

*Graduation Thesis*  
*for M.D. degree*

11-1886-7

UNIVERSITY  
11 1886-7  
LIBRARY

\* PRELIMINARY \*

**MEDICAL EDUCATION.**

**W. A GORDON LAING, M.B.**

BARNSTAPLE :

W. H. THORNE, PRINTER, 54, BOUTPORT STREET, BARNSTAPLE.

1886.

ProQuest Number:27552942

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 27552942

Published by ProQuest LLC (2019). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code  
Microform Edition © ProQuest LLC.

ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 – 1346

PRELIMINARY

MEDICAL EDUCATION.

---

W. A. GORDON LAING, M.B.

---

It was a remark of the late JOHN STEWART MILL, that on all great subjects there must always remain much to be said, and granting this statement, as it necessarily is, to be unquestionably true—nay, rather self-evident—I must make use of it as an apology for bringing into notice a few of my ideas on the subject of preliminary medical education, a subject which I imagine all will agree with me in thinking worthy to be placed in the category “great.”

Few things have, of late years, been causing so much attention, few things have been talked about, and written about, and argued upon with more enthusiasm and eloquence, than the education of the people, and with reason, too; for in a great nation like ours, if the men who go to make it up are to succeed in the different paths of life which each has chosen for himself it is necessary that they should have the wherewithal to command success, and from what else now-a-days can the materials of success be drawn than a good education?

It is in proportion to the power and capacity of a man's mind for receiving and turning to the best use the education he has obtained that he rises in the world, and if a man of unwonted genius overtop his compeers, "Quantum lenta solent inter viburna cupressi." But if a good education is the *sine quâ non* for all entering on the various paths of life's journey, surely *he* should receive the *very best* and *most* careful preliminary mental training who has chosen as his object in life to be "Opifer per orbem," to alleviate human suffering and prolong human existence—nay, sometimes even to snatch "a faucibus orci," an afflicted fellow creature; for, indeed, to diagnose disease aright is no easy matter, an affair of no trivial moment, as those not yet on the threshold of medical science are far too ready to expect, but requires a mental sagacity and acumen, a well balanced mind not too ready to jump at conclusions, but so constituted as to work out carefully and conscientiously, and without thought of the trouble involved, the obscure cases of disease, making use in so doing of the method of exclusion, and, finally, when the diagnosis has been carefully made, bringing a clear and calm judgment and discretion to bear upon the treatment of the case, based upon an accurate knowledge of the drugs contained in the Pharmacopœia.

Again, then, let me most emphatically say, that the preliminary education of those destined for the profession of medicine should be *the best possible*, for the more highly cultivated the man who enters its ranks, the better qualified will he be to carry out his mission both with credit to himself and benefit to his patients.

It is lamentable to see—and how often is the spectacle presented to our sight—the deplorable ignorance on matters of general education possessed by some of those qualified to practise. To say that they know "small Latin and less Greek," as Ben Jonson remarked of the Bard of Avon, is to let them off very easily; indeed, one is often at one's wits' end to conceive how they ever managed to emerge anything but "featherless bipeds" from the certainly not very stiff preliminary examinations at present in vogue; I say "not stiff" advisedly, for a very elementary knowledge of the branches of an ordinary education has hitherto been required by all the examining bodies in the United Kingdom, with one brilliant exception, viz., the Matriculation of the University of London, at which, although candidates are only required to have an elementary knowledge of each of the subjects of examination, yet that elementary knowledge must be sound and thorough, and failure in one means failure in all.

Before, however, investigating the subject of preliminary medical examination, and giving my humble opinion on what subjects should be included under that head, and my reasons for so thinking, I wish to premise a few remarks upon what I consider the advantages of the old apprenticeship system—a system now, unfortunately, though I cannot see why, rapidly declining into desuetude; isolated cases of it, however in a modified form, being still to be met with here and there.

Every man, I think, entering upon the study of medicine, should, even before passing the preliminary examination, or at least before joining a medical school, have a thorough ocular knowledge of the drugs of the Pharmacopœia, and should be able to compound and dispense with facility and adroitness.

## USEFUL SUBJECTS OF STUDY.

---

He should learn the names of the principal official preparations of the different substances, together with their doses and modes of administration.

