

Thesis,

De Studio Medicinæ;

By

Andrew Shields.

Edinburgh
1861

*"The Physician should commence
with Philosophy, the Philosopher
end with Medicine." Aristotle.*

De Studio Medicinae.

The study of Medicine—like that of many of the other sciences—may be regarded and prosecuted either as a mean, or an end, or as both. It may be cultivated as a science—as a study terminating in itself—an instrument of intellectual activity & refinement; having individual, and therefore peculiar attractions, laws & lessons of its own. Or it may be undertaken & carried out, not so much from its subjective interest as a science, as from its practical bearing and results as an art—an end or effect. As in Mathematics, so in Medicine, there is the 'pure' and the 'applied'; the $\epsilon\pi\iota\sigma\tau\eta\sigma\iota\varsigma$ —scientific process, as distinguished from the $\tau\acute{\epsilon}\chi\eta$ —the method of making or doing, the skilful execution. *Per speculativam scimus ut sciamus; per practicam scimus ut operemur* (Averroes)

Both are best, for both are required. They mutually guide, check, and reflect light on each other. The one is legislative, and so far as it can, gives the rationale; the other is executive and looks only to results, or at least is content with them if favourable. As our object in this paper is to point out the advantages of the study of Medicine as a means of mental culture, we shall consider it in its most comprehensive aspect—endeavouring to show that the subjects of study coming within the compass or range of this department of human (study) knowledge, supply the most efficient means for cultivating the discerning powers, and for sharpening and strengthening the intellectual faculties;— while the practice of the healing art is calculated to quicken the sympathies, to purify & ennoble the sensibility of our aesthetic nature. That the human mind is capable of improvement is acknowledged on all hands. Indeed the capacity

for intellectual progress is a characteristic feature in man's psychological nature. And it is in the present state—this cradle of our existence—that those faculties which constitute our true greatness begin to unfold themselves. Those mighty energies of thought and will and self-conscious intelligence—which unlike most other things, have with us a beginning, but no end;—these point out, not only man's present probationary state, but also indicate that there are in his constitution the elements and the law of progress; and that, every consideration taken in to account, the best gymnasium is the one which is comprehensive enough to recognise man in all the length and breadth of his being & relation, and which shall enable him, alike, rightly to fulfil present duty, and to stand on high vantage on quitting this life for another sphere of existence.

In advocating the study of medicine then, as an instrument for whetting

and expanding the mental faculties—developing them too, not in one, but in every direction; adjusting & giving to them due balance, as well as vigour and acumen— we do so on the understanding, that it be conducted & carried on in the Baconian or inductive spirit.

He who devotes himself to this profession must aim at being not merely a Medicus— a healer, but also, and at the same time, a physicus— an inquirer into nature— a strict interrogator— a correct observer of her laws and method of working. Long ago Galen, speaking of the great importance to medical men (τοῖς ἰατροῖς) of the study of Logic and Philosophy deserves:— ὅτι ἀριστος ἰατρός καὶ φιλόσοφος— that an accomplished physician is also a philosopher. Thus it has ever been, and must necessarily continue to be. For the mere τέχνη without the directing, regulating, ἐπιστήμη is only blind em=

puricism. The proper cultivation
 of both, first raised Medicine
 to the position of a science and
 placed it upon a rational &
 progressive basis. Hippocrates
 brought philosophy & reasoning
 to his aid as well as experience.
 And it will readily be admitted
 by all acquainted with its his-
 tory, that just as these have been
 conjoined and made mutually
 corrective and auxiliary, so has
 Medicine advanced. For asbul-
 len, whose mind was strictly phil-
 osophical, observes:— "The truly
 judicious practitioners and good
 observers, are such as have the
 most extensive views of the animal
 economy, and know best the true
 account of the present state of the
 ory, and therefore know best where
 to stop in the application of it".

The true or accomplished physician
 then, the ἀριστος ἰατρός of Galen,
 will not merely look for, and be
 content with results, but will
 endeavour to ascertain as far

as possible, the different processes, few or many, by which these are obtained. Short of this he does justice, neither to himself as an observer, nor to those intrusted to his skill and attention, and who have the strongest claim on his profiting by experience. For here as else where, duty is relative; having like most other things two sides or aspects, one person-
 all, the other not less sacred and important, & much more comprehensive & far reaching.

But apart altogether from the responsible and philanthropic view of the question, and looking at it only from the physicians standpoint, we regard such a study as one of the very best means for securing a healthy, vigorous mental discipline, especially when carried on in the manner and spirit already indicated. Even judging a priori, one might be entitled, considering the circumstances, to advance such a proposition as the one now made. But the best criterion is

1
the history of medicine itself. For we find that many of the most illustrious names in philosophy are those which stand identified with the medical profession. The fact is indeed notorious, that those who have been the most patient and correct observers, and who have done most to extend our knowledge in science & philosophy, have as a whole — (for there are notable exceptions — been more or less, for a longer or shorter period, engaged in the study of the subject now under consideration. Without citing from Hippocrates downwards, the illustrious names of those who have properly belonged to the profession, it is enough to select from amongst many such examples as Aristotle, Bacon, Locke, and as the modern representative of all human knowledges (to use his own term) the late Sir William Hamilton. With each of these medicine was a favourite subject; and without depreciating or overlooking their native genius, the question might be

legitimately asked, how far that fact accounts for their remarkable success in those wide and difficult regions of thought which their writings have so much elucidated and adorned. What Dugald Stewart says regarding Locke's early training, applies to others, as well as to the founder of our analytical philosophy of mind. Stewart, remarks:—"No science could have been chosen, more happily calculated than Medicine, to prepare such a mind for the prosecution of those speculations which have immortalized his name; the complicated and fugitive, and often equivocal phenomena of disease, requiring in the observer a far greater proportion of discriminating sagacity than those of Physics, strictly so called; resembling in this respect, much more nearly, the phenomena about which Metaphysics, Ethics and Politics are conversant."

