The physician, a naturalist : a graduation address, delivered August 1st, 1888 / by Sir William Turner.

Contributors

Turner, Wm. Sir, 1832-1916.
Royal College of Surgeons of England

Publication/Creation

Edinburgh : Printed by Oliver and Boyd, 1888.

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THE PHYSICIAN—A NATURALIST:

A GRADUATION ADDRESS.

Delivered August 1st, 1888.

BY

SIR WILLIAM TURNER, KNT.,

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PROFESSOR OF MEDICINE AND ANATOMY IN THE UNIVERSITY OF EDINBURGH;
MEMBER OF THE GENERAL MEDICAL COUNCIL.

(*Reprinted from the Edinburgh Medical Journal for September 1888.*)

PRINTED BY OLIVER AND BOYD, EDINBURGH.

MDCCCLXXXVIII.

TO

THE RIGHT HON. JOHN INGLIS OF GLENCORSE,

D.C.L., LL.D.,

LORD JUSTICE-GENERAL OF SCOTLAND,

CHANCELLOR OF THE UNIVERSITY OF EDINBURGH,

THIS GRADUATION ADDRESS

Is most respectfully Inscribed.

THE PHYSICIAN—A NATURALIST:

A Graduation Address.

It is an old saying that every woman is beautiful on her wedding-day. Graduates! this is your wedding-day. After a courtship more or less prolonged in individual cases, all of you have been this morning tied by the bonds of holy matrimony to the Alma Mater by whom you have been educated, as graduates and members of her General Council, and the great majority of you to medicine as a profession. But whilst the tie to your respective professions is so loose and elastic that you are perfectly free either to enter into their practice or not, as you may feel disposed, the bond which now binds you to the University is much more rigid and enduring. No divorce Act that I know of has as yet been framed to dissolve that intimate union which is set forth in the phrase, "that once a graduate, always a graduate." Let me express the wish that this union which we now celebrate may be long and happy and prosperous.

Gentlemen! You will henceforth regard this day as one of the most interesting in your lives. It marks a definite stage in your respective careers. By the "magic touch of the Chancellor's hand," you are no longer *in statu pupillari*, but you have been crowned, or rather "capped" with your degrees. Each one of you is now able to pursue his further career in that direction which may be most fitted to his talents and acquirements, and in that locality which may seem to offer the best field for work and usefulness.

But if this occasion is of supreme interest to all of you, it is not without significance to myself; for I have this year entered on my professorial majority, and am now completing my thirty-fourth year of work as a teacher of anatomy—a period of continuous service within the University which places me amongst the seniors, though I can by no means claim to be the oldest amongst my colleagues either in years or in professorial standing.

It is one of the privileges of seniority to indulge in reminis-

cences, and without perhaps exhibiting that failing of age which is termed garrulousness, one might find interesting material for a graduation address in speaking of the men who most largely filled the public eye in the Medical Faculty in this University when I entered it as a young teacher—in contrasting the University life and government of that day with the present, and the methods of medical education and practice then in vogue with those that now prevail.

The professors in the Faculty of Medicine at the time to which I refer were a remarkable body of men. With scarcely an exception, each was a leader in the subject which he professed. They possessed marked individuality and force of character, as well as high professional attainments. They sustained and strengthened the reputation of the University as a school of medicine, and the majority gained for themselves a permanent place in the history of their profession.

They have all departed and been succeeded by a younger generation ; but amongst their immediate successors not a few have also gone from amongst us. Only a few months ago we had to mourn the loss of Alexander Dickson, who was suddenly taken when in the full tide of his professorial career, and with, to all appearance, many years of life and work before him. He will abide in the recollection of his pupils and colleagues both as a distinguished botanist and as a truly good man.

I have witnessed most important changes in the constitution and government of the University.

