

some of these principles, and first, those which are universally recognized and then those which, although not universally recognized, seem to us to flow out of the primary, self-evident principles.

First of all, then, *education should be carried on upon scientific principles.* This is a point upon which all men really agree. They may not all, at once, accept the terms in which the principle is put forth; but this is from a misunderstanding of their meaning. They do in reality hold the truth which is expressed. When religious men, for example, allow that there may be an antagonism between religion and science, they are committing a double error. They are offending against science, which is a servant of God, and they are offending against religion by allowing it to be supposed that science can ever harm the faith.

What do we mean by science? We mean knowledge, right knowledge, knowledge which is not gained in a tentative, haphazard manner, but by careful induction of facts. We mean knowledge which is careful, systematic, and approximately complete. We mean the kind of knowledge which seeks to ascertain all the qualities and properties of the thing investigated, and all its relations. Now, to whatever object this method of enquiry may be directed, it is quite obvious that it is doing God-like work. Whether it is investigating the earth upon which we stand, or the plants which grow upon it, or the living creatures which live and move upon its surface, or the starry firmament, or the nature of man, or the nature of God, its generic name is science, and it is the handmaid of man and of God, of intellect and of conscience.

Now education must be carried on in a scientific spirit, unless we think it better to walk in the twilight of guess work, instead of such light of

truth and fact as we may be able to attain to. If we are training a plant, we take into consideration its peculiar nature. If we are taming an animal, we consider the qualities and powers of each animal. And it is the same with man. Our education will be successful and profitable just so far as it recognizes the potentialities of the beings educated.

We do not, of course, mean that education is to be suspended until we are thoroughly acquainted with the nature of man. Rather shall we educate as far as we do already know, and, in educating, gain fresh knowledge, and then again make use of that increased knowledge in our work. But it must be recognized that we are better equipped for the work of education the more completely we are acquainted with the subject to be educated.

And here, too, we must remark that we by no means look back with disdain upon those older methods of education in which there was little or nothing said or thought of the scientific character of education. Among the greater educators of earlier times there was an unconscious science, there was an educational instinct, there was the imitation of methods which had been learnt, consciously and unconsciously, from experience. We have no sympathy with those leaders of the present who are ever "slurring the days gone by," any more than we have with the priggishness which sets up for knowing everything, as though no one had known it before. It may be that often the man who acts under the influence of a science which is not recognized as such, does the best homage to that science; yet it will not be denied that every work has its science, has its first principles, and in the conscious recognition of those principles we have the best assurance of the hopefulness of our work.