

Medical science and ethicks : an introductory lecture delivered at the Bristol Medical School, on Monday, October 2, 1837, at the opening of the winter session / by W. Ogilvie Porter.

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MEDICAL SCIENCE AND ETHICKS;

AN

INTRODUCTORY LECTURE,

DELIVERED AT THE

BRISTOL MEDICAL SCHOOL,

On MONDAY, OCTOBER 2, 1837,

AT THE

OPENING OF THE WINTER SESSION.

BY

W. OGILVIE PORTER, M.D.

SENIOR PHYSICIAN TO THE BRISTOL DISPENSARIES, &c.

BRISTOL:

W. STRONG, CLARE STREET; AND FORE STREET, EXETER;

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MDCCCXXXVII.

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ASTOR LENOX TILDEN FOUNDATION

KING SQUARE,

Tuesday Morning, Oct. 3, 1837.

Dear Sir,

I have much pleasure in being the medium of communicating to you the subjoined resolution, of which I am desired to transmit you a copy; and am,

Dear Sir,

Yours, very truly,

G. DOWNING FRIPP.

W. O. PORTER, Esq. M. D.

*At a Meeting of the Faculty of the Bristol Medical School,
on Monday Evening, October 2, 1837, it was*

Resolved unanimously :—" That the cordial thanks of the
" Faculty be presented to Dr. Porter for the very interesting
" and appropriate Address with which he has this day opened
" the proceedings of the Winter Session; and that the Ho-
" norary Secretary transmit a copy of this resolution to Dr.
" Porter."

THE HISTORY OF THE
CITY OF BOSTON
FROM THE FIRST SETTLEMENT TO THE PRESENT TIME

By SAMUEL JOHNSON, Esq.

Author of the "Dictionary of the English Language"

London: Printed by J. JOHNSON, in Pall-mall.

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MEDICAL SCIENCE AND ETHICKS.

GENTLEMEN,—In contemplating the subject with which we are to be engaged, we may imagine ourselves on a hill, surveying the extensive and varied field, wherein you are about to recommence your labours;—and as we look around, I will take occasion to offer some remarks on its divisions, its products, and mode of cultivation. The brief period allotted to an introductory lecture admits of little more. It shall be my endeavour, however, to make this address otherwise useful to you.

Medicine being the profession you have chosen for the business of life; you must ever keep it in view as the end of all your studies. In making your way to it, you are not to suffer yourself to be fascinated by any one of the accessory sciences, so as to yield up to it the pre-eminence due to the ulterior object: yet you are expected to attain a competent knowledge of them all; for without a certain amount of such knowledge, you cannot pass on to the study of medicine with much prospect of success.

The medical student cannot be too deeply sensible of how much he has to accomplish. He should repair by increased diligence that which he may have neglected, or slighted, and be on the watch not to let slip either the time or the opportunities which now await him. Indolence, or even love of ease, must not be entertained for a moment. Without unremitting industry and application you cannot effect any thing. You must work to acquire the power of doing more work, and of doing that work better, and with more facility, whether it be of the head or of the hand. This is a proposition, on the truth of which is based all that is admirable in the sciences, and excellent in the productions of art. And the day must come, when each of you will acknowledge its force; when every man shall have found his level and his place among his medical brethren, according to his talents and acquirements.

X At this day no small proficiency is required to gain admission fairly into the profession:—there is at least as much required of the general practitioner at Apothecaries' Hall at this time, as might have qualified the graduate in medicine, thirty years ago. This is honourable to the profession—it must exclude the idle and the stupid. Such will not venture into the arena.

But, when by industry and application, the aspirant shall have passed through the ordeal of examination, and goes forth into life with his well-earned certificates and diplomas, he will find that he has giants in zeal and knowledge to contend with for public favour, to be found not only in the metropolis, and in large cities, but even in the villages, and almost in every spot where he

can plant his foot. You must, therefore, aspire to eminence. An ardent love of your profession must be generated in your minds. You must contemplate the honourable station its distinguished members hold in society; the ample considerations in every way, that reward pre-eminence; and you must resolve in your minds to become one of these. I will tell you what one of these (Sir Ashley Cooper) said the other day at a public dinner, given to him by the profession at Edinburgh. He said, that when he looked back on the days of his youth, and reflected on the fame and success which had attended him through life; he was thankful to Providence who had so conducted him; and seeing so many members of the profession around him, he affectionately exhorted them to attain the utmost skill in their profession, but never to attempt to rise by depressing another, and never to let go their integrity, and high moral character, as they valued public confidence and esteem. Here is precept and example, and the same field in which he has reaped so plenteously of wealth, and honour, and fame, is open to every one of you.

