

CONTEMPORARY LITERATURE.

EDUCATION AS A SCIENCE. By Alex. Bain, LL.D. (Volume 25, International Science Series). London: C. Kegan Paul & Co.; Toronto: James Campbell & Son; also, New York: D. Appleton & Co.; Toronto: Hart & Rawlinson and A. Piddington. (*First Notice.*)

No book has been more eagerly anticipated by the teaching profession than this one since the announcement of it was made some few months ago. There has hitherto been no systematic effort made to bring the various functions of the schoolmaster's art under the domain of science. It is true that the scientific aspects of education have received the attention of thinkers from the time of Plato and Aristotle down, but only in a desultory way. As practised in the school-room, it has not had that specific attention given to it to justify its being called a science at all. Herbert Spencer made some attempt to treat education as a science, but his chapters on the subject are little more than fragmentary and do not claim to be exhaustive. They are so good, however, that we cannot but regret that one so gifted and so competent should rest content with being a mere contributor to the science instead of being its organizer. Mr. Bain, the well known Professor of Logic in Aberdeen University, and the author of several educational works on Grammar, undertakes in the volume before us to treat of the subject in a systematic manner, and on a scientific basis. Though it is one of a series, the International, to which many authors contribute, it bears evidence of long-continued thought and observation, and no one can deny that it is the fruit of ripe experience and judgment, and of a thoroughly trained scientific intellect.

In his first chapter on the "Scope of the Science of Education," though he is quite

liberal in quoting definitions of education from other sources, he fails to supply us with one of his own; this is certainly somewhat unpromising, and not a very scientific way of beginning his subject. In this chapter, too, we are startled with the announcement that "the leading inquiry in the art of education is how to strengthen memory" (p. 8). Now the general consensus of opinion is, that the leading inquiry in education is how to strengthen the reasoning faculties so that they may employ what memory, their hand-maid, supplies; and it will take greater authority than that of Mr. Bain to restore memory to the bad eminence it once occupied. Let us see what other leading thinkers have to state on this subject. Locke says in his essay on "The Conduct of the Understanding:" "The business of education is not to make the young perfect in any one of the sciences, but so to dispose and open the minds of the young as may best make them capable of any intellectual effort when they apply themselves to it. Reading furnishes the mind only with the materials of knowledge; it is thinking makes what we read ours. The memory may be stored, but the judgment is little better, and the stock of knowledge not increased by being able to repeat what others have said, or produce the arguments we have found in them." John Stuart Mill thus expresses himself in his "Dissertations and Discussions:" "The object of education is to qualify the pupil for judging what is true or what is right, not to provide that he shall think true what we think true, and right what we think right—to make him a thinker or an enquirer, not a disciple." And Herbert Spencer says in the book we have already referred to: "Education should consist more in *training* than in *telling*. What the learner discovers for him-