

**Medical examinations and physicians requirements considered / by
Thomas Mayo.**

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MEDICAL EXAMINATIONS

AND

PHYSICIANS' REQUIREMENTS

CONSIDERED.

BY

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1857.

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MEDICAL EXAMINATIONS,

ETC.

AT the present moment, at which there appears to be a better chance than has hitherto presented itself, that a system of uniform Medical Education, and with it of reciprocity of practice and registration of practitioners through Great Britain and Ireland should pass into a law, any suggestions that may explain principles and afford grounds of decision on questionable points, may be of use if made in a candid spirit.

It is, I trust, in this spirit, that I offer some remarks upon topics of no small importance to the general subject of Medical Education.

The first of these topics is the question in point of expediency between competitive examinations, and such as having proposed a standard of mental acquirement and power, only require that the candidate should come up to it. These two principles of examination, I need not say, may be intermixed,

and thus modified ; but it is useful for my purpose to view them standing out separately, so that the benefits or the evils, if any, which they involve, may be fully appreciated.

First, let me distinctly admit and affirm the immense value of the popular movement in favour of examinations generally ; in truth, if any expressions tending to limit them in extent occur in these pages, they may, in part, be referred to my wish that no abuse of them should be allowed, which might possibly interfere with their use.

On the first contemplation of the pursuits which are required for the formation of the accomplished physician, the largeness of their extent, and their magnitude in kind, pervading, indeed, all physical and much mental science, seems to suggest competitive examinations as rendered appropriate by the greatness of the subject-matter ; and we are tempted to ask for a more potent stimulus for such exertions as seem requisite, than the love of science and desire of gain, aided by a moderate amount of ambition. It may also be affirmed with apparent truth, that, unenlivened by the stimulus of competition, the candidates examined are liable to descend from the high level on which we are supposing, on

the contrasted plan, the standard of requirements to be pitched ; while the examiners will be overtaken by the same *vis inertiae*. But there is a point of view from which this subject may be contemplated, affording very different vistas into medical education. In proportion as the mind yields itself to the potent stimulus of competition, it demands and exults in the exhibition of talent and power. And, on these grounds, a tendency is generated alike in the candidate who is to exhibit, and the examiner who is to elicit the evidence of desert,—to select those topics for the display, which afford the best *champ de bataille*. And here opens to us the full question which we have touched. Transcendental Anatomy, Physiology, Chemistry, Botany, and what may be called the History of Medicine, are all essential ingredients in kind of Medical Education, and they present large and varied means to the candidate under examination of displaying retentiveness of memory combined with a high degree of liveliness of thought, and both of inductive and deductive skill. They constitute, therefore, very *definite* grounds for the assignment of honours on the competitive principle. Too definite, indeed, and too engrossing! For it happens that, in com-

parison with the qualities thus developed, there is a difficulty in maintaining, at their just estimation, certain other qualities, less brilliant far, yet all important; under a neglect of which the medical pupil or graduate, however adorned by rewards and titles of honour, is liable to advance into the private practice of his profession competent perhaps in scientific requirements to enlarge its bounds, but not as yet to practise it with safety.

But I shall be asked, what are the departments of Medical Education, which are liable to be thus neglected on my hypothesis, through competitive examinations. I answer, neither more nor less than all the *immediate* treatment of disease and much of practical pathology; or, in general terms, all that goes by the name of clinical medicine, being that kind of knowledge which, if the pursuits above-named have not been neglected, can enable a thoughtful and observant man to cure disease; and, on the other hand, in the absence of which, a high development of what is justly called science may render the practitioner able to do little more than assign a title to a disease and speculate upon the general laws of its history.

I may be told that I have drawn the lineaments

of my case with a strong hand. I wished to do so, in order that they may be at least understood. And I am justified by the fact, that I am unfolding principles, not attacking rival institutions. I can, indeed, afford to admit the frequent valuableness of competitive examinations, even while I insist that there are peculiar elements in the case, which render them questionable when applied to the whole sum of the candidate's qualifications.

