

**Introductory lecture delivered to the class of the Starling Medical College :
November 1st, 1848 / by Frederick Merrick.**

Contributors

Merrick, Frederick.
Starling Medical College.
National Library of Medicine (U.S.)

Publication/Creation

Columbus : Printed by Legg & Murray, 1848.

Persistent URL

<https://wellcomecollection.org/works/jr88pqnc>

License and attribution

This material has been provided by This material has been provided by the National Library of Medicine (U.S.), through the Medical Heritage Library. The original may be consulted at the National Library of Medicine (U.S.) where the originals may be consulted.

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

merrick. (Fr)

INTRODUCTORY LECTURE

DELIVERED TO THE CLASS

OF THE

STARLING MEDICAL COLLEGE;

November 1st, 1848.

BY FREDERICK MERRICK, A.M., M.D.,

Professor of Chemistry and Botany.

6
284445
Washington, D.C.
COLUMBUS:

PRINTED BY LEGG & MURRAY.

1848.

STARLING MEDICAL COLLEGE,

NOVEMBER 2D, 1848.

PROF. MERRICK :

Dear Sir : The Medical Class now present, having listened with pleasure to your able, instructive, and eminently *practical* Introductory Lecture delivered before them on yesterday, have appointed us a committee of their number, to request a copy of the address for publication.

On their behalf the request is herewith submitted, with an earnest desire that their *expectations* may not be disappointed.

Respectfully and truly, yours,

WM. S. AUMOCK, OHIO,

N. WEBB EAMES, ALA.,

L. R. JOHNSON, IA.,

D. TIMMS, MICH.,

J. W. HOLE, VA.,

E. COLLINS, TENN.,

W. DUVAL, JR, ARK.,

JOS. PULSIFER, IOWA,

WM. B. CHAMBERLIN, KY.,

M. L. FAULKNER, PA.

COLUMBUS, Nov, 3d, 1848.

GENTLEMEN : Grateful for the favorable estimate the Class place upon the Lecture I recently had the honor of delivering before them, as the Introductory to the course, it is still with unaffected diffidence that I comply with their request, which you have, in so polite and flattering terms, communicated. The subject not one of popular interest, I fear the remarks upon it do not possess sufficient intrinsic value to warrant giving them so permanent a form. In placing the manuscript, however, at their disposal, I follow the advice of friends, whose opinions, for many reasons I am bound to respect.

With the highest regards to yourselves and the Class,

I am, sincerely, your friend,

F. MERRICK.

WM. S. AUMOCK, N. WEBB EAMES, AND OTHERS,

Committee of the Medical Class.

LECTURE.

Gentlemen of the Medical Class :

To me has been assigned the pleasing duty of welcoming you to the present course of lectures in the Starling Medical College. Agreeable, however, as is the office, I cannot but regret that it should not have devolved upon some one of my worthy colleagues, who, from greater familiarity with scenes of this character, and an intimate connection with the profession, would have been able more fully to enter into your feelings, and better to adapt his remarks to your present circumstances. But as my position is one for which others are responsible, I must beg the liberty to throw myself upon your kind indulgence.

I am happy to see before me so large a number, who have chosen as their vocation in life the truly honorable profession of medicine. In behalf of the Faculty I bid you a hearty welcome to the privileges of this institution.

We have not the pleasure of greeting you in extensive halls, or beneath lofty domes ; our pretensions in this respect are indeed humble ; but you are well aware that as it is not so much the body which determines the character of the man, so it is not the architectural structure which constitutes the more essential part of a college. We trust that with the facilities of improvement you find here, you will be well satisfied ; and though at present we can promise you only comfort and a tolerable degree of convenience in our lecture rooms, we are happy to say, that through the liberality of a gentleman of this city—a liberality which not only reflects credit upon the gentleman himself, but upon the city and upon the State—the Trustees of the institution will be able, in the course of the coming season, to erect an edifice, which, both for convenience and elegance, will stand unrivaled among the medical colleges of the West, and to which you will be able hereafter to point with proud satisfaction as you say, there stands my *Alma-mater*. We trust you will find your residence in

the city, and your attendance upon the lectures, both agreeable and profitable. We shall not fail to feel an interest in your success. Our sympathies and best wishes we freely and cheerfully pledge you.