My official connexion with it goes back to the time when the Municipality of the city controlled and managed the affairs and exercised the bulk of the patronage. Under its auspices, and sustained by the guidance and accumulated reputations of several generations of eminent men who filled in succession the chairs in the several Faculties, what was originally only the Town's College grew to be a great and world-renowned University. With the progress, however, of letters and science, with the ever-increasing specialization in educational systems and methods, with the not unfrequent want of harmonious co-operation between the administrative and educational bodies, it was felt, by an almost universal consent of opinion, that the time had come when the University should no longer be ruled by a non-academic body, and that a change in the method of government had become necessary. Accordingly, an Act was passed in 1858 by the Lord Advocate of the day, now our distinguished Chancellor, which remodelled the whole constitution, and amongst other things entrusted the administration of the property and revenues of the University, and the superintendence and regulation of the teaching and discipline, to the academic body, subject to the control and review of the University Court.

The thirty years that have elapsed since this Act came into

operation have witnessed a marvellous progress and expansion in the material resources of the University, in the increase in the educational staff, and in the number of students. The new statutes that were framed by the Universities Commissioners, and the machinery that was provided for modifying these statutes as occasion arose, have enabled the administrative and educational bodies, both of this and the other Scottish Universities, to provide in a great many particulars for the growing requirements of the nation. The statesmanlike character of the Act of 1858, and the patience, forethought, and sagacity which guided the Universities Commissioners in framing their ordinances, have placed our Chancellor in the highest rank amidst the benefactors of education in Scotland.

Experience, however, has shown that in certain directions an enlargement of powers and an increase of resources are necessary, in order to make changes which could not efficiently be carried out under the Act of 1858. For several years past the authorities of the Scottish Universities have urged upon the Government of the day the importance of passing an Act to enable these changes to be effected. Although several Bills have been prepared, none has as yet become law.

The Bill introduced early in this session of Parliament has passed through the House of Lords, but to all appearance it does not seem as if, for the present at least, it is to make further progress. This Bill proposes to entrust to an Executive Commission large powers to alter the existing arrangements affecting the curricula of study, the requirements for graduation, the endowments of the Universities, and to found new professorships and lectureships. But, further, it is proposed to transfer the administration of the property and revenues of each university from the Senatus Academicus to an enlarged University Court, the members of which are to be chosen in part by academic, in part by non-academic persons. Until some definite legislation takes place, University education in Scotland will remain in an unsettled condition. But whatever form the Act may take, I would express the wish that it may exercise as great an influence for good over the generation, whose education it is to regulate, as the Act of 1858 has done over that which is now passing away.

The change which has taken place in the methods of medical education during the last thirty or forty years has been most marked, and in no school of medicine probably has this been more strikingly shown than in our own. When I first became connected with it, the only subjects in which practical instruction was imparted—in which the student was required himself to experiment or observe—were botany, chemistry, and anatomy, with of course the practical training pursued in the Royal Infirmary. The great bulk of the teaching was by means of formal lectures, with

occasional demonstrations of specimens by the teacher. Each subject, therefore, derived its interest, not so much from its own intrinsic merits, as from the descriptive power of the professor, and the force with which he threw his own personality into his teaching. How different is the state of matters now! Every branch of medical education has its practical department, and the student is required to do something more than sit and listen, and exercise his memory. He is called upon to test the accuracy of what his teacher tells him by his own observations.

It was the strong conviction of the necessity of developing this aspect of medical education that led the Senate of the University some eighteen years ago to direct public attention to the inadequacy of the accommodation in the then buildings of the University for the work which was required to be done. In consequence a committee was formed consisting partly of University professors, and partly of other public spirited citizens, which under the guiding hand of our late Principal, Sir Alexander Grant, appealed for assistance to the public and the government. This appeal was so liberally responded to that in a few years' time the imposing group of buildings in Teviot Row, in which you have received your education, was erected.

In making this reference to the buildings of the University, I would further add that the time is rapidly approaching when, through the splendid munificence of one of our citizens, the University will no longer require to hold so important a function as that which we are this day discharging outside her own walls. The site is rapidly being cleared, and the foundations are now being dug for the erection of a stately Academic Hall, to be presented by Mr M'Ewan, M.P., to the University, in which the graduation and all other public ceremonials will be conducted, and which, when built, will complete the design of the new buildings of the University, and add another noble edifice to the architectural adornments of the City.