During the late recess we may hope that you have not neglected to devote some portion of time to keep up your classical acquirements; and that you have not disdained to scan over a few problems or theorems in Euclid; nor to give an hour or two now and then to the study of the laws of motion, of mechanical forces, of sound, of light, and other objects of natural philosophy; and that you have not altogether neglected books on natural history; for each of these depart-

ments of knowledge is necessary to the attainment of a complete medical education ; they are accessory studies, and it is, therefore, incumbent on the medical student so far to make himself intimate with them, that he can draw upon the knowledge peculiar to each, when required, to serve him in the study and exercise of his profession.

In the above remarks I have said nothing of chemistry, because it is not only an accessory but an associated science ; being taught in the schools of medicine.

Before proceeding to speak on the several departments of medical study, which are to occupy you during the session, it may not be without its use to point out certain qualities, or rather faculties, of the mind, on the cultivation of which our progress in any science mainly depends.

Every organ by exercise acquires an increase of power. And the reverse of this proposition is equally true.

We know that certain muscles, with their nerves, are under the controul of the will ; so are some of the unseen movements of the brain under the agency of this and other inherent powers of our constitution. And as we know that various kinds of power are increased in the former, that is in the muscles, by suitable exercises and training, so also have we reason to conclude that the same results will follow the same course with respect to the latter, the brain ; and this increase of power extends to the moving powers as well as to the instruments engaged in their respective processes.

Of these, *Attention* claims our first consideration. It is a faculty of the mind of great importance ; for, as is the intensity of our attention to any object, so is our acquirement of knowledge respecting it ; therefore, the cultivation of this faculty is highly important to our progress in science : it is indeed the *purveyor of knowledge* ; and will be found in greatest perfection where there exists the greatest desire to be informed. And happily, like all other acts, mental or corporeal, its power may be increased to almost any amount by due exercise. *Observation* is a product of this faculty ; and acute and minute observation the result of its due exercise. What we observe accurately, we apprehend clearly and distinctly. And it is, in the majority of cases, the fault of inattention, if afterwards we are not able to recollect the impressions we have received.

There exists in the mind another faculty at least equally important ; by which we make present to ourselves whatever we have felt or known, even without the presence of the object that made the original impressions ; and by the same inherent power, we can cause to stand forth a fact, or a series of facts, as originally perceived ; and cause the problems we have studied, or the reasonings we have heard, to pass in review before the mind in the order we desire to subject them to our deliberation ; and if we be careful to maintain a correct association of these facts or reasonings, their relations will be established for practical purposes. This power we call *Memory*. It is a faculty without which all our *attention* and *observation*, and all the knowledge collected from time to time by the

industry of those faculties would avail us nothing. It is the recollection of acquired knowledge in the moment it is wanted for application, that constitutes the aim and object of all our studies and pursuits. And if we cannot recollect what we have learnt, I repeat it, the fault is mainly with ourselves. Gentlemen, it is of every day's occurrence to hear a man say, "I do not recollect any thing about it. I have never thought of it since." Here we have the secret of defective memory; he does not recollect any thing about it, because he has not thought of it since. If the matter in question had ever been brought before his mind, he would have remembered something about it; but if it had been the subject of frequent contemplation, his memory would have served him accurately. And here we have the secret of an effective memory. Now if this be a true representation, which I feel confident it is, we may safely conclude that the power of memory on any given subject rests in a great measure with ourselves, if we have common capacities. We certainly do not, and cannot remember every thing. There is much that occurs, and much that we hear, and much that we read, that does not interest us, that is not worth the time or the trouble required to impress them on the memory; and for this reason, we do not turn such matters over in our minds; hence they are forgotten, and we do not remember them. But the knowledge we desire to treasure up, is made the subject of our frequent contemplation; we thereby fix it in the mind, ready to reappear at a moment's notice, in all its pristine reality, singly, or in associated

relations. These associated relations of facts and reasonings, form the grand stock of materials, out of which we form our judgment.—These are the most important faculties of the mind by which knowledge is acquired, and retained, and made available for practical purposes.