With these few, but sincere words of welcome, I proceed, in compliance with time-honored usage, to offer for your consideration a few remarks of a general character, intended to be appropriate as introductory to the subsequent lectures of the course. The remarks will be such as have been suggested by a consideration of your present position. That position, gentlemen, I cannot but regard as eminently interesting, and as fearfully pressed with responsibilities. To mortals is assigned but one brief life on earth. Through its pleasures and sorrows, its privileges and duties they pass but once. They enact their one short drama, and are seen upon life's stage no more. The selection of a calling which is to constitute the greater portion of that drama, cannot, therefore, but be an event of the highest interest, and a preparation for its duties a matter of the greatest importance. You have made your election. Upon it you have staked much. In the practice of the profession of your choice, you expect to fulfil the ordinance of Heaven, which requires that man shall receive his sustenance as the fruit of his toil. But "it is not all of life to live." There is something besides the "omer of manna" for which you will look to your profession. You cannot be willing to pass through life unnoticed and unknown. Unless you crush an ennobling principle of your nature, you must have stirring within your bosoms, aspirations for an honorable distinction. How shall they be met? Medical men, especially in this country, seem more closely shut up to their own profession for the means of elevation than those of almost any other calling. If, therefore, you gain an elevated rank in society, it will probably be by success in your chosen vocation. But, surely, you would not live to yourselves alone. You would do something to benefit your race. Even the reputation you would gain you would consecrate to benevolent ends. Each in his sphere, I trust, would be an imitator, however humble, of Him who has alone given us a perfect example of what human conduct should be, of whom it is said "*he went about doing good.*" You have chosen the mode in which you will chiefly seek to accomplish this end.

Without, then, alluding to more important interests that may be involved in your decision, which lie beyond the limits of time, am I not right in saying that upon this decision you have ventured much?

But need I remind you that in it the interests of others are also involved? It places you in a most important relation to your fellow men; a relation which will lead them to look to you for aid when their dearest earthly interests are endangered; and upon the manner in which you meet their calls may depend even life itself. Yes, to you it may be given to extend the life of one to whom a helpless family are looking for protection and support, or to call back from the verge of the grave, her whose influence of all others is most needed to give direction to the opening intellect, and to mould the youthful heart—to stay the hand that would snatch the gentle infant from the bosom of maternal love, or to preserve for a time unbroken the golden link which binds together kindred hearts; to give to an heir of immortality an hour of probation, upon which may hang his destiny for eternity; or failing in the practice of your profession, you may hasten rather than stay the hour of doom. Be assured, success in your calling will do much to perpetuate and increase the sum of human happiness; want of it may fearfully swell the stream of human sorrow.

To meet the responsibilities of this calling, you are now in course of preparation, and upon the manner in which you pass through this preparatory course, will your future success, in a great measure, depend. It is especially in view of this that I speak of your present position as one of interest and importance. In the hope of offering you some little aid in the important work of preparation, I venture to offer, with much diffidence, a few suggestions, as to the manner in which this may be best accomplished.

Your first object, of course, will be to acquire a thorough knowledge of the facts and principles upon which medical science is based. This is indispensable. Without such knowledge you cannot hope for success. We live in a world of law. Nothing occurs by chance. The moat which floats in the air is no less under the dominion of law in its apparently eccentric movements, than is the planet wheeling through its path of ages. The rising vapor and the falling rain, the veering wind and the changing sky, obey laws more permanent than

those of Medes or Persians. Not a change, however trivial, can take place in the history of an individual of the vegetable or animal kingdom, but in accordance with the laws of its being. Diseases, decay, and the convulsions of nature, form no exception. Every where law reigns; and these laws no finite power can change. They may be directed, and made to modify, to some extent, each other's operations, but they cannot be annulled or suspended. To act efficiently, we must, therefore, act in harmony with them. The mechanist who should construct a machine without regard to the laws of reaction, might apply a power sufficient to destroy his instrument, without overcoming the resistance of a feather's weight; and but poor optical instruments would he produce who should attempt their construction without a knowledge of the laws of light; and surely not less unsuccessful must he be who undertakes the practice of medicine ignorant of its fundamental laws. Much more likely will he be to destroy life than to save it.