The University is now provided with a completeness of accommodation and equipment for the teaching of medicine and of the sciences on which it is based second to no other institution in the United Kingdom. I have sometimes heard it stated that in Edinburgh medical education is not of a practical, but of a largely theoretical character. I quite admit that if by a practical training is meant that rule of thumb method, which prescribes a particular drug or formula for the treatment of a given disease, altogether irrespective of its causation, of the stage of the disorder, the constitutional peculiarities of the patient, and other modifying circumstances, then the Edinburgh training does not come up to that standard. But if an education based upon the consideration and discussion of principles, and with ample opportunities and means of illustrating those principles by constant reference to facts

and phenomena, be a proper training for the profession of medicine, —and who with any insight will doubt its suitability,—then I say the education imparted in Edinburgh is in the highest sense of a practical character.

But along with the improvements in the methods of medical education, there has also been marked progress in diagnosis and treatment, in our knowledge of the causation of disease, and in the preventive measures which are to be adopted to check its spread amongst the community. Indeed, one may say that almost the whole science and organization of what is now called preventive medicine dates back no further than forty years. In curative medicine, also, great strides have been made. The surgeon has had for centuries no lack of knives and saws and other instruments for producing what he is accustomed to call "solutions of continuity," but until comparatively recently, he had no means of rendering his patient insensible to the pain which the use of these instruments occasioned. The discovery by Morton, an American dentist, in 1846, the year in which I entered the profession as a surgeon's apprentice, of the anæsthetic properties of sulphuric ether inaugurated a new era. I recollect, as if it were yesterday, the first capital operation that I saw which was done under the influence of ether, the year following its introduction as an anæsthetic. At the end of 1847, the use of chloroform instead of sulphuric ether was advocated by Professor Sir J. Y. Simpson, and with the marvellous energy which characterized that very remarkable man its virtues soon became known throughout the world.

Most valuable advances have also been made in the treatment of wounds. The importance of cleanliness and of simplicity in the dressing of wounds had been insisted on by Robert Liston, the greatest operating surgeon of his day. The employment by Marion Sims of metallic, instead of silk sutures for bringing into apposition the edges of wounds, was also a great improvement in practice. But that which more especially marks our generation in this direction is the introduction and elaboration of that method of practice which, under the name of antiseptic surgery, we owe to the genius of Joseph Lister. It will ever redound to the glory of the medical school in this city, that the introduction of chloroform as an anæsthetic, and the development of the principles and methods of antiseptic surgery, are due to two men who at one time occupied chairs in the Faculty of Medicine in the University. By their discoveries a security has been imparted to surgical practice which it had not before possessed. Along with the growth of the feeling of comparative safety in the mind of the surgeon, there has arisen an improvement in methods of operating in the instruments employed. Surgeons now have no hesitation in performing operations of the greatest magnitude in such regions

as the abdomen, the cranial cavity, the spinal canal, the thorax and the joints, which twenty or thirty years ago were *tabu* to the use of the knife.

But I would not have you to suppose that the progress in curative medicine has been limited to the surgical branch of our profession. The principles on which antiseptic surgery is based, that morbid processes are associated with the presence of living germs, have been applied to the investigation of the production of internal diseases both in man and animals, and there has arisen during the last twelve to fifteen years that new department of study called bacteriological medicine, with the rise and progress of which the name of Pasteur will be imperishably connected. Although still in its infancy, important results have already been obtained, and with continued research more may be expected to follow. I am glad to state that in more than one department in our University interesting bacteriological researches have been conducted, or are still under inquiry.