Gentlemen, I shall say little on the pretensions of medicine as a science. It is sufficient for our purpose to consider the removal of pain, or the cure of disease, as a most desirable object of knowledge ; and as such, it is a science, and one of the most useful, to which the mind of man can be directed. That medicine is not a pure science, or purely a physical science, we are ready to concede ; and we never must forget it. In our physiology, in our hygiene, in our therapeutics, we must ever keep in mind that there is something in the living man that exercises an influence on the result of all mechanical and chemical agencies, to which, the materials of his frame may be subjected ; and it is this circumstance that separates, and ever must separate, medicine as a science from all others. You are here assembled preparatory to the prosecution of this science. And I will seize the opportunity now so condescendingly afforded me, to congratulate you on the efficiency of the school of medicine to which you have confided your education. I dare not trust myself to speak of its professors individually. I might be suspected of flattery or partiality ; but I am bound by truth to say, that all your teachers are men well qualified to instruct you ; and I will not hesitate to add, that there are among them, those who possess

talents of the highest order in their respective departments.

Gentlemen, the time is gone by when medical students must repair to universities of antient celebrity for professional education. At those universities they may attain high marks of distinction in the classics and accessory sciences; but for many years past, the teaching of our profession has been passing gradually into private schools of medicine. Even at Edinburgh a school of medicine is now established by private teachers which threatens to rival the University. That you may be able to form some estimate of the importance of this school, it may be mentioned that more than one thousand tickets were issued in Edinburgh last session (1836-37) by its private teachers, and no small portion of them to the students who had entered on the books of the University. Indeed private schools of medicine have gradually risen up, through a long period, in London; and of late, in consequence of a vast increase of population, and a still greater increase of wealth, (the demand for professional instruction being greatly multiplied,) schools of medicine have sprung up in all the principal cities of the kingdom. And it is this state of things that has given rise to those two magnificent establishments in London, its College and University; the latter, however, properly speaking, is not an university, but a college also, and is called University College. From what you have just heard, and from what you may learn elsewhere, you will feel satisfied that you are as well placed for learning your profession, as if

it had been your prouder lot to be entered at one of the old Universities ; for you will have no occasion to go beyond these walls to seek elementary medical instruction. Practice is to be found in another place, it is not a denizen of schools or universities. It must be sought and found at the bed-side of the sick, and in the operating room. Bristol affords these opportunities to a considerable extent, and when the proper time arrives, you will avail yourselves of these advantages.

Having made these preliminary remarks, I shall offer a few observations on the several departments of medical science.

It has been said, that if medical science were to be represented by a column, to bear the symbolical figure of Apollo, the basis must be anatomy. The importance of anatomy, and scarcely less that of physiology,—a knowledge of the structure of the human body, and of the functions of that structure,—will be felt at every step you take in the study of medicine, and also with little intermission during the whole course of your professional life. If you are not fully acquainted with these, you will want the keys that unlock the secret chambers of health and disease.

There is no way of acquiring a competent knowledge of anatomy, but by seeing the human body dissected, and the parts demonstrated, and by doing it yourselves. Experienced anatomists say, that students should not read on anatomical subjects before they have made actual acquaintance with the parts ; as false ideas are acquired from plates, and descriptions,

which never afterwards can be quite effaced, even by ocular demonstration; but after the mind of the student has been impressed by seeing all the parts demonstrated, and their uses explained, reading then will be highly useful,—it will fix the impressions he has received on his mind, it will aid in forming an effective anatomical memory.

