

during the first five years in which I studied it. I have learnt that it is a most difficult subject. It requires in order to master it, an acquaintance with three distinct branches of knowledge not apt to go together. First Geology in all its details, and the general principles of zoology, botany, and comparative anatomy. 2ndly a knowledge of the principles of interpreting the scriptures, and 3dly a clear conception of the principles of natural and revealed religion." He then admits that most geologists are deficient in some of those branches, and gives a list of exceptions; that is, a list of authors on geology who were measurably prepared to treat the subject properly, especially in its relation to revealed religion. (I notice he does not place Lyell in this class.) "But a still larger number of authors, although men of talents and familiar it may be with the Bible and theology, had no accurate knowledge of geology. The results have been, first, that by resorting to denunciations and charges of infidelity, to answer arguments from geology which they did not understand, they have excited unreasonable prejudice and alarm among common christians against that science and its cultivators; 2ndly, they have awakened disgust and even contempt among scientific men especially those of sceptical tendencies, who have inferred that a cause which resorts to such defences must be very weak. On the other hand prejudice and disgust equally strong have been produced by the productions of scientific men upon the religious bearings of geology, because they advanced principles which the merest tyro in divinity would know to be false and fatal in religion and which they advocated only because they had never studied the bible." "The enemy have within a few years past intrenched themselves within the dominions of natural science, and there for a long time to come must be the tug of war. And since they have substituted skeletons and trees and stones for weapons, in the place of abstractions, so must christians do if they would not be defeated. But how inadequately furnished the minister must be for such a contest who has used only the means of instruction provided in our existing seminaries! How certain to be worsted in an argument with an accomplished naturalist who is a skeptic! Suppose the skeptic take the ground of the author of the "vestiges." Let the clergyman whom I have supposed read the reply of Sedgwick and Miller and see if he can *even understand* their arguments without a more careful study of the sciences on which they rest." "Will the minister but slightly familiar with the ground chosen by the enemy be able not only to silence his guns, but as