Let us for a moment consider the elements comprised in clinical medicine:—the appreciation of vital actions as modified by constitution and temperament; the selection of remedies, sometimes made with the rapidity of an instinctive process, sometimes through a broad general principle, sometimes from an hypothesis constructed on experience and conjecture; an acquaintance with the numerous relations in which remedies stand to each other, or are *singly* applicable, points of view in which our late lamented President delighted to estimate them;—these are elements of clinical medicine. But the qualifications implied in their possessor, all important as they are, may make but a poor show against the prowess of the candidate who has got up with the distinctness and definiteness of which chemistry and physiology are

capable, the distinctions and analyses learnt from those sciences. I must indeed add, that under a conviction of this fact, the aspirant to competitive honours is but too liable to steal some hours, during which he ought to be following the physician round the wards of the hospital or into the lecture room, in order to increase his leisure for those studies which will more contribute to his fame. The specialties of hospital observation which are applicable immediately to practice, and would render him a successful pupil at the bed-side, will not, he is aware, go so far to insure his success as a candidate for honours; and accordingly I am compelled to say, that we meet in private practice instances of very inadequate acquaintance with the powers and the applications of remedies, and the *nuances* of symptoms, in persons whose honorary distinctions gained at competitive examinations ought to imply, and be derived from, a very complete knowledge of clinical practice, as well as of the collateral sciences.

Such being the case I may, I think, fairly claim that the system pursued at the Royal College of Physicians, which is *not* competitive, and which does *not* involve the disadvantages above pointed out, should be regarded with respect in this point

of view; and that no rash measures should be applied to supposed improvements in our system, which may involve us in the evils of the opposite one. That our standard of examination is sufficiently high to correspond with the scientific demands of the age is in evidence in our examination papers, and in the careful selection which we make of our examiners, who are changed with sufficient frequency to render the anticipation of certain set forms of questioning impossible; and yet not so frequently as to prevent them from acquiring *habits* of performing their important work.

While such is the security afforded by our system that our examinations for the licence to practise are justly and adequately carried out, the courses of lectures conducted at our great hospitals in London are admirably calculated to supply modes of competition involving none of the disadvantages to which my previous remarks apply. To be examined at the end of respective courses of lectures on the topics of the lecture, is so far removed from offering any inducement to exclusive study, or to neglect one class of study in favour of another, that it seems expressly devised for security on this head.

In the above remarks, made indeed at a time at

which good feeling and unity of action are peculiarly desired in the medical bodies, I have abstained, while praising, I hope not immoderately, the system of the Royal College of Physicians, from bringing it forward in any direct comparison with any other examining body.

But I may not unreasonably be asked why the science and art of medicine should in these points be so specially defended against *mala praxis*? Why, notwithstanding the temptation that may exist to exclusive studies under competitive examination, the good sense and the requirements of mankind may not be trusted for their defence in this as in other analogous cases? I confess I entertain some doubt whether these analogous cases are always successful instances of the principle of competition in examinations. But I certainly believe that there are specialties in this respect, in the subject of medicine. The good sense of the public cannot avail against evils which it cannot discover, and I must observe, in defence of the provisions which I am recommending, that in the point of view in which I am contemplating him, the medical man, is in a remarkable extent tried *coram non judice*; and that the question of clinical skill cannot be settled

in reference to actual successes and failures to the same extent as analogous questions in other pursuits. A bed of sickness or a death-bed are not calculated to afford data for ascertaining a practitioner's capabilities except to medical lookers-on; and *they* lie too near the case, or are too much under the legitimate influence of feeling or etiquette, to allow that their opinion should be taken on a brother practitioner. If this reasoning be just, it is not too much to ask, that every security should be afforded for completeness in all the educational processes.*

I now proceed to another question not less intimately connected with the interests of education than the one above discussed. I have considered the principle of *competition* in that point of view. But a question may arise, whether competitive or

* The somewhat helpless state of the public mind in reference to medical proof is amply illustrated in its method of dealing with the *improbabilities* which, in this as in every other science, it has occasionally to weigh for practical purposes. Thus, in regard to the question of infinitesimal doses, on the principle of Hahnemann, without assuming that this method is wrong, a supposed impartial spectator might well be struck by the *facility* with which men, otherwise of sound mind, digest the enormous improbability, that these infinitesimal doses should have any effect whatever.

not, examinations may not be *too frequently repeated*. Now, it is obvious that no objection can be found against successive Terminal examinations, such as ascertain the progress of the pupil, and mark his successive steps. The question can arise only at such epochs of a young man's life, the taking a degree for example, or the examination before the censor's board at the College of Physicians, supposing the repetition of such tests, on admission to a Fellowship, cases in which a presumably finished state will be the subject, each time, of inquiry.