It does not belong to this address to enter into detail, on the present state of our anatomical knowledge. Much is known, very much, the accumulated result of industry and talent, during many centuries. Still, however, there are desiderata most important to the perfection of our physiology, that remain, as yet, not successfully explored. However, if you learn all that is known, you will not be idle; and you will have accomplished the task at present required of you. But, to use the words of the highly talented physician who addressed you last year from this place, “be assured that all you have learned of anatomy and physiology, will be called into play for the interpretation of the mysterious symbols, by which disease sometimes announces its presence and location; and that however much you have learned, you will find that you have not learned enough.”

Gentlemen, at a future period of your lives more than is now required of you will be looked for at your hands, by your professional brethren. Every one is expected to contribute something to the general stock of knowledge. There are many labourers now diligently at work, both in Europe and in America; and we will entertain a hope that there are those here who,

at no very distant day, will do their part, and reflect honour on this school of medicine by bringing to light some of the desiderata I have alluded to,—some of the as yet arcana in human anatomy and physiology.

It may not be out of place here to say a few words on what has been called “philosophical anatomy,” as an object of study, as the principal means by which we hope to improve our physiology. On this subject our celebrated journalist, Dr. James Johnson, expresses himself thus, “The study of human anatomy and physiology alone, may make the clever operator in surgery, and may even be deemed sufficient for the purposes of the practical physician, in the ordinary routine of his avocations ; but it can never suffice for him who has any taste for the philosophy of his profession.” This being true, we should not demand more of you than the absolute requisites to form the practical surgeon and physician, for they are not a few. Yet your attention to comparative anatomy should not be dispensed with ; seeing its importance, as a means of elucidating human physiology, and of advancing our knowledge in human anatomy.

The magnitude of some animals, as the elephant and the whale, affords an opportunity of investigating minute structures less apprehensible in man. Moreover, the vivisector can pursue experiments, by which only, the peculiar use of particular parts may be discovered. This branch of science has been little cultivated in England till of late ; neither, until the sagacious and industrious Cuvier displayed his energies in France, could that country boast of any work on the

subject worthy of mention. About half a century ago the celebrated professor of anatomy at Edinburgh, the first Monro, wrote a small book on the subject ; since which, little has been done till lately, in this country. At the present day, however, lectures on philosophical anatomy are given at most of the schools of medicine, at the London University and College, and at Surgeons' Hall ; confessedly replete with interest and high promise.

I have spoken above of the advantages to be derived from the dissection of animals of superior magnitude ; but what may we not anticipate from the use of the microscope in its present state of improvement, when employed in the investigation of minute structures in the human body ? By the aid of this instrument the French and German anatomists have been enabled to make a successful research into the curious, and as yet undemonstrated structure of the periphery of the circulation : certain appendices have been discovered connected with the minute arteries in erectile tissue, which promises to throw much light on that function, and to lead to some physiological results as to the movements of the circulating blood among the extreme vessels of the surface and internal organs.

By the astonishing magnifying powers of a microscope, Mr. Owen discovered several entozoa of a new species, inconceivably minute, infesting the interior of muscle. Mr. Crosse, in his retrospective address to the Provincial Medical and Surgical Association, states, that in one portion of muscle which he possesses, there existed probably between one and two thousand

of these entozoa within the area of one square inch. Things are large or small only by comparison;—an ordinary flea may be to one of these in magnitude, what the rhinoceros is to the flea. And yet these entozoa are giants, compared with an antediluvian race of animalcules, lately discovered. Ehrenberg has detected by means of the microscope in the polishing slate of Bohemia, in the chalk flints, and even in the semi-opal, the presence of these animalcules, whose organic remains constitute the chief part, if not the entire whole, of these silicious fossils. In the polishing slate from Bilin, in which there seems no extraneous matter, and no vacuities, a cubic inch is said by the author, to whom I have referred, to contain, in round numbers, twenty-three millions of them. The weight of a cubic inch which contains them, is 270 grains; hence, there are 85,000 of these animalcules in a single grain. We must acknowledge that these are wonderful discoveries; and we look at them as an earnest of what may be expected, from the application of this instrument to the minute structures of the human body.