The past forty years have witnessed great advances also in the methods of medical diagnosis, and in the instruments which are employed. At the beginning of that period the stethoscope had become firmly established as an aid to diagnosis; but the microscope was almost limited in its use to the recognition of the characters of urinary deposits, or to the discrimination of morbid growths, with in many cases only a half-hearted belief in its efficacy. It is true that the blood was examined microscopically in disease to determine the relative proportions of the red and white corpuscles, but the methods of obtaining precise information on the number of corpuscles in a given quantity of blood, and consequently their increase or diminution in the entire mass of the blood in certain morbid conditions, had not been discovered. The condition of the pulse was tested by the finger, but the sphygmograph as an instrument of clinical research was unknown. The thermometer had scarcely been used in clinical observation. The ophthalmoscope, laryngoscope, endoscope, and other instruments now so extensively used for examining the interior of the tubes and chambers of the living body, had either not been invented, or were very imperfect. The clinical examination of the urine was almost entirely confined to the testing for albumen and sugar. The employment of electricity as a remedial agent was in its infancy.

Enormous strides have also been made in acquiring a correct knowledge of the physiological action of drugs and of their therapeutical applications. Time does not permit me to enter into details on this head, but I ought not to omit to state that much of the progress in this direction has been due to the researches of some of your teachers and of my colleagues.

In contributing to the progress of medicine, the Edinburgh school has taken an active and, in many branches of study and

practice, a leading part. If a Research fund were instituted from which such of the many able young men, who, year by year, graduate in medicine and who have an aptitude for conducting investigations, could obtain assistance in the supply of the necessary apparatus and material, as well as in some measure to recompense them for the time to be devoted to original inquiry, then contributions from this school to medical science would be largely increased. As the University is now so well provided with educational buildings in which research in the different branches of medical study can be conducted, it is for the consideration of those who may be disposed to make benefactions to it, whether, in the disposal of their means, much good would not accrue by the institution of a fund for the endowment of research.

To what are we to ascribe these advances in the *ars medica* to which I have been referring? Without doubt they are due to the application to medical diagnosis and practice of principles and methods of research similar to those which have been and are now employed with so much success in the biological and experimental sciences. As it has become more widely recognised that the processes of the human and animal economy are in conformity with physical laws, medical science and practice have lost their empirical character. Fact has been substituted for theory, positive knowledge for hypothesis, and the science of medicine has advanced *pari passu* with the progress which has been made in the sciences of observation and experiment. May this progress long continue!

The physician, therefore, is a Naturalist, in the comprehensive sense of that term, and his special business is to study the natural phenomena exhibited by the human body both in the state of health and when disturbed and altered by disease.

For the purposes of our profession the power of exact observation ranks as one of the most precious gifts and endowments of the physician, and should be cultivated with the utmost care. Medical literature abounds with examples of erroneous inferences and conclusions based upon hasty and imperfect observation.

You cannot begin too early to train a child how to observe. A great defect in the system of education which prevails in so many schools is the want of attention paid to the cultivation of this faculty. The memory is exercised and strengthened, but the value of the eye as an educational instrument is too much ignored. I have frequently noticed, and a similar observation, I feel sure, has been made by my colleagues, that many young men who have entered on the study of medicine, bringing with them the reputation of having attained a high position at school or in the Arts Faculties of our Universities, do not, for a time at least, in their medical studies fulfil the expectations of their earlier career. Those qualities of mind which the successful study of medicine demands have been dormant, and they require much stimulation before they

can be brought into active operation. On the other hand, it is not uncommon to find youths, whose school record was of a very ordinary character, display a marked ability for medical study and obtain high distinction in it.

Early in life I was impressed with the importance of cultivating the faculty of observation by reading a dialogue between a tutor and his pupil, entitled, "Eyes and no Eyes; or, The Art of Seeing," in which the important lesson was taught me that the art of seeing had a relation to the degree in which the attention was concentrated on the object looked at, and the distinction between vacant gazing and intelligent observation was clearly pointed out.

Some persons are, indeed, gifted more than others with the power of rapid perception of objects. With every one I suppose things in which a special interest is taken are recognised and remembered much more readily than when they do not appeal to the sentiment or intelligence. How active, for instance, is that faculty of appreciative observation, intensified, without doubt, through its exercise in a particular direction during so many generations, which enables one of the opposite sex, almost at a glance, to discriminate the colour, texture, quality, fit, and, I have heard, even the value of the various articles of dress with which those of her own sex are appareled.