What an advantage this would be to him afterwards, when sitting under his Gamaliel in *Materia Medica* in the lecture-room.

Again, he should be able to recognize some of the commonest diseases, as measles, scarlatina, mumps, chicken-pox, and should be on his guard against mistaking a hydrocele for hernia, orchitis, or varicocele.

How useful would all this eventually prove to him, and with what much greater benefit would he listen to the lecturers on the practice of medicine and practice of surgery, when having some practical basis on which to build the materials derived from them.

Again, a man should most decidedly have an elementary knowledge of osteology before joining a school, for he who enters an anatomy theatre without any such knowledge (and some there are thus entering who have never seen nor handled the bones of the human skeleton prior to taking out their anatomy tickets) will find this subject dry and uninteresting, and indeed uphill work, whereas they who have some previous knowledge of the subject will feel inclined, if they belong not to the "*ignavum pecus*," to enter with zeal and energy into the prosecution of a study already to some extent familiar to them.

Now all these benefits are at the command of the apprentice, and he stands upon a great vantage-ground for future excellence both in his classes and as a practitioner.

Again, the "*tactus eruditus*" may to a great extent be acquired by the apprentice, who ought to lose no opportunity of becoming neat-handed in the application of bandages and other surgical appliances, and should also use all his eyes when present at any surgical operation performed by his master.

But, "*Tempora mutantur nos et mutamur in illis*"—the good old customs of our fathers are, alas! dying away into the dim back ground, and the majority of young men of the present day enter upon the study of medicine under great disadvantages as compared with their predecessors, for to have seen *one* case and to have recognized it thoroughly is better than to hear a lecturer describe a dozen which have not been seen.

"*Segnius irritant animos demissa per aures;  
Quam quæ sunt oculis subjecta fidelibus.*"

HORACE *ad Pisones*, 180-181.

Now, I hope that none of my readers will misunderstand me when I talk of *recognizing* certain diseases. What I mean to be understood by the connotation of the term *recognize* as used above is simply to assign to a disease like "Measles" its proper name, from a recollection of having on previous occasions heard the term "Measles" applied to a similar aggregate of phenomena. This is a form of induction; it is a method of reasoning from particulars to particulars, something of this sort going on in the mind; such and such phenomena, when on such and such another occasion presented to my senses, received the *general* name "Measles," therefore whenever I see such phenomena again present I am entitled to assign to this aggregate the term "Measles," which thus becomes a sort of shorthand registration of facts known. "A name" says Hobbes "is a word taken at pleasure to

serve as a *mark*, which may raise in our minds a thought like to some other thought that we had before, and which, being repeated to others, may be to them a sign of what thought the speaker previously had in his mind" so that when the lecturer on medicine announces to his class his intention of lecturing on "Measles," the phenomena above mentioned will immediately present themselves to the mind's eye of those who have learned to recognize the disease by its external appearances. In the same way it is far easier for a field botanist who knows all the principal plants, and gives to each of them a name from an inspection of their external appearance, to study botany, than for him that hears a description of a plant for the first time. Again, will it not be much easier for him to understand comparative anatomy who first knew well, from their external forms, the different animals whose intimate structure he has to study. From what I have said, then, it will be seen that I consider theory should, in a course of medical instruction, come after practice, although in this I am aware I differ from the great majority of thinkers.

How often do we see young men turned loose on the world to practise, who are mere theorists and bookworms—men who, though they have been able, by dint of hard reading, to pass a brilliant examination, even to get their degree with honours, would be at a loss as to what to do if called in suddenly to treat an infant suffering from convulsions.

The above remarks on the subject of *practical* knowledge I have deemed it advisable to include under the head of preliminary medical education, and, as I think, with reason. I should like to have dwelt with greater length on this part of the subject, but time will not permit me.

Latham, in his Clinical Lectures, has the following words:—"they only who are *practically* informed can read good books with profit, or bad books without injury;" and the same may, I think, be asserted, substituting the terms "listen to" and "lecturers" for "read" and "books."