In Embryology the microscope has very recently detected the earliest operations of life on animal matter. It has examined the human embryo at its development, when a mere vesicle—a simple zoophyte, as it were. It has noted changes progressively taking place, that raise this zoophyte through a succession of stages in the scale of animal perfection. It has been ascertained, that organisation commences at the surface of the vesicle at each side, gradually converging

towards the mesial line of the body. However, this is no more than might have been anticipated; for it had previously been demonstrated by several eminent men, both foreigners and of our own country, as you well know, that the smaller blood-vessels are formed before the larger, and these before the heart, and that it is by the gradual approximation of the larger vessels of each hemisphere of the body, terminating in the mesial line, where they coalesce, that the largest vessels, and even the heart itself, are formed by their union. And the same order, with respect to the nerves, spinal marrow, and brain, had been observed. All this is the inverse of what was formerly taught. It was believed, not half a century ago, that organisation in the embryo, commenced from a centre—the *punctum saliens*—*primum vivens*—*ultimum moriens*—the heart,—and that the spinal chord was a prolongation of the brain, and the nerves a further extension of the cerebral structure. We are indebted to men of the present day for a better light, and for discoveries as to the existence of separate orders of nerves, having distinct functions in the animal economy. And it is now asserted that the microscope has moreover shewn a difference in the structure of these separate orders of nerves; that minute organic filaments have been discovered at the roots of the sentient nerves; and by this mark, physiology considers it probable that the glosso-pharyngeal is the gustatory nerve of the tongue. We may recollect that Mr. Broughton asserted the fact of the glosso-pharyngeal nerve being the gustatory nerve, at the meeting of the British Association in

Bristol last year, but upon different grounds. I must, however, leave the details of these matters with your able professors ; my object being merely to shew what may be expected from the microscope in anatomical and physiological discovery.

But I will here venture to offer an opinion on that which the microscope never can discover : I mean that power by which the embryo just spoken of, is organised. It is *life*. *The term life must be taken as expressive of the principle of vitality, and vitality as the result of the influence of this principle upon matter.* Life does not consist in the actions of development ; for it exists anterior to them, in the relation of cause and effect. Life has existed from the beginning. It has propagated itself in an uninterrupted succession, since the day, in which the great Creator of universal nature gave it molecular bodies for future development, in each created individual, according to their kind. Its power is to creation, what motion is to impulse. The flowers, and fruits, and forests, which now cover the earth, and the innumerable animals which inhabit it, beautiful in the perfection of their forms, and man, are all equally the result of its agency ;—an agency quite dissimilar to that of light, or heat, or electricity, although these severally, are made subservient to it in its operations. And it may be remarked, that these elementary existences are each evolved from certain animals, by its influence on organised matter ; and that it controuls the ordinary laws of chemical affinities among the constituent elements of bodies with which it is connected, producing results peculiarly its

own. Indeed, its power is so wonderful in operation, so complete in execution, in adaptation so exact, in all things so exquisite, that there is nothing like it among all the other agents or elements of nature. It is like the Being from whom it originally emanated, impalpable and invisible ; and I suspect that no link of causation will be found to exist between it and the Creator. Yet, this life is but the stirring principle of matter into organisation and form ; common to vegetable and animal existence, to the brute creation and to man. It must not be confounded with that life, which is neither animal, nor even intellectual, but spiritual ; the distinct nature of which, is declared to us by a revelation from God himself, who is the Author of all existence.

The restricted compass of this address obliges me to pass over many topics that would interest the medical student ; but other opportunities await you. I could wish to expatiate on the cultivation of pathological anatomy, and on that particular division of pathology denominated patho-physiology ; but the subjects are too extensive to admit of more than a transient glance in review. All that can be done here, is to recommend them to your deep and unwearied attention, when brought before you in the courses of the session now about to open.

On the subject of morbid anatomy, however, I would impress on your minds the importance of getting possession, if possible, of the symptomatology of every case submitted to you for post mortem examination ; so that by considering the symptoms during life, in

connection with the morbid appearances after death, the pathology of the case may be established in your minds; and its patho-physiology elucidated for future practical purposes. Morbid anatomy thus attended, claims the new appellation of pathological anatomy, but not otherwise. There is very little indeed to be learned from necroscopy, if the history of the disease be wanting; and for this reason, preparations of diseased parts, malconformations, &c. without an accompanying history, are of much diminished value. It was the custom of Dr. Baillie, and of Mr. Wilson, after him, in the Windmill Street school of anatomy, to have a large book on the table of the museum with historical references, bearing a corresponding number with the preparations on the shelves. And I hope this is now done in every museum of pathological anatomy, private and public.