How the powers of observation may be strengthened and intensified is related by Robert Houdin, well known some thirty or forty years ago as a professor, not of the art of healing, but of second-sight and sleight-of-hand. In the profession which he followed with so much distinction and profit acuteness of observation and memory were of the utmost value, and he tells us in his autobiography how these were cultivated. His father used to walk with him along the streets of Paris and stop suddenly in front of a shop window in which numerous articles were displayed. The boy was then required to concentrate his attention for a minute on the objects, and, on his eyes being withdrawn, to tell his father what they were and how they were arranged. With the frequent repetition of this practice, the boy's sense of vision became so acute that a moment's glance in passing enabled him to recognise and then to describe with accuracy, what the window contained.

But with all one's care and attention, one is constantly impressed with the difficulty of seeing objects completely and correctly. It has been the business of my life to observe and to put the results of my observations into definite language. And yet how often one has failed to recognise characters in the structures one has been examining! It may have been, perhaps, through some preconceived theory possessing one's mind, or through the attention being so concentrated on a particular aspect of an object, that others equally or even more important were overlooked. And on returning, perhaps after an interval, to the examination of the same thing,

with the mind no longer pre-occupied, one has been amazed at having previously omitted to recognise some character which now appears most obvious.

Listen to what one of the greatest physicians of the last century, Dr William Hunter, wrote to a young practitioner, destined afterwards to become, as Professor Wm. Cullen, one of the most renowned teachers of his time in this University. Hunter was relating to his correspondent that he was engaged in the preparation of a compendious *System of Anatomy and Physiology*, and exclaims, "But, good heavens! what pains is required to do anything with tolerable accuracy! Have you not found it so, for you have been employed much in the same way?"

But long before these truths came within the range of one's own, or, indeed, of any modern experience, they were expressed in few but pointed words by one of the greatest, if not the greatest, of the Prophets—"Seeing many things, but thou observest not." And again by another of almost equal weight and authority, "Hear now this, O foolish people, and without understanding; which have eyes, and see not; which have ears, and hear not."

To make full use of what you see you must combine with the observing eye the receptive and reflecting mind. The facts and phenomena which you have to examine must be pondered over and compared with each other; their causation, relations, and interdependence must be inquired into. You have, in short, to obtain an "understanding" of them before you can draw legitimate conclusions, and benefit both your patients and medical science.

I know no book that exhibits in a more striking form the combination of careful observation and experiment with close reflection than the small volume entitled, *De motu Cordis et Sanguinis*, which its author modestly called a tractate, and the writing of which revolutionized physiology and medicine, and placed the name of William Harvey amongst the immortals. Although published one hundred and sixty years ago, and probably written before, though not actually published until eight years after the appearance of the *Novum Organum*, it will ever remain a monument of inductive reasoning and a model for all investigators.

The aid which medical science derives from the study of the lower animals is clearly set forth in Harvey's treatise, and is admitted by all who wish to see a medical education based upon something more than the narrowest technical foundation. The study of plants also, though perhaps in a less degree, is a most useful feature in the preliminary training in medicine. True it is that your vocation in life is not to doctor starfishes or snails, or even dogs and rabbits; nor is the modern practitioner of medicine required, like a certain apothecary of old, famous in poetry and the drama, to be "culling of simples." But the study both of plants and animals widens our knowledge of Nature, make us more

conversant with the details of structure and with the processes of life, and both exercises and sharpens our powers of observation and comparison. Not long ago I was talking with my old teacher, Sir James Paget, about a little book, *On the Natural History of Yarmouth*, in which I was interested at the time, and in which he, when little more than a boy, had written a description of the Flora and Fauna of that town and the neighbourhood. In the course of our conversation, he spoke of the labour given to the examination of the plants and animals, and the comparison of the different species, so as to arrange them in their proper classes, required in the production of that work, as having been a most valuable preliminary training in fitting him to observe and discriminate disease. I could not give you higher testimony.

