

knowledge, but to train their minds to remain open for the reception of truth throughout their lives, and to enable them to meet the various emergencies of the profession whenever they occurred. Medical knowledge was ever progressive and never stationary. Medicine was based on the natural sciences; the natural sciences were never at rest; they were always moving onwards, and so it was with medicine. A man who remained stationary retrograded when all around him was moving in advance. In order to keep abreast it was necessary for them not only to obtain equal knowledge with their brethren, but to throw aside that which had become effete and useless. The medical man must learn to forget and throw aside the *debris* of exploded theories and the dry and useless husks of obsolete practice. It was impossible for a man encumbered with obsolete knowledge to keep abreast of his competitors. He must learn to throw it aside; by whatever labor it had been acquired, it must be discarded and abandoned. Every man in the medical profession should be a student through his life, and in the course of a long existence they would find that it was absolutely necessary to relearn many matters thought to be thoroughly mastered at an earlier period.

---

ABSTRACT FROM SIR A. CLARK'S  
ADDRESS AT SHEFFIELD  
MEDICAL SCHOOL

Now this is the age of examinations, and for qualifications in the various departments of art and science the questions to be answered are sometimes so numerous, recondite, and complex that the kind and degree of preparation necessary to answer them are becoming incompatible with true education, genuine study, and thorough work. For all these true knowledge is necessary, and true knowledge cannot be acquired by any mechanical habit, and could not continue to subsist as a mere addition to the mind. True knowledge is not in any high or just sense a mere acquisition—it is a living part of a living mind, growing, developing, re-producing, creating, in such proportion as it is properly fed and exercised. And this food

and exercise are supplied through observing, doing, thinking—through comparing and classifying the objects in Nature—through critical consideration of the acts and facts of life. But it seems that the mere training of pupils to pass difficult examinations has become the business of education and the end of study. Examinations have unquestionably their place and use; but I regard it as certain that no acuteness of perception, no quickness of acquisition, no retentiveness of memory, no cleverness in learning artificially classified subjects will ever bring about results comparable with those of patient and thorough educational work. The mere process of cramming conducted by a clever coach may sharpen some of the lower intellectual powers; but it will sap the strength of the higher ones, and, whilst it may carry a student triumphantly through some difficult examination, which may have been made the end of his studies, it will place him in after years at a terrible disadvantage in dealing with the difficult problem of life and work. For the chief faculty employed in this showy but shallow method of learning is memory. But memory cannot be exercised excessively except at the cost of injury to all the other mental faculties. In such case they become weakened, atrophied, disordered. And although the mind may readily receive, retain, and when required return, naked facts and unreasoned principles, these constitute neither the means nor the material, neither the scope nor the purpose of education. Education is a very different and a much higher thing than that. It has for its object the growth and development, the exercise and the discipline of the mental faculties in just relation to each other; it has for its means observing, comparing, classifying, trying, doing; and it has for its end the enabling of man not only to observe, reflect, reason, judge, feel, and act, but so to employ those powers in studying the problems of life and mind that in striving after their solution he shall be neither put to confusion nor landed in error. This is the kind of education which makes the statesman and the scholar, the man of science, and the man of art; and this is the only kind of