I have made use of the word patho-physiology, as a division of pathology. Pathology embraces all matters connected with the presence of disease, while patho-physiology is confined to express the doctrine of organic and functional derangement, including the etiology of diseases. But there is another division of pathology not to be passed over, it is pathognomy. This term, as a division of pathology, has hitherto been little used. It distinctly embraces the art of discovering those signs which we call pathognomonic, that is, the diagnostic signs; the signs by which diseases are distinguished from each other, and their individuality established.

Now, Gentlemen, that I have ventured to assail

your ears from this place with the seldom heard term "pathognomy," and to define its business; I shall take the liberty of drawing your attention to the improvement made in this branch of medical science by auscultation; a means by which we are made acquainted with the condition of internal organs, far beyond any that we before possessed. The well-trained auscultator is the best pathognomist in diseases of the chest; he takes his inductions from physical signs, by impressions made on the senses. He is furnished with instruments to aid the senses of touch and hearing. But he must be supposed master of the relation which all sounds elicited from internal parts bear to the condition of the parts themselves. To attain this proficiency, requires very long training under an able master, followed up by daily practice, and by frequent necroscopic opportunities, and much reflection on the results obtained; and by a careful register in writing of the whole matter. It must be confessed that the time and attention required to accomplish all this, is not a little. However, you must either do all this, or do nothing; for the stethoscope in the hands of any but a proficient, is not only of no use, but tends to confuse and puzzle the half-initiated practitioner in his diagnosis:—to stop short of proficiency is only to encumber yourself with a source of delusion. It is painful to state that much less practical benefit is derived from this fruitful source of knowledge than might be expected. And having made this acknowledgment, I will also express my conviction, that the disappointments we meet with in auscultation arise,

not from its inherent insufficiency, but from certain impediments placed in the way of investigation by adventitious circumstances connected with the patient, and too often from want of skill in the auscultator. To obviate in some measure these impediments, it may be advisable on ordinary occasions to use the index, or middle finger of the left hand, for your pleximeter in percussion; and then instead of bringing forth your stethoscope, apply the ear direct to the parietes of the chest for the purposes of auscultation. The less parade about it the better. You must do every thing in your power to facilitate the application of these new and extraordinary means of detecting the nature and extent of disease; not for the sake of science only, but for your own respectability in the eyes of your patients and their friends. A quick-sighted writer of the present day, says, "I warn medical men, that they must soon do it, or be disgraced: many affectionate parents are in the habit of feeling the pulse, and looking at the tongue, when they suspect disease to exist: they will soon also begin the very simple process of applying their ear to the chest; and thus put the medical attendant to shame if he cannot make use of his." I entreat you, gentlemen, to remember this; the future lies before you.

We have now made mention of those studies by which you become acquainted with the phenomena of health and disease. This knowledge would be of little use, could we not avail ourselves of it in the practice of our profession. In surgery various remedial expedients have been furnished as an inductive

result of anatomical knowledge. But in the department of medicine the way is more indirect. We must study in a wide field, while pharmacy ransacks for us all the three kingdoms of nature for remedies. These are the *materia medica*, that claim your attention. The articles are numerous, but the classes of remedial agents are few ; as students, however, you must study each article separately ; without which, you would be incompetent in the day of practice to make an election. Botany on the one hand, and chemistry on the other hand, will conduct you through this study, supplying you, as you go along, with all requisite knowledge as to classification and constituent elements.

The applicability of the substances above alluded to belongs to therapeutics ; a department of medical science which presupposes a knowledge of anatomy, physiology, pathology, botany, chemistry, and *materia medica* ; besides an acquaintance with the economy of nature in the external world, with which the human frame is in constant communication ; and also with the moral nature of man, his occupations, his desires, and his passions, under the various relations of life.