But along with a general training in these sciences of observation, important benefits are derived from the study of such experimental sciences as physics and chemistry, not only as aids in the cultivation of the mind, and in widening our knowledge of nature, but in their special application to the anatomy and physiology of man, to practical medicine and to sanitation. Although it has so happened that my lot in life has been cast on other lines than those of practice, I would here acknowledge the insight which my early master had of the need of a scientific foundation in medical training, for from the first year of my apprenticeship he required me to study both botany and practical chemistry.

But I must not dwell too exclusively on the intellectual aspect of your professional training, though that of course is of the highest moment. Our profession has a moral side also, of supreme importance to ourselves, our patients, our professional brethren, and the community amidst which we live.

The contemplation of the particular aspect of Nature which the physician has to study ought to exercise an elevating and, at the same time, a softening influence on his character.

What says he who, more perhaps than any other writer, has given poetic form to Nature in so many of her aspects?

> "Go, demand
> Of mighty Nature, if 'twas ever meant
> That we should pry far off, yet be unraised.
> That we should pore and dwindle as we pore?"

Or again,

> "Who thinks and feels,
> And recognises ever and anon,
> The breeze of Nature stirring in his soul,
> Why need such men go desperately astray?"

Many of you, doubtless, recollect the old Greek fable of Antæus, the son of Poseidon, a giant and mighty wrestler, whose strength

was invincible so long as his feet touched his mother earth, by contact with which, in his numerous encounters, he was refreshed and re-invigorated. You, in your wrestlings and strivings with disease, will gather strength for the conflict so long as your trust is placed in the laws and principles which regulate the construction and functions of the human body, and recognise and understand the disturbing causes which produce those modifications in structure and functions which we call disease. Should you cease to place trust in Nature's laws, and rely on some visionary hypothesis or alluring dogma, which, for the time, may be attracting attention and perhaps obtaining converts, you will, I fear, meet with the fate which Antæus experienced at the hands of Hercules, who, on ascertaining the secret of his strength, lifted him from the earth and crushed him in the air.

By the contemplation of the human body both in health and disease, the physician becomes inspired with a desire to penetrate the mysteries of life and organization; to get as far as possible behind the Veil; to remove the healing art from the domain of conjecture and hypothesis, and plant it on the firm ground of science, *i.e.*, of positive knowledge. With such an ideal before him the physician's own character will become elevated, strengthened, and purified.

But, further, the practice of your profession has an eminently humanizing influence. It leads you to become conversant with grief and sorrow, often in their most heartrending aspects. It leads you to sympathize with the sick and suffering. At times it makes you a participator in the happiness of family life. But under all circumstances it should take you out of yourselves, and call forth what is good in your respective natures.

In your relations to your patient you are to regard him as something more than a collection of organs—a machine for doing physiological work. His vital frame exists for other purposes than to be "examined, pondered, searched, probed, vexed, and criticised." It will at times exhibit phenomena other than those which are within the scope of the methods of physical research. Your patients are human beings endowed with a mighty capacity for experiencing pleasure and pain, joy and sorrow, anxieties, sentiments, feelings, and emotions. The human soul is—

> "Of a thousand faculties composed,
> And twice ten thousand interests."

Do not put yourselves into the position of those philosophers who have been charged with prizing—

> "This soul and the transcendent universe
> No more than as a mirror that reflects
> To proud Self-love her own intelligence."

As you grow in years and experience, and gain the confidence of the public, you will be consulted by persons with highly emotional natures, or perhaps by others in whom strong intellectual powers are lodged in a feeble frame, and will have to realize that the mind may dominate over the body. Your highest analytical skill and knowledge of human nature will be needed to unravel the complex phenomena which may be displayed, so that you may wisely advise as to the treatment to be adopted.