What I have stated, hitherto, has been to prove that the education of those who contemplate entering upon the study of medicine should be the best and most thorough obtainable. It is essential, however, that before the noble mansion of Æsculapius unfold its portals to such as desire to gain an entrance, a passport should be required from each applicant, on which should be clearly and accurately indorsed the qualification of its bearer for such a distinction—in other words, the fact of a man having passed the preliminary examination in general knowledge should be the means of his being recognized to be one who has received the education of a gentleman—an education such as to entitle him to be admitted a student of a learned profession.

Now, what should be avoided in all examinations is "Cram"—a most expressive word and one connoting a system of mental gymnastics very rife at the present time. Now, what I understand by the word "Cram" is this—the storing away into the brain of as much knowledge (?), or perhaps I shall express myself better by saying as many facts, as the candidate can possibly carry, this mass of facts being merely garnered for the express purpose of reproduction on a special occasion, that special occasion—to wit, the crucial test, the examination—gone by, scarcely ever to be remembered again.

Now, I am quite aware of this, that in order to prepare for what the candidate hopes will be a successful issue to his examination, a certain *method* of preparation *must* be pursued. Each candidate *must* and undoubt-

edly will, find out for himself a certain method, easier to him than any other, for imprinting certain facts in history, say, in literature, in mathematics, upon his memory. By the manufacture of a certain "memoria technica," he will strive to bring into a focus "memorabilia quædam," which without some such means would, after the lapse of even a few hours, be a dead weight on his already too overburdened brain.

Now, if a man thoroughly and conscientiously, and by *his own undivided* efforts, constructs, *after a thorough study* of his subject, some method which, by associations of ideas—no matter how ridiculous such means as he adopts may seem to an outsider—to imprint certain necessary facts on his memory, that man, in my opinion, is not "a mere crammer" in the vulgar acceptance of the term, but most decidedly to be classed with the orator, who, after having thought thoroughly over the subject-matter of his discourse, jots down, in a manner to catch the eye, the leading points of his speech. I simply ask this question. What sense would the orator's headings present to the mind of one unacquainted with the ideas the orator means to unravel in the course of his speech? By the system of "cram" in the present day, every man who adopts it expects everything to be ready provided for him. He imagines that there *is* such a thing as a *royal* road to learning; he makes use, in the most unblushing manner, of the labours of others; he learns answers of those questions he either *thinks* or is *told* are likely to be asked; he purchases a "Key" to the classical author "set" for the examination; and Dr. Giles, with his word for word, and not very accurate or elegant translations, has undoubtedly contrived to pull many a candidate through the much dreaded ordeal. Now these "cribs" are certainly, to borrow the words of Macaulay, "the leading strings which support the child, but prove a let and hindrance to the full-grown man." Students should learn to be self-confident—not to trust for examination purposes to leading-strings, but to their own unaided efforts.

I thoroughly believe in analyses, I thoroughly believe in "memoriæ technicæ," but I thoroughly *disbelieve* in the student using such as have been made by other hands. Let him, after mature and careful study of the author he is perusing, make an analysis for himself, and by the mere mental effort thus expended he will have gained some really sound information.

This system against which I have been inveighing—and who can say that such a system is not in vogue?—has been to an enormous extent encouraged by the preliminary examinations for all the professions as well as that of medicine—questions to find out how many facts the student had stored away in the hold of his mind being usually set, but few such as to task his intellectual appreciation of those facts.

I shall now give a list of the subjects of examination as I should wish them to be. I shall just glance at each, and shall conclude by considering the great advantage to be gained by a medical man having been thoroughly acquainted with the classics and, through their medium, with the history and literature of his own country.

#### COMPULSORY SUBJECTS.

1. English Language, Literature, and History; English Composition.
2. The Latin Language. Translation of some one of Cicero's works, as the "De Senectute"—*e.g.* Translation into English of an unseen Latin *prose* author, and translation of a piece of pure and simple English prose into Latin.

Questions on Grammar, on the accuracy of the answers to which *great stress should be laid*.

3. The Greek Language. Translation into English of some such work as Plato's "Apology of Socrates;" with questions on Grammar.

4. Mathematics, *i.e.* :

- (a) Arithmetic—the ordinary rules.
- (b) Algebra—including simple equations.
- (c) Euclid—Books I. IV.