We are called upon not only to cure diseases, but to prevent them : this last is an important branch of our profession—the hygiene of medicine. Here the *materia medica* avails us little. It is our acquaintance with the effects of external agencies, and also of our moral feelings and passions upon the human body, that enables us to direct the prophylactic measures required to preserve health, by counteracting the causes of disease. But the foundation of health, in truth, is

a sound hereditary constitution. We must, however, take this as we find it, and when defective, do our best to improve it ; deprecating all practices and habits, which tend to weaken the nervous energy, or prevent the proper growth, or development of the body, in its natural order of progression during youth.

I shall not dwell on the health-imparting power of dry habitations, cleanliness, ventilation, proper food, exercise, &c. &c. all of which will meet with your due consideration ; but I would impress on your minds the importance of what is too much neglected in this country ; the use of baths and ablutions. No single observance contributes so much to a healthy condition of all the internal organs, as the preservation of the cutaneous function in its full integrity. The more the insensible perspiration is obstructed, the more labour is thrown on the respiratory organs in their excrementitious function. Besides, there exists a powerful sympathy between the skin and all the other internal organs, productive of health or disease. It has been my practice for many years, on my own person, to use cold ablution from head to foot every morning throughout the year, immediately on getting out of bed. And I recommend this practice, with proper modifications, to almost all who consult me on the subject of preserving their health.

I may be permitted further to offer one or two observations more on the subject of hygiene. It has been repeated a thousand times, that all persons who attain a great age have been early risers ; this I believe to be true, but it is not the whole truth of the case,

they who rise early generally go to bed early; and these two habits of life, pursued together, are attended by the most salutary consequences. They who retire to rest at a late hour, suffer more or less from a certain degree of febrile action, which manifests itself in most persons towards the close of the day, and continues during the greater part of the night; it is augmented by the fatigue incident to late hours; it does not pass off perhaps until the dawn of day, and then, not without obvious perspiration. These late goers to bed cannot rise till late, and when they do rise, they have undergone two debilitating processes, which, however inconsiderable in degree, come to a fearful aggregate in a few years, deteriorating their health, and shortening their lives. It is not so, when nature's call to repose is answered, by quitting the wear and tear of sensation, or of thought. In sleep, the pulse falls to its natural standard, so that the person awakes and rises at the dawn of day refreshed and invigorated.

On the salutary effects of temperance, not only in a physical, but moral point of view, society shews by its efforts to promote it, what is the general sense of well-regulated minds respecting it. Temperance, indeed, has been advocated in all ages, as the great promoter of health; and in its observance, is to be found also, the secret of all enjoyment.

There is one more department of medical science that claims my notice in this address. It is forensic medicine. On this subject I shall offer no remarks beyond briefly pressing on your recollection, that by the neglect of this branch of medical science, so im-

portant to the interests of society, in the administration of criminal justice, you might inflict a wound on your professional character, never to be healed without leaving behind it a mark not easily effaced. A manifestation of ignorance on some important question connected with your professional character, put to you in the witness box, might ruin your reputation, and, as far as your own fortune is concerned, nullify all your other acquirements.

Gentlemen, I have now given you an outline of the task you have to accomplish. When we contemplate it in its details, we are forcibly and deeply impressed with its magnitude. But, *Labor omnia vincit, si labor ipse voluptas*. You have able teachers; and while they impart to you their knowledge, aspire to imbibe their zeal also; and there will be found those among you, and not a few, I trust, who shall do honour to the profession, and uphold the character of this school of medicine.

Gentlemen, before I close this address, I am desirous of saying a few words to you on a subject intimately connected with your success in life. Medical men not unfrequently remark, that after having learned their profession, they find, when entered upon actual practice, that they still have very much to learn to enable them to proceed with comfort and success. This subject, which is one of conduct in their intercourse with others, is thus forced upon the mind of the physician and surgeon, as a matter of importance, subordinate only to that of his professional knowledge.