Apply yourselves, therefore, conscientiously to determine the malady from which your patient suffers, the causes which have produced it, and the means that are to be employed for its alleviation and removal. Give the best of your mind and skill, whatever these may be, to your patient, whether he be peer or peasant. If this be your guiding star in practice, then, when you commit mistakes,—and remember you are but human,—and your conduct is adversely, perhaps severely commented on by the patient, his relations, or by those candid friends your professional brethren, you may take comfort in the thought that you had left no means untried which commended itself to your judgment and experience. Let me on this point read a short and pertinent extract from the life of one of the greatest naturalists of our generation, and, indeed, of all time, Charles Darwin, who, in his deeply interesting autobiography, wrote as follows:—"Whenever I have found out I have blundered, or that my work has been imperfect, and when I have been contemptuously criticised, and even when I have been overpraised so that I have felt mortified, it has been my greatest comfort to say hundreds of times to myself that 'I have worked as hard and as well as I could, and no man can do more than that.'"

How different would be your reflections if you had not taken the trouble to master, or to try to master the nature of your patient's malady! If you had been careless in your attendance, and had not given due thought and consideration in the advice which you tendered, and in the treatment which you adopted. You would then cower under adverse criticism, and perhaps try to take refuge in some sophistical plea, in order to conceal or extenuate your fault. But no criticism from without would equal in its keenness or intensity that inward monitor which would charge you with the guilt of wrong-doing. Be honest, therefore, in your work, "not slothful in business, fervent in spirit, serving the Lord."

In your relations to your professional brethren cultivate a kindly feeling. As young practitioners, you will find the advantage of having an ally in your immediate neighbourhood to consult with in cases of difficulty; and although, if he be much senior to yourself, you may, with the egotism of youth and fresh from the most recent methods of the schools, be disposed to laugh at some of his opinions and methods of practice as old fashioned, yet if he be a man of intelligence and observation, you will gain

much from his experience and from his knowledge of human nature.

Avoid as you would a poisonous serpent the habit of depreciating your brother practitioners, and of indulging in sneers at their expense. The effect on your own minds of such a practice will be most pernicious. It will lead you constantly to distort the truth, and whilst producing an inability to recognise what is good in your neighbour, will lead either directly or by inference to a perpetual laudation of yourself. Be assured that you will find it a hard enough task to avoid falling into errors, and to correct your own mistakes. Judge others therefore leniently, as you would wish yourselves to be judged.

> "Musst dich an eignem Thun ergetzen
> Was andre thun, das wirst du schätzen ;
> Besonders keinen Menschen hassen,
> Und das Uebrige Gott überlassen."

To those of you who may be ambitious of acquiring high professional distinction, I would say, Be not avaricious of fame. The desire to monopolize the sole credit of some research or discovery has sometimes led a man to be unjust to other workers in the same field, to suppress a proper reference to, or to detract from, what they have done, and has blurred and clouded an otherwise great reputation. Be assured that no important discovery ever originated full fledged in the brain of one man, as Pallas Athene is fabled to have emerged from the brain of Zeus completely armoured and with a great shout. It has been built up slowly and laboriously by the work of cotemporaries, as well as of those who had gone before, until at last the man arose, who, with a fuller and keener insight, brought what had been done by others into harmony with his own work and completed the edifice. But he who carves and puts in place the capital, should not forget those who have dug the foundations and reared perhaps both the base and shaft of the column.

When you settle in a locality, the nature of your training will fit you to advise both as regards matters which concern the health of individuals, and those which affect the community as a whole. The range of your studies has been such as to make you educated gentlemen, as well as competent practitioners. It is incumbent upon you, in all your relations to those amongst whom you are about to dwell, to do credit to your University, and to uphold the honour of our profession.

It is customary, I believe, for those who address an audience in this Hall to preface what they have got to say with a text. Let me reverse this order of things, and place my text at the end of my discourse, and summarize in pointed words from that Book, which one never opens without finding in it guidance and support,

much that I have said to you on the intellectual and moral aspects of our profession,

> "Wisdom is the principal thing, therefore get wisdom, and with all thy getting get understanding;"

and again,

> "Therefore, all things whatsoever ye would that men should do to you, do ye even so to them."

And now, gentlemen, I bid you Farewell! On my own part and on behalf of my colleagues, I wish you all success in your respective careers. As is symbolized by the finely modelled figure of vigorous Youth, which is about to form the finial of the dome of our University, go forth, and bear the torch of knowledge throughout the world.

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