In the pursuit of this knowledge, let me suggest, in the first place, that you *be careful to discriminate between what is true and what is false*. Error is not merely negatively injurious, in that it excludes truth, and thus prevents right action, but it is positively injurious, in that it leads to wrong. The medical student has special need to be upon his guard. In some departments of his study the facts and principles of the science are indeed so obvious that he is in little danger of falling into error, but in other departments it is widely different. Here the truth is more obscured, it has not yet been made to stand out in relief; and what will embarrass him not a little, is the endless variety of opinions as to where it is to be found. He will find opposing theories urged with almost equal plausibility, and the authority of great names quoted as freely upon one side as upon the other. Under these circumstances his only safe course is, having, as far as possible, freed his mind from all predilections in favor of one theory rather than another, and resolved to weigh authorities according to intrinsic merits, to pursue his investigations with a determination to recognize all facts well authenticated, and such doctrines as are legitimately deduced from them; and to reject, at least as doubtful, what is not thus supported.

It is not all, however, who pursue this course. Some, naturally

over-credulous, or for lack of ability to discriminate, or else because too indolent to think, receive, without questioning, whatever comes to hand. They read and they hear, and receive all that is communicated about as passively and as indiscriminately as the sponge drinks up water. What is given them they gather. Whether true or false matters little, so it but goes to make up the requisite amount of acquisition. A certain quantum of *something* must be had, and, easy souls, they take whatever is offered. Good, bad and indifferent is all alike stowed away, and all retained as equally valuable. Of course their minds become a perfect *ominum gatherum*, where in strange proximity are found things the most diverse. How utterly unqualified such must be, however extensive their acquisitions, for the practice of their profession, I need not stop to show.

There are, occasionally, others who fall into the opposite extreme. They will give full credence to nothing which they hear or read. This incredulity may, in some cases, be merely affected, and the result of a silly vanity. There are some so unfortunate as to think far more highly of themselves than they ought to think; and, as to adopt the opinions of others might seem to imply that they were as wise as themselves, they seek to avoid so humiliating an inference, by questioning every thing to which they cannot lay claims of paternity. This their folly is their ruin. Others, by some habitual and long continued abuse of the powers of belief, have become unable to appreciate the force of evidence, whether of fact or argument. It has been my lot to meet with some minds of a high order thus impaired. Such finding themselves ever liable to be led to false conclusions, are likely, sooner or later, to fall into universal skepticism.

There is another class, who pursue a course little less objectionable than that of either of those I have named. I refer to such as are in the practice of forming opinions upon subjects before investigation, and having adopted them they know not why, adhere to them for the same intelligent reason. Their reading and observation may be extensive; and they may not be without their claims as eclectics — culling, as perhaps they do, something from almost every system; but the only condition upon which any opinion is adopted is agreement with their own. These constitute their standard of truth. What coincides with them is true, what does not is false. With so simple a

rule of logic, they readily arrive at conclusions, and appear never to be disturbed by any doubts as to their correctness. Where others hesitate, they are confident; where the keenest intellects can only discern men as trees walking, all is to them as open vision. Every argument that recognizes not the infallibility of their universal syllogism, goes for nothing. Even the long and well established principles of science, not falling in with their views, are laid aside as unquestionably false; and as for facts, they regard them in much the same light as the French philosopher, who, when assured that facts were opposed to his theory, replied with the utmost nonchalance, "so much the worse for the facts."