5. Chemistry, the outlines of—for which such books as Roscoe's Outlines should suffice.

6. Botany and Zoology, the elements of.

#### OPTIONAL SUBJECTS.

1. Language of France, Germany, and Italy.
2. Logic—Inductive or Deductive; at the option of the candidate.
3. Mechanics, the elements of, as treated of in Newth's little work.
4. Electricity and Magnetism.

To those intending to present themselves for honours, papers of greater difficulty on the above subjects should be set, and the marks thus gained should be added to those obtained at the different professional examinations, just as in the Indian Civil Service competition the marks gained by successful candidates at the open competition are added to those gained at the intermediate and final examinations.

I intend now to go a little more into detail with regard to some of the above subjects.

#### I.—ENGLISH LANGUAGE, LITERATURE, HISTORY, AND COMPOSITION.

That a candidate should be able to write a grammatical and correctly-spelt essay on one out of two or three subjects given for selection, should be sharply insisted on, for what more painful spectacle could possibly be presented to our notice than that of a member of a *learned* profession being incapable of writing two or three consecutive lines with grammatical precision, and, worse than this even, spelling incorrectly the words that go to make up those badly constructed sentences.

That many of my readers have met with such cases in their individual experience as students, it may be, and afterwards as practitioners, I have little hesitation in assuming as a fact. But, besides testing the grammatical and orthographical capabilities of a candidate, the English essay does more: it tests the mental capability of the student, by proving what resources he is able to bring to bear from originality of thought and previous reading upon a certain subject in a limited time. The greatest stress, therefore, should be laid upon the capability of the candidate for producing at least a fair essay.

The historical part of the examination should not be conducted as it too often is, *viz.*, with the view of eliciting a certain number of bare facts and bald details. It should be based more upon the *rise, growth, and progress* of the laws and constitutions in this



“Land of brave and old renown,  
Where freedom broadens slowly down,  
From precedent to precedent.”

The first and second chapters of Macaulay's History, Hallam's Middle Ages (that part, at least, dealing with the early constitutional history of England, rise of Parliament, &c.), and portions of the same author's Constitutional History, should be enjoined for study.

With regard to English literature, the examination papers should take a wide range, as they do in the open competition for the Civil service of India, and their aim should be to elicit a practical acquaintance with the works of the different English authors, and not a mere answering by rote, as enumerating their works, and giving, *second-hand*, the opinions of others regarding such works.

## II.—THE LATIN LANGUAGE.

On the importance to the medical man of a thorough and accurate knowledge of the language of old Rome I intend speaking further on; it is with regard to the fitting books on which to examine students that I wish to speak at present.

Now, at most medical preliminary examinations, some book of Cæsar—the second of the Gallic War, *e.g.*—or a book of the Æneid of Virgil, seem to be the favourites. Now, if we must “*set*” books, I cannot for the life of me see the suitability of such as these in considering purely the language and subject matter. Of course, Cæsar wrote in very pure Latin, but he is simply in his Commentaries the writer of a series of memoranda concerning certain campaigns in which he was personally engaged. I do not say that Cæsar is not a most valuable work for the Latin student—let no one imagine this for an instant—but *this I do say, and most emphatically too, that it is not the book*—is almost as useless as Eutropius would prove, to set to those who are to be tested as to their knowledge of the Latin language with a view to the prosecution of the study of medicine. With regard to the Æneid of Virgil the same remark applies. The subject matter is unsuitable for an examination of this sort, and then the fact of its being written in verse renders it still more unsuitable. (N.B. these remarks are only applicable to examinations where a book is “*set*.”) But even should I waive this latter objection I should consider the Georgics infinitely to be preferred on account of their dealing with such subjects as the rearing of cattle, the cultivation of trees, the keeping of bees, &c.—matters, in fact, of practical interest, and from the study of which the student may gain some useful information, or at least some knowledge of what the ancients thought on these subjects.

For my part, I consider that Cicero is peculiarly adapted as the author to be set to those entering upon the study of medicine. His language is majestic, manly—in fact, a pure well of *Latin* undefiled, and he writes on subjects of the greatest moment.

Now, amongst the works of Cicero, as most appropriate, I have mentioned *three*, although the list may be easily extended, *viz.*: “De Senectute,” “De Amicitia,” and “Oratio pro Archiâ Poetâ,” and of these three the first undoubtedly bears away the palm.