It would scarcely be in keeping either with object or title of

our present paper to enter any way fully into the intimate relation which has ever subsisted between the advancement of Medicine & that of Philosophy; but surely it is not too much to say that the History of the one forms no inconsiderable part of the History of the other. It would be singular indeed were it otherwise. For while the philosopher may not, & need not, be a physician, the physician must necessarily, to some extent, be the philosopher. Hence we find, as a general rule, that those who have in any age excelled as the one — who have been distinguished for observation, skill or diagnostic tact — have also possessed the qualities and cultivated the habits of thought & action which characterize the other. To be successful in either case, requires the same careful, patient, exact observation, the ^{same} severe, searching analysis, keen insight and delicacy of discrimination. With out these conditions or qualifications

which are partly native, and in part also
 capable of being acquired, neither efficien-
 cy nor success can, or ought to be ex-
 pected. But while Medicine demands
 these qualities in those professing it,
 at the same time it supplies the
 very best means for attaining them
 in so far as they can be attained by
 being learned or taught, And that
 they can be so, in no small meas-
 ure, is unquestionable. Of the poet it
 is true, nascitur non fit; this however
 is the exception—the reverse is nearer
 the rule with ordinary mortals and less
 ethereal callings. The marble must
 indeed be in the quarry before it can
 be taken out, but marble though
 it be it nevertheless requires the sculp-
^{tors} skill and chisel to make it stand
 forth in life-like form and beauty.
 The best tempered steel requires the
 whetstone to give it edge; & the diamond
 loses nothing of its lustre by being
 well set. So with the culture of the mind.
 There must of course be capacity—the
 power—condition of taking in and
 assimilating. But just as two

11
Sculptors may exhibit very different workmanship and finish upon material from the same block, so the habits and activity of any particular mind are very much determined by the discipline to which it has been subjected. Or as Aristotle puts it:—"The capacity of receiving knowledge is modified by the habits of the recipient mind." (*Metaphysics*)

Having thus far indicated the general bearing of the subject, we shall now state more particularly in what respects, Medicine, is, par excellence, fitted for educating the mind— for evolving fully and harmoniously its faculties & capacities.

Here then we observe that it cultivates preeminently the discerning powers & the intellectual faculties.

Diagnosis is the most important, as it certainly is the most difficult part of the physician's duty.

Signs and symptoms are to him what proof & evidence is to the jurist or the advocate in a court of law. They are witnesses in the case; and their evidence requires

to be carefully and skilfully elicited, arranged and weighed. Besides diseased action, shows itself in so many & so varied forms; its cause, or causes being often hidden and uncertain, at one time so proximate, at another so remote; its phenomena frequently so equivocal and deceptive; that necessity is, as it were, laid upon the physician for cultivating and bringing into full exercise the utmost care, method & discriminating tact. In observing, scrutinizing and interpreting signs and symptoms and ^{antecedents} there is both given and required a training which neither the classics nor Mathematics can boast of. These of course are not to be neglected or undervalued, forming as they do, an excellent preparative for the study of Medicine, as well as other subjects. But in the latter, for example, in Mathematics, there is no balancing of probabilities, no necessity, nor even scope, for observation external or internal and no generalization. In this science the

probable and the possible are al-
 together excluded. Every thing is vir-
 tually contained in its data & only
 requires evolution. One goes through
 a problem in Euclid very much in
 the same way that a locomotive
 engine passes along the rails pre-
 viously prepared for its wheels.
 Either wholly right or wholly wrong,
 & carried in either direction almost
 mechanically. "Mathematica munus
 pistrinarium est; ad molam enim
 alligati, vertimur in gyrum aequum
 atque vertimus." The mathemati-
 cian being a Spectator rather than
 an actor. Whereas in Medicine it
 is the habit or faculty of inquis-
 itiveness as distinguished from ac-
 quisitiveness or mere receptivity which
 is most developed & called into vig-
 orous exercise; and here in particular
 "actionem exigit officium." Know-
 ledge — mere possession of facts
 or principles is not enough, there
 must be the power — the readiness
 the presence of mind in apply-
 ing them to every particular case.

It was our purpose to have added a
paragraph on the Aesthetics of
Medicine; & also to have noticed the ad-
vantages of the study of Natural Science,
e.g. Botany & Natural History, in forming
& sustaining those habits of mind, alluded
to in this paper: but "Dies brevis, et
opus multum, et pater familias [Alma
Mater] urget".