But not only should caution be observed in not receiving as true what is demonstrably false, too much care cannot be exercised in discriminating between established principles, and what is mere hypothesis. There is much which passes current with many for real science, which is not verified by facts. Take for illustration the popular theories of light — the corpuscular and undulatory. One supposes the phenomena of light to result from the action of minute particles, emanating in all directions from radiant bodies; the other, from the undulatory movements of an exceedingly subtile fluid, which is acted upon by the radiant, in a manner analagous to that in which a sonorous body acts upon the air. Now both of these theories cannot, of course, be true; and yet either accounts most beautifully for nearly all the known phenonema of light. Indeed the essential element in each is purely hypothetical. The existence of neither the corpuscles of the one, nor the subtile fluid of the other, has yet been proved. Illustrations might be drawn from almost any department of medical science, but my object does not require it. The great danger of being misled in these cases, consists in this, that the hypothesis so satisfactorily accounts for undoubted facts, and facts which perhaps without it, are unexplained. Hypotheses have their place. When regarded merely as the forerunners of science, they have often proved eminently useful, by giving direction to investigations which have led to the most important discoveries, but when they have thrust themselves into the place of science itself, they have most effectually retarded its progress, by preventing investigation, and by giving false views to facts accidentally dis-

covered. Suffer not yourselves, therefore, to be beguiled by them, however imposingly they may be put forth, or however well they may be adapted to the phenomena they are proposed to explain. Test rigidly every proposition which claims to be scientific truth, by enquiring whether it has been legitimately deduced from unquestionable facts, or whether it simply accounts for them. But, in rejecting a hypothesis as science, beware of rejecting the facts which may be associated with it. They may be perfectly veritable, while it may be utterly fallacious. Indeed a hypothesis may in part be true, and in part false; and often what are claimed as facts may be found, upon close examination, to be bare assumptions. Truth and error strangely blend in all the productions of fallible man.

“Verily, there is nothing so true, that the damps of error have not warped it;

Verily, there is nothing so false that a sparkle of truth is not in it;

Yea, there is truth in the wildest schemes that imaginative heat hath engendered,

And a man may gather somewhat from the crudest theories of fancy :

The alchemist laboreth in folly, but catcheth chance gleams of wisdom,

And findeth out many inventions, though his crucible breed not gold.”

Truth is what you need. Embrace it wherever found, and whatever its associations; reject error, however speciously urged, or however honorable its connections. But how shall you discriminate between them, and how best attain the knowledge which you seek?

“The sages say, dame Truth delights to dwell,—

Strange mansion!—in the bottom of a well.

Questions are these, the windlass and the rope,

That pull the grave old gentlewoman up.”

Additional suggestions may furnish a solution.

Conduct your studies upon philosophical principles. This will require attention, in the first place, to phenominal truths, as these constitute the basis of all true science. And, first, their *nature* must be carefully studied. An error here would be likely to vitiate all subsequent investigations and reasonings based upon them. If

the foundation be defective, the superstructure cannot be stable. Much of theoretical error is the result of a partial knowledge of the true nature of facts. But not only is a thorough acquaintance with the facts themselves essential, their relations must be well understood before any general principle can be safely deduced from them. This is especially true with regard to their causal relations. As I have before remarked, nothing occurs by chance. All phenomena have their causes, and to ascertain what these are, is of the first importance. No advance can be made in theoretical science until this is done. But this may not, in all cases, be easily accomplished. The relation is not always obvious. The cause may be so occult that long and thorough investigation may be necessary to discover it; and what may render the discovery still more difficult, the cause may be exceedingly complex. Various causes are frequently combined in producing effects apparently the most simple, and to determine their relative influence, becomes a problem of the highest importance, though frequently of difficult solution, so difficult even as to baffle the attempts of the most careful observers and accurate reasoners. Both of these difficulties must be encountered in the pursuit of medical science. Here the most important causes are often very obscure, and their combinations equally complicated. To obtain a thorough knowledge of them, clearness of apprehension, and the power of rigid analysis, are necessary, and even these may sometimes fail.