What is it chiefly that we have to learn? To bear with the peevishness of sickness in our patients, and with the too often impertinent, though well-meant, interference of their friends. And where is the remedy? Expressions of displeasure, either by words or manner, on the part of the medical attendant, cannot change but for the worse, these unpleasant, and sometimes almost unbearable annoyances. He must make up his mind to encounter them every day of his professional career, at one place or another. And where is the remedy? I answer, in the discipline of our own feelings, and in the due regulations of our own minds. We must cultivate patience, until it become a habit of the mind. It is our only remedy. But how is patience to be cultivated to the extent required in this affair? By a continued effort to weaken in ourselves that great source of moral evil, the selfish principle, which stands opposed to all sympathy with our suffering fellow-creatures; and by accustoming ourselves to give up quietly unimportant points; listening attentively to the complainings of our patients, and to the statements and questions of their friends; answering by few words, conceived in truth, and uttered in a tone of composure, if not of kindness. But do not forget, that kindness is the key that unlocks all the human affections: without all this, and perfect self-command, we cannot perform our duties as respects the sick, with comfort to them or ourselves. There are many maxims and cautions that might be added to these; but if the detail were extended, so as to fill a volume, it could not meet all cases and contingencies. We,

however, find a sure guide in the precept of our blessed Redeemer, "Do unto all men as you would that they should do unto you." And medical men would do well to apply this precept to the regulation of their conduct, each to the other, as well as to their other professional duties: we should not then be exposed to feel, or witness, or even hear of those feuds, which sometimes arise between members of the profession, so injurious to the interests of all concerned, and so derogatory to that high character, which it is our duty to preserve, and should be our chief aim to raise in the estimation of the public.

Gentlemen, there is a standard of character to which every medical man must aspire; and let it be remembered that character in real life cannot be put off and on like the thespian buskin; it must grow with the growth, and strengthen with our years; it must become an integral part of the actual man. He must acquire the habit of being all that he desires to be. Such can be produced only by a long continued line of conduct in one certain direction, termed rectitude; and this being essentially true, our moral education cannot be begun at too early a period of life.

It is not my intention, gentlemen, to assail you with a tirade of denunciations against what are called the follies of youth, or against the vices of these degenerate days;—these days are not degenerated, thank God! but regenerate in many things. Virtue, and morality, and religion, are every where respected, and the time has already come, when the reveller and the swearer dares not shew his face in society. The medical character

has now assumed an aspect of moral and religious bearing much to be commended ; always conspicuous in the brightest ornaments of the profession in all ages. In the early part of this address we took occasion to notice, that one who now stands among the foremost in our ranks, for fame and honour, expressed himself as thankful to Providence who had so conducted him. Let us also, in humble dependence on that God whose Providence so conducted him, offer up our morning prayers, day by day, before we go forth to our professional duties, that he may so conduct us, that in our last days, we also may praise him among our brethren.

In conclusion. We will hear the testimony of an illustrious writer and physician, whose comprehensive mind would direct us to the contemplation of Deity, not only as the Author of nature, but as the Giver of eternal life.

“ In the structure and economy of the human body,” says he, “ the medical observer has proofs, such as no other branch of natural science can furnish, of the power and wisdom of the Eternal One. Let him resign his mind to the influence of these truths, and learn to rise in humble adoration to the Almighty Being of whom they witness ; and familiar as he is with human suffering and death, let him learn to estimate the value of those revealed truths, which have power to heal the broken heart, and to cheer the bed of death, with the prospect of immortality.”

NOTE.—See Page 19.

The term *Vitality* is employed by most writers not only to express the notion of a being endued with life, but is used to signify *Life* also, as an abstract principle. This certainly is confounding terms, and perverting grammatical distinctions. *Vitalitas*, is one of those substantive nouns derived from an adjective, expressive of the attribute conferred. It is only necessary to look at the original word and its derivatives, to perceive the extent of the error above alluded to, thus:—

LATIN.—Vita	Vitalis	Vitalitas.
ENGLISH.—Life	Vital	Vitality ;
Or, Life	Lifeful	Lifefulness.

I should think this view of the question sufficient ; but it may be strengthened by subjoining another word with its derivatives similarly constructed ; where it is scarcely possible to make a mistake in the application of the derivative substantive for the original word, viz.—

LATIN.—Fides	Fidelis	Fidelitas.
ENGLISH.—Faith	Faithful	Fidelity,
	Or, Faithful	Faithfulness.

