

the hands of young men of the latter nationality who have gone abroad to seek their fortunes.

Possibly a certain kind of parallel may be found nearer home. It is notorious that in the common schools of Ontario more stress is laid upon arithmetic than upon any other subject. Indeed, so much is it deferred to, that in the Toronto schools, at all events, the grading of the classes, though nominally determined by the order of the reading books, is virtually settled by proficiency in arithmetic. In some schools and forms the position of the pupils in class is determined not merely by an arithmetical standard, but actually by cleverness in the so-called time-tests alone. I am not just now criticizing the system, but only pointing out to what an extreme of specialization the arithmetical cult is carried. The results may be estimated by the admitted inefficiency in ordinary commercial arithmetic displayed by the great majority of applicants for positions in banks and other financial institutions. Here we have, perhaps, the most practical of all elementary educational subjects most assiduously cultivated, of course for practical ends, and yet failing to be utilized just where it is most in demand.

It sounds like paradox to suggest that the reason of the failure is that the subject is viewed, discussed, and taught in an unpractical fashion. Just because it is so practical its importance is wrongly emphasized. In the first place, it is drawn out of proportion in its relation to other studies; and, in the second place, it is treated as though familiarity with all its workable aspects and methods were a good thing for the pupil. It is thus made an end in itself, with the usual results of idolatry of forms and symbols. At least two evils are manifest. It is forgotten that while arithmetic has such very practical

uses, numbers, which are its material, are the most abstract of all things. When the pupil is made a calculating machine, as so often happens, he becomes in so far eminently unpractical. He is divorced from his natural intellectual environment, the region of human life, of history, of literature—in short, of concrete existence. Moreover, the best part of the working time of many pupils is taken up with the brain-racking process of trying to solve problems ingeniously contrived for the purpose of puzzling him as much as possible. This is supposed to be an eminently educative discipline, whereas, as a matter of fact, it is at best an elaborate device for killing time and dulling wit, except in the cases of the exceptional few who have a talent for solving that species of conundrum or rebus.

A little not very profound insight into the philosophy of numbers would convince our educationists of the fallacy and noxiousness of this whole arithmetical crusade against the innate needs of children, their mental well-being and peace of mind. It would soon become plain to them that these abstract numbers are in problems of practical utility merely employed as a species of counters or checks. To use them in this way and for this purpose is a wholesome and necessary business. But to take the average schoolboy beyond this region, and to train him, for example, to work out algebraic problems by arithmetical processes, is for the most part vanity and vexation of spirit. There is, to be sure, a benefit to be gained from dealing in a natural and simple fashion with numbers, when the mind does not become jaded and, so to speak, abraded, by being forced and dragged through a barren wilderness of figures. I refer to the strengthening of a "memory for numbers," one of the most useful of accomplishments. A habit of re-