Having ascertained the facts of your science, the next step is to classify them according to their philosophical relations, and to deduce from them the general principles which they exemplify. The thorough knowledge of the facts which I have been urging, will enable you to classify them without difficulty, and greatly assist you in the deduction of principles, though in the latter much care will still be requisite. Could we obtain a perfect knowledge of all the phenomena of any science, it would enable us to refer them to general principles, and to reduce the science to a perfect system. The relation between causes and effects is immutable. The cause the same, the effect must be the same. To this there can be no exception, save in the case of miraculous interposition. But we must not lose sight of the fact that causes may be combined in producing results, and that upon their relative influence will depend the character of the effect.

According to the difficulty of detecting these causes and determining their relative influence, will be that of deducing the general principles of the science to which they belong. Herein consists the difficulty of establishing some of the general principles of medical science. The causes of disease, and the counteracting influence of remedies, are often so occult as to defy discovery. Take for example one of our most common diseases, and the remedy most frequently employed in its treatment—intermittent fever and quinine. What do we know of the cause of this disease? We may be told that it is malaria, or, as it has been called, marsh-miasma. But what is this? I am aware there has been much research and speculation in order to ascertain its nature, and some have ventured to suggest its chemical composition; but after all, even its materiality remains to be proved. The more prevalent opinion, at the present time, that it is sulphuretted hydrogen is not a legitimate induction from facts. Indeed, the facts which stand opposed to this theory are more decisive than any which can be urged in its favor. But allowing its constitution known, what is known of its causal power? Its action in producing functional derangement? Absolutely nothing. And what do we know of the remedy? Its natural history and chemical composition are well known; but what is known of it as a cause, as it acts in removing the disease? We know that certain effects follow its use, but these effects are not direct, and who can trace the connection? In some cases all that can be said is, that it substitutes its own peculiar impression for that of the disease—the expression of a fact, of which, however, no philosophical explanation can be given.

Let me not be understood as intimating that all is uncertainty in the practice of medicine. Far from it, for such is not the case. What I assert is, that its general principles have not yet been fully established. Much, to be sure, has already been done towards its accomplishment, and that more has not been done, is not to be attributed to the want of a fair amount of philosophical acumen on the part of medical men. As a profession they have furnished some of the most profound interrogators of nature—men of clear apprehension and sound judgment. If the remark, therefore, of Bacon be true, that “medicine is a science which hath been more professed than labored, and yet more labored than advanced—the labor having

been rather in a circle than in progression," the cause is to be found in the difficulties intrinsic to the subject itself.

I am aware that, at present, you do not occupy the position of original investigators — that you do not, in your course of preparation, mainly depend upon your own observations or deductions. Others have gone before you, and in a great measure prepared the way. They have labored, and you enter into their labors. Still, in reading their works, or listening to their oral communications, you will do well to practice upon the suggestion. Should no other good result from it, it will do much towards developing and disciplining the intellectual powers; and this, especially in the case of those whose early opportunities for mental training have been limited, would be an advantage of no small moment. Knowledge is power according to the mind that wields it. As this advantage, however, is rather incidental, I will not urge it. But should your authors be strictly philosophical in the treatment of their subjects, they must be studied philosophically to be fully understood, and if they are not you should be prepared to detect and correct their faults. Place not too much confidence in the best established authorities. Examine carefully their facts, and rigidly scrutinize their deductions.

It is especially, however, in view of the position you will soon occupy as practitioners, that I urge upon you this habit of thought. You will then have to make your own observations, and rely upon your own inferences, guided, indeed, by the knowledge you shall have previously acquired. Often, however, you will meet with so much which is new, that you will need to call into exercise all your powers of analysis and induction, to solve questions which will be sure to rise.