I may be prejudiced in this matter myself, for my affection for this gem

of Latin literature dates from my boyhood, when I used to translate and re-translate it in order to obtain a good style of Latin composition.

I repeat, this book is especially serviceable owing to the purity of its language, and the sentiments with regard to hygiene, old age, and death therein laid down; and these subjects are, of course, of the greatest and most intense interest to the medical man.

Let us examine a few passages, for instance, before proceeding further: "Quo circa," says Cato, "si sapientiam meam admirari soletis . . . : in hoc sumus sapientes, quod naturam optimum ducem tamquam deum sequimur eique paremus." His wisdom, he says, simply consists in his observance of the laws of nature.

Should we see so much sickness and suffering "In œgris mortalibus" if this golden rule of old Cato were systematically carried out? "Præclarum responsum et docto homine dignum!"

A little further on he asks, "Quid est enim aliud, Gigantum modo bellare cum dis nisi naturæ repugnare."

Again, how true are such remarks as these: "Habenda ratio valetudinibus, utendum exercitationibus modicis, tantum cibi et potionis adhibendum ut reficiantur vires non opprimantur."

Says Juvenal, "Orandum ut mens sit sana in corpore sano;" and Cicero has the same idea in his head when he goes on to say, after the lines above quoted, "Nec vero corpori soli subveniendum est, sed menti atque animo multo magis." We must, says he, not only take care of our health by the use of moderate exercise and partaking of food sufficient to recruit and not oppress the body, but we owe it as a duty to support the mental faculties much more, for one must pour oil on them as into a lamp to prevent their becoming extinguished by old age.

Surely, no modern work on hygiene could lay down more useful rules than those placed in the mouth of Cato the Censor, by Tully.

The medical student will find in this treatise "Full many a gem of purest ray serene," and may well ponder upon and turn to practical use, when he comes up to town to study his profession, all that the great writer says on the allurements of pleasure and the duty of resisting them.

The conclusion of the "De Senectute," on the "Appropinquo mortis," I would advise every student to carefully study—nay even to get by heart, for the sentiments with regard to death and the belief in a future state of existence are so noble and refined, and the wording so eloquent, that it will well repay his trouble to do so.

In these brief remarks on the "De Senectute" I have attempted to show—how imperfectly I am well aware—that such a book is admirably adapted for the careful study of the intending medical student.

### III.—THE GREEK LANGUAGE.

In this language, in my opinion, the books most suitable to be set are the second book of the History of Thucydides, or one of the philosophical works of Plato, or, since Hippocrates was the father of Physic and wrote in most elegant Ionic Greek, why should not some parts of his works be set for examination? I simply throw this out as a hint.

The histories of Greece and Rome should also form part of the examination. "I must think it an unpardonable ignorance," says Hume, "in persons of whatever sex and condition, not to be acquainted with the history of their own country, together with the histories of ancient Greece and Rome."

But, besides "*sci*" authors, unseen passages should also be set to test the student's knowledge of the language, for no man can pretend to have a knowledge of either Latin or Greek who cannot translate into decent English a piece he sees for the first time, or who cannot turn an ordinary piece of English—say a passage from the *Spectator*—into idiomatic Latin or Greek.

The very greatest stress should be laid upon correctness to the answers to the Grammatical questions.

Questions might also, I think with advantage, be set on the derivation of words, particularly of such scientific terms as are of frequent use in medicine and the allied sciences.

#### IV.—MATHEMATICS.

That a student should have a good elementary acquaintance with Arithmetic Algebra and Euclid, must of course be admitted by everyone.

With regard to Euclid, the Collage of Surgeons requires but two books; the University of London at its Matriculation requires four; those of Edinburgh, Glasgow, and Aberdeen, three.

I do not think that four books is too much to expect a student to be acquainted with. Euclid is especially valuable to the intending medical student. "Nothing," says Hannah More, "puts such a bridle on the imagination as 'Demonstration.' A habit of computing steadies the mind and subdues the soaring imagination. It solves the vagaries of trope and figure, substitutes truth for metaphor, and exactness for amplification."

