

able. The breath of its atmosphere is felt directly by those who know what it is or are of it, and to them its signs from China to Peru are easily visible. That it can be attained by means of instruments both old and new is quite another question, which is being discussed to utter weariness. Yet one thing is clear, namely, that to attain it, instruments, whether old or new, must be used in exactly the same way.

It is suggestive to notice how satisfied the champions of the useful are to stop short of logical conclusions. There is no modern crusade of first-class magnitude against the teaching of algebra and Euclid in schools, or, if there is, we have not heard of it. If the board is to be swept logically so that only the useful may remain, then algebra and Euclid, like Greek, must go, and simply because they are quite useless in the practical affairs of every-day life, except to a comparatively small professional class. All that ordinary life calls for in the way of mathematics, so far as the vast majority of men is concerned, is a knowledge of the first four rules of arithmetic and of vulgar and decimal fractions. If a man must a borrower or a lender be, he may have to know something about interest and discount; if a capitalist, about stocks. And there the matter ends. When the student leaves school or college he leaves a large proportion of his mathematics behind him; the last examinational use of mathematics is to the majority of men its last use for life.

And yet, in the interests of education, the attempt to oust a subject like geometry should be resisted to the end. There are moments in life when a sudden consciousness of mental power leaves behind an impression never to be forgotten, becomes, as it were, a starting point of effort, and one of these is the moment when the first rider in Euclid is solved without help. In fact, certain branches of mathematics which are highly educative and yet perfectly useless, and Latin which is highly educative and distinctly useful, are instruments difficult to replace, and a thoughtful educator will reflect twice before he discards them. We anticipate the reply that some good English writers have been ignorant of Latin, to which we make the rejoinder that although some geniuses are notorious for bad spelling, it does not follow that every person whose spelling is defective is, therefore, a genius.

It could be wished that those who are constantly harping on the "useful" could be pinned down to that word absolutely, and compelled