And here arises the difficulty. In truth, the general advantages of examinations are so great, and the system had been so long ignored and neglected in England, that on its present *renaissance* the public is disposed to remedy past neglect by impetuous fondness. But, are there no disadvantages conceivably arising out of the examination test? There certainly are; and such as powerfully contra-indicate *repetition* of its use in the class of cases alluded to.

To read, or otherwise study, with a view to mastering the subject of inquiry, and to read with a view to being examined on it, are two very different operations. The object of the first

is implied in the expression which I have used to describe it. The object of the second is the giving sufficiently prolonged attention to satisfy the examiner, that he is entitled to consider the subject understood. The knowledge obtained in the first operation is likely to prove fructiferous ; that in the second need be no more than luciferous. Just as the mind has obtained its full momentum in a given direction of thought or inquiry, *that* direction has to be, or may have to be, and often will have to be, changed ; for the candidate is working with reference not to satisfying his own convictions, but the possible requirements of his examiner. He is reading not *multum sed multa*. Such examinations as I am alluding to, cannot indeed be dispensed with. They are all-important tests. But they cannot be *repeated* with impunity, as far as mental habits are concerned.

Nothing can indeed be more fatal to the evolution of *continuous* thought, than at the age at which ultimate habits are forming, to be involved in the preparation of four or five departments of severe thought against an examination. Neither time nor occasion to *master* them, but every inducement to adopt the perfunctory process, which

will secure well-compacted answers to probable questions, the mind leaving each part of the subject, as soon as this point is gained. Such, I believe, has been the state of things, and its result, in many cases of University honours. The candidate grasps his prize before the subjects of it have had time to settle into his mind; and the books which he had used for that purpose lie cold on his table for the rest of his life.

All the Medical Corporations, as well as the Universities, have professed, and I believe very sincerely professed, an anxious desire to secure and raise the standard of *anterior* education, both in mathematical science and literature. And there has been a time at which the College of Physicians was eminent for the successful promotion of one great branch of literature—that of the dead languages. Whatever remarks I make on the general head, might therefore have with us a special reference to this element; on which, however, as considered separately from general literature, I will say no more than that the possession of it has long constituted a kind of intellectual freemasonry. That it has given to the class of scholars who possess it a confident and recognised

assurance of a position looked up to even among those who affect to doubt its usefulness. This is not a mere question of long and short syllables or of dialects ; though, in that point of view, it is connected with the presumption of an intimate acquaintance with two very remarkable languages : mixed up with such considerations there exists, however generated, a feeling, a sentiment, a tone of self-respect and of respect for others, intrinsically valuable—and peculiarly so to a profession such as ours—in which the sanctity and vital importance of the duties which we have to perform scarcely compensate, so as to keep us in our just social rank, for the extent in which our time and our whole selves are largely prostrated before the convenience, the fancies, and sometimes the trivial likes and dislikes of the public under sickness and suffering. This result of classical literature is, I say, highly valuable to us, both as fitting us to acquiesce in these duties in a proper spirit, and enabling us to find sympathy and friendship, in those at least who are of the same education, and have drunk out of the same fountains of thought with ourselves. Do not let us yield without a struggle to the insinuations

of those who are ready to tell us—probably in their ignorance believing their own statement—that these studies are a worthless loss of time ; for, in truth, the modes of thought in our own medical literature might derive great improvement from a larger cultivation of general literature, and peculiarly its classical element. Science has given us inductive tendencies, which are often well carried out ; but the deductive use, to which we apply their results, is sometimes inconclusive, sometimes presumptuous. Full many a partial, inadequate, and undefined enumeration disgraces our statistical tables. Many a time do we talk of causes, when all that we have a right to say is, that we have observed separable conditions. Many a time do we affirm an explanation or a law, when we have merely given a hypothetical description, as when in our physiology we talk of “cells selecting, plastic, formative,” as confidently as we affirm the facts made good by an inductive process,—the above attributes, as applied to cells being purely hypothetical, or, I might say, metaphorical. The works of Aristotle and Cicero would contribute to us that scholarlike precision, which they gave, with no slight benefit to philosophy, to the great men—Harvey himself, for

instance—who illustrated its revival, when the dead languages yet lived in the literary use as well as in the memory of the moderns.