To insure success in this mode of investigation, *earnest, continued and patient thought* will be indispensable. In no department of science can much be accomplished, unless the mind can be aroused to energetic effort. This is something more than mere activity, or activity in connection with fixedness of attention — it is intensity combined with both. It is a state in which the mind seizes the subject before it with a vigorous grasp, and fixing upon it a steady and penetrating gaze, carefully examines all its parts, and accurately notes its relations. It shrinks not at difficulties, but struggling, if need be,

to overcome them, urges its way on towards the accomplishment of its object. There may be, by original constitution, a difference of mental energy, but it is unquestionably to a great extent voluntary, and susceptible of almost unlimited improvement. Few minds are naturally so sluggish that they cannot be trained to some good degree of energetic action. Many may never exhibit it, but it does not follow that even in their case it was impracticable. They may have passed their lives in a Rip Van Winkle sleep, solely for the want of some quickening impulse to arouse them. It is said that the late Dr. Adam Clarke in his boyhood was so extremely dull, that the rudiments of the Latin grammar seemed utterly beyond his comprehension, until, stung by the reproaches of his teacher, and the taunts of a fellow student, he was led to make an unwonted effort, when his mind, bursting asunder its fetters and clothing itself with strength, manifested an energy which excited the astonishment of all. From that time his success was almost unparalleled. The boy to whom *As in praesenti* was a profound mystery, became the great linguist of his age. The case of Charles XII. of Sweden, is equally striking. Nor is their history peculiar. Thousands of other minds have, in like manner, been aroused from their half sleeping state, to one of wakeful and vigorous activity; and thousands of others, no doubt, have passed through life as the veriest dolts, who needed only the influence of some stirring motive to have developed powers which would have caused them to shine among the brightest stars in the galaxy of mind.

This earnest thought must be *continued*. No matter with what energy the mind may act, its achievements can be of but little value, if its action is fitful. Constantly changing from one subject to another, or dwelling but for a moment at a time upon the same subject, it must of necessity be superficial. It is the long continued gaze which gives the profound insight into the mysteries of nature. She hides deep her richest treasures, that they may not become the sport of the trifler. Newton, when engaged in solving some of the most difficult and sublime propositions of the *Principia*, is said to have often been so lost to all else, that it was with difficulty he could be persuaded to take food or rest. All have probably heard of the long unbroken thought bestowed by Handel upon that masterpiece of

musical compositions, "The Creation." True, there are limits to intense continued thought, and these in a mind not thoroughly disciplined, may require somewhat frequent respite. But the subject should not then be dropped. After proper time for rest it should be again recurred to, and pursued until the object aimed at is attained.

This will require *patience*. Without it the mind will be likely to recoil upon encountering difficulties; or should it, by the power of a determined will, be held to the subject despite its restless impatience, it must soon yield from exhaustion. The mental friction becomes too great for continued action. A calm and hopeful spirit will alone sustain the mind in a long and earnest effort. This, it is well known, was a leading trait in the intellectual character of Newton. He himself declared, that whatever service he had done to the public was not owing to any extraordinary sagacity, but solely to industry and patient thought.

Let me then impress upon you the importance of carefully discriminating between truth and error; and to succeed in this, of accustoming yourselves to habits of philosophical study and observation. Stir up also the strength that is within you. Bend your minds to the work of conquering every difficulty you may encounter, and of mastering every subject you take in hand. Never become disheartened. Very active minds are often prone to impatience. They become discouraged, by whatever tends to thwart their object or retard their progress. The medical student, perhaps more than almost any other, needs patience. The great variety of subjects to which he must direct his attention, the intricacies of some, and the almost endless technicalities of all, are peculiarly perplexing. While, therefore, you cultivate habits of earnest thought, learn to possess your soul in patience under circumstances the most trying. Do not expect to accomplish every thing at once, nor suffer repeated failures to discourage you. Let patience have her perfect work. Should you fail once and again, repeat the effort; and failing still, call to mind the story of Bruce and the spider, and try again. It is a noble spirit which bears up under such discouragements, and cheerfully labors on for the accomplishment of its end. Pursuing this course, you are safe in anticipating success. You may indeed encounter adverse influences; opposition and unanticipated difficulties may meet you at every turn; but who ever stood

upon the mountain's summit, without having first climbed its sides? These will give you an opportunity to rise. Conquering them will develop your powers and give you distinction. Be of good heart: "Hope on, and hope ever."