#### V., VI.—CHEMISTRY AND BOTANY.

These should undoubtedly find a place in the preliminary examination—they have no business among the subjects of the regular curriculum any more than has Zoology, and for this reason, that there is no time to devote to their proper study when there are so many other *practically* important subjects to be learned and inwardly digested. Both Chemistry and Botany, however are indispensable to the intending medical student, and he should do the best, the very best that in him lies, to obtain a good practical insight into these sciences whilst at school, or whilst studying under a tutor for his preliminary medical, for much light is thrown upon Physiology by the laws of Organic Chemistry. Chemistry, together with Botany, greatly aids the acquirement of that subject of the curriculum generally considered so very uninteresting, the *Materia Medica*; and Sir James Paget, in an address Published in the *Lancet* of October 16th, 1880, on the subject of "Elemental Pathology," delivered at the Pathological section of the British Medical Association, has shown that many interesting points in Pathology, "the consequences of injury and disease," can be suitably studied in the structure of plants, *e.g.*, hypertrophies, atrophies with degenerations, symmetry with regard to disease, &c.

Elementary Zoology from the light it throws on the subject of development, should also be included in the scheme of the preliminary examination.

With regard to the OPTIONAL SUBJECTS, I must be brief in my remarks.

French and German are both of very great use to the intending medical student, if he have time and opportunity to study them, for so many works of scientific interest and importance in medicine and the allied sciences are written in these languages. With regard to Logic, I have thought it advisable that an option should be allowed between "Inductive" and "Deductive" Logic. Now the student should know something about Inductive Logic if he takes up Deductive as his subject, and *vice versa*, for all reasoning is, *in reality*, Inductive, and a general proposition from which we draw a so-called "*Deduction*" is simply a shorthand registration of facts gained by induction. For Inductive Logic I would recommend Mill; for Deductive, Whately.

The elements of Mechanics. In this subject Newth's little work should answer the purpose very well. Some knowledge of mechanics is essential to a correct appreciation of the *raison d'être* of certain physiological actions, but this the student will discover for himself.

In conclusion, I wish to make a few remarks on the advantages to be derived by the intending medical student from a study of the ancient classics.

Some of my views on this subject the reader will find in a letter of mine to the Editor of the *Lancet*, which appeared in the student's number of that journal dated September 11th, 1880.

I always fancy it is those persons who know least about the subject who are always crying down the cultivation of the Greek and Latin languages. "Damnant quia non intelligunt" (They know so little about the subject that they assume to themselves the right of judging). Such people should remember these words from Churchill's "Author":—

"When with much pains this boasted learning's got,  
'Tis an affront to those who have it not."

A mere smattering of Latin and Greek is of course of little service, and every sensible man entering upon the study of medicine should strive to obtain as thorough an acquaintance as possible with the ancient classics, if he wishes to become the cultivated physician—

"Scilicet ingenuas didicisse fideliter artes,  
Emollit mores nec sinit esse feros."

Now, some are of opinion that it is no good to learn Latin and Greek nowadays, because all can now read the principal authors who wrote in these languages through the medium of translations; but we should remember this, that in scholastic work, or preparing for an examination of any kind, no man reaps any benefit from the analysis of a work made by another: so, in the same way, the translation of a classical author made by another man will never convey the ideas of the original with one third the force as will that made by one's own individual self.

Certain shades of meaning and niceties of expression get lost in a translation, and when a man sometimes tries to be true to his original by translating too literally, he very often, metaphorically, puts his foot into it, as did he who translated "Vultus nimium lubricus adspici," of Horace, by "A face too slippery to behold."

It is to be hoped that the medical profession will contain few like unto him described in Albert Smith's "Medical Student," who reads "Sanus homo," a sound man; "et" and "qui," who, &c., and in a rash moment makes up his mind to "go up."

In the first place, the study of the classical languages is useful on account of the difficulties which must of necessity be overcome in their acquisition. With each new difficulty in the acquirement of the language mastered, the intellect becomes stronger and rendered more capable of grappling with something of still greater difficulty. Milo is said to have carried through the race-course of Olympia a live bull, having commenced to carry it as a calf. His muscular development, from repeated daily exercise, increased in an equal ratio with the increase of size of the animal, so that Milo at last carried the gigantic bull with apparently the same ease as he had previously sustained the calf. So is it with the mind. What it has to grapple with becomes harder and harder every day, but with a fresh accession of difficulty comes a fresh accession of strength to cope with and overcome the difficulty.