So much for a topic somewhat neglected by those who profess to admit the general value of literature. In the present case I shall, with these expressions, take that general value for granted, and limit myself to the practical consideration of a more specific kind of value which I believe it to possess, and which has been peculiarly unthought of. Let us suppose a patient labouring under a nervous affection,—the term being applied, in its ordinary sense, where no specific disease of a nerve is intended by it. Of two physicians, whom we shall suppose to visit this patient, one lets the patient see that he considers the complaint imaginary, in the sense of non-reality, and he is justly distrusted by the patient, who is perfectly aware of its relative reality, or that it is real to *her*. The other physician, whom we are supposing, admits that it is real, but assures the patient that it is temporary, and subject to her control; and he explains to her, without shocking her with ill-applied unbelief of her sufferings, that her disorder, without being imaginary, is a disorder of the imagination, which may be reduced into

order, and is more or less subject to her will. It is philosophic thought which gives the second of these two physicians an influence over her. These are powers not denied to the illiterate; but they are applied with effective force by the cultivated understanding. By what other mental appeals the illiterate help themselves I will not stop to examine. They constitute a large element of what is justly called quackery, if, as I think, we may justly apply that term to the management of the patient's mind by disingenuous and dishonest management of the hopes, the fears, and generally the affections or passions, instead of the understanding.

I have adduced an instance of a well-trained medical mind regulating the intellect of the patient in the *appreciation* of disease. Let us now consider it in its influence on the *sufferings* of disease.

If, as has been said, apparently on adequate grounds, and illustrated in many cases, a bodily paroxysm from disease can occur or be averted, according as the mind is in a tranquil or ruffled state, the progress of disease, as far as it is determined by the endowments of the physician, must, *ceteris paribus*, depend upon his capabilities of maintaining a healthy state of mind in his patient.

Now, the class of occurrences here alluded to involves much that is physical and also physiological; still it may fairly be assumed that, if mental phenomena can induce, they may also conceivably remove, bodily phenomena. The conditions of tenacity of pain, as well as of amount of pain, from a given cause, are no doubt complicated with the question. But I am now only estimating the relations of pain to a frame or condition of *mind*. If such a condition of mind can be induced as to occasion continuous associations of adequate strength in one current of thought, we are taught by experience that associations of a different kind may be lost, and as it were extinguished. Hence it follows, that with a given force of associations, different in kind from those of pain, the latter *may* be put in abeyance. Now, it is unquestionable that the associations immediately connected with the sensations of pain—viz., the memory of the past sensation and the anticipation of the coming one—constitute a large part of its actual intensity. Meanwhile the vivacity and strength of the associations through which this victory may be obtained over the mental phenomena of pain must depend upon the mind itself, and exist in some direct ratio to its natural

endowments and its cultivation ; and here the value of literature and philosophy makes itself felt through all the inlets of the mind, whether those of reasoning or those of imagination. Processes of this kind, heightened to the state which is called abstraction, have operated to the extent of producing, it is said, total insensibility to pain ; and the gradations of this anæsthetic influence are endless. Now, the same conditions, which the sufferer whom we are supposing can in these ways in a higher or lower degree produce in himself, may be effected in him by others, and *that* through the same instrumentality of thought, whether as originated in himself or thus obtained by sympathy.

Stetit urna paulum
Sicca, dum grato Danai puellas
Carminum mulces ;

has been felt or said in regard to many of those gifted men, not a few of them physicians, whose lot it has been at various periods to apply the resources of literary cultivation to the relief of bodily, and, doubtless I may add, of mental pain.

The above considerations, in the course of which, after wandering through dry paths, I find myself

discussing the professional advantages of literature, have been suggested to my mind by the present epoch of medical legislation. They relate to principles which have to be carried out or negatived under the auspices of a new system, embracing the entire profession of medicine in Great Britain and Ireland, unless we are once more doomed to the disappointment of seeing our earnest efforts to produce that unity of purpose, out of which the Bill has sprung, end in abortion. That the labour given to this work has been most continuous and most energetic, *I* can with the less vanity affirm, because *I* have done little myself. Indeed, the bringing into the adoption of a common purpose bodies having certain differences of interest, is intrinsically an arduous task; and *I* trust, we are entitled to hope, that if at the last some slight differences between these bodies may appear to linger, which, however, *I* do not expect, the Government will exercise that most legitimate influence, by which the differences incident to every large body, made up of sections heretofore acting under separate banners, may be induced to yield to the general good.

THE END.

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