But, gentlemen, would you realize these hopes, I must insist that you also *labor on, and labor ever*. Persevere in the habits of study I have recommended. Be industrious. Let no time run to waste. Though enough for all the purposes of life, you have none to lose. And upon this point I must be allowed a few remarks upon your habits of study after you shall have entered upon the practice of your profession. Circumstances may at present secure proper industry, even with those in whom hereafter the temptation to relax may become strong. I may be mistaken, though my opportunities for observation have been by no means limited, but it has appeared to me, that not a few of the profession regard their studies as having been completed at the time they received their parchments. Upon these they seem to rely as if they supposed them possessed of talasmanic power. With an abundance of time for reading, and in circumstances peculiarly favorable for observation, they still rather retrograde than advance; their acquisitions scarcely supplying the losses of memory. This is wrong, and I cannot but think criminally wrong. To say nothing of the wrong which such inflict upon themselves and upon the profession, it is trifling with the dearest interests of society—with life itself. The time devoted to preparatory studies is so limited, that the student can be simply initiated into the several departments of his noble profession. If he ever becomes perfected in any way, it must be by subsequent study. Carry, then, your studious habits into the practice of your profession. Your observation will furnish you with material for thought, and the responsibilities of your calling should stimulate you to the intensest application. Read, also, as well as observe and think; nor excuse yourselves from this, though you may find it impracticable to complete a volume at a sitting. I am well aware how liable you will be to frequent interruptions, but gather up the fragments of time, and you will be surprised, if you pursue a systematic course of reading, as by all means you should, how much you will be able to accomplish. Suppose you read but twenty pages a day; that, uniformly continued, would, in ten years, take

you through more than sixty thousand pages, or more than a hundred volumes of six hundred pages each. With this amount of careful reading, and a corresponding amount of observation and reflection, there is not one, probably, whom I address on this occasion, who would not raise himself far above mediocrity in his calling.

Go forth, then, when you shall have completed your preparatory course, not only to practice upon the knowledge you shall have acquired in passing through it, but to acquire more. Nor limit yourselves to the discoveries of others. From what I have before said, you will understand that I do not entertain the opinion that the *ultima thule* of medical science has yet been reached. No, gentlemen, there is a vast *terra incognita* yet to be explored; and if its ultimate boundaries are never to be traced, which may be true, still, there is undoubtedly within it, much land yet to be possessed. Push your observations into this unknown land. Let each, if possible, reclaim and subdue a portion, however small, and thus add something to the stock of medical science. But in your explorations, be careful and not fall into the common error of drawing inferences from too limited observations. Some, but little acquainted with what, to most of the profession, had long since become the "old country" of medical science, looking upon this land from afar off, and seeing nothing but its botanical productions, have hastily inferred that it actually possesses no mineral treasures. Others, meeting upon its border, with an extensive tract of water, boldly assert that it covers the whole region; while others, becoming utterly bewildered in the fog, have stoutly declared that it is only a land of steam.—Now a little more mental digging would probably have led to the discovery of minerals; with a little more reach of intellectual vision, *terra firma* might have been descried, and ordinary penetration would have seen through the mist. Be careful in the observation of facts—apply the principles of a sound philosophy in your deductions—be earnest, patient and persevering in your efforts, and you may not only hope to avoid falling into such ridiculous and pernicious errors, but to make some real and valuable discoveries.

I intended to offer a few remarks upon the importance of cultivating refinement of feeling, dignity of deportment, and elevated moral and religious sentiments, as invaluable qualifications in the medical practitioner—but time forbids. I close with the expression of an ardent wish, that the session upon which we now enter, may be passed pleasantly by all, and that life's duties may be so discharged, and its privileges so improved, that in the final reckoning it may be said to each, "Well done good and faithful servant."