"Labor omnia vincit improbus."

So well adapted, in fact, is the study of the ancient classics for the promotion of habits of perseverance and application—habits indeed so useful, and in fact necessary, to the medical practitioner; so well adapted for invigorating the understanding, expanding the intellect, and promoting habits of accurate investigation, that I am at loss to understand how such a study can be under-estimated by any. Latin and Greek, which may be compared to a pair of cabinet pictures each tending to throw lustre on the other, give to their possessors logical skill, thoroughness, elegance of diction, nicety of expression. The comparison of the different shades of meaning which a single word may connote, according to the context in which it is used; the comparison of its meaning in one passage with that of its meaning as employed in another; the inquiry into the subtlety of meaning of such and such a Greek particle used in a particular combination—the investigation of all this, the thorough diving to the bottom of the meaning of a word arrived at by a study of comparative philology—*must* give to the man who has conscientiously done all this habits of perseverance in all he undertakes, which will adhere to him through life; and thus a halo will be thrown over whatever path of life, be it Medicine, be it Law, be it the Church, which he may chance to follow.

Again, it is from the study of the languages of ancient Greece and Rome that we are enabled more accurately to understand our own, and that this is a *sine quâ non* to a medical man is of course evident.

Although the framework of our noble language is Anglo-Saxon, yet all the learned and scientific terms are derived from Latin and Greek. I defy a purely English scholar to appreciate Milton's "Paradise Lost" as a classical scholar can appreciate it.

Progress in Anatomy, too, will be facilitated by their study. Most of the scientific terms in our language are either Greek or "Græco fonte cadunt," and thus the meaning of many words in daily use will be pointed out. Even were it only as an accomplishment, it were worth while to study the classics, for, bear it in mind that medicine owes its position as a learned profession to the accomplishments of those who adorn its ranks.

Linacre was not only the first founder of a College of Medicine, but also the first who gave lectures in Latin and Greek at Oxford and Cambridge, and Erasmus asserted that the best scholars of his classic age were the Physicians of England.

That a medical man should be able to write his own language with elegance and correctness, that he should make no error in spelling, that he should be able to speak with facility and adroitness when called upon on any special occasion, it were ridiculous to gainsay. Now, a classical substratum, if it will not ensure, will at all events go far towards the consummation of this desirable result. "What," says Cicero "is more disgraceful in a well born man than an ignorance (inscientia) of those things, an acquaintance with which (scientia) he is supposed to have?"

Now, a medical man is a member of a learned profession, and, ranking as such, should he at any time in the course of his practice come into contact with men of highly cultivated minds—men of letters either among his patients, it may be, or friends of those whom he is attending—it will undoubtedly accrue to his reputation when it is discovered, by those capable of judging of such matters, that he, too, the trusted medical adviser, has, besides his mere professional capabilities, acquisitions beyond; and admiration for these "Artes Ingenus" would set off in bolder relief the simple bare framework of his merely professional acquisitions. I need scarcely remark that no man can write a prescription in unabbreviated Latin who has no grammatical acquaintance with that language, and yet I have to come in contact with many a man who, if asked to write out a prescription *in full*, has made the most atrocious blunders in gender, number, and case, and has even proved himself ignorant of the meaning of the  $\mathbb{R}$  at the head of the prescription, nor could tell for his life what "Sig." meant. If only to be able to write a prescription properly, therefore, Latin is useful.

The classical languages, Latin *e.g.*, are further useful for describing the performance of certain sometimes necessary operations on the female that should not be known to the uninitiated (*vide* Ramsbotham's Midwifery, p. 338, foot-note).

In conclusion, I would say, in the words of Cicero, "Licet enim omnibus, licet etiam mihi dignitatem artis medicæ tueri; potestas modo veniendi in publicum sit, dicendi periculum non recuso."

Boutport Street, Barnstaple,

2 Devon

Jan 28<sup>th</sup> 1887

Thereby certify that this Thesis  
has been composed entirely by myself

W. H. THORNE, PRINTER, ABC RAILWAY GUIDE OFFICE, 54, BOUTPORT STREET, BARNSTAPLE.

W. W. Gordon  
Leaving M.B.