

standing than for the hand." Perhaps no more striking proof of this fact can be given than the statistics of the various manual training schools, from which we learn that an increasing army of useful citizens has been—I would almost say—created out of that class from which so little had been hitherto expected.

3. Thirdly, an advantage necessarily arising from the carrying out of the experiments required in so many departments of scientific work is the development of a keen and accurate perception of the truth by the constant checking of results. Our thoughts at every stage are crystallized into facts, and we are prevented from wandering into the often too hazy regions of hypothesis, and what is frequently mis-called pure thought—into the kind of thing which the Scotchman said was "no deep, but drumle."

4. Again, in experimental work, the cause and its results are brought into such close juxtaposition as to throw into the strongest possible relief the relation of cause and effect—the most fundamental in our teachings after truth.

5. The scientific method also involves, of course, that constant and steady accumulation of facts, erroneously looked upon by many as synonymous with science, but which is more truly regarded as the material of science. We can never tell what fact will prove the starting point of some fresh discovery.

6. Further, the learning of science fits a man directly to understand his environment, to cope with the every-day circumstances of his material surroundings, and therefore tends to develop in him common-sense and practicality.

7. It offers more scope for the free exercise of the powers, always very stimulating to interest in the student, and incidentally gives to the educator better opportunities for judging the particular bent of the character with which he has to deal.

"Because, says Plato, no trace of slavery ought to mix with the studies of the freeborn man. For the constrained performance of bodily labours does, it is true, exert no evil influence upon the body; but, in the case of the mind, no study, pursued under compulsion, remains rooted in the memory. Hence, you must train children to their studies in a playful manner and without any air of constraint, with the further object of discerning more readily the natural bent of their respective characters."

8. Finally, although it is hardly true, as is so often alleged, that the training in literature and language does not directly prepare a man for an immediately remunerative career—for what other preparation is considered necessary for the teacher, for the journalist, for the author, for the diplomat, or the politician?—still, it is more often the case that the teaching of science will prepare a man directly for his after-career, and for the prosaic but very necessary duty of as soon as possible earning his bread and butter.