

how few find the leisure, to say nothing of the disposition, carefully to investigate a new and extensive science! Even though younger men should be found standing forth as the advocates of geology, yet how natural for those more advanced to impute this to the ardour and love of novelty, characteristic of youth!

There is another difficulty, in relation to this subject, that embarrasses me. It is not even yet generally understood that geology is a branch of knowledge which requires long and careful study fully to understand; that a previous knowledge of many other sciences is indispensable in order to comprehend its reasonings; that its reasonings are in fact, for the most part, to be mastered only by long and patient consideration; and finally, and more especially, that they will appear inconclusive and feeble, unless a man has become somewhat familiar with specimens of rocks and fossils, and has examined strata as they lie in the earth. How very imperfect must be the most intelligent man's knowledge of botany, who had never examined any plants; or of chemistry, who had not seen any of the simple substances, nor experiments upon them in the laboratory; or of crystallography, whose eyes had perhaps never rested upon a crystal! No less important is it that he who would reason correctly about rocks and their organic contents, should have studied rocks. But upon such an amount of knowledge it is no disparagement to say we have no right to presume in all, even of publicly educated men. Before such a state of preparation can exist, it is necessary that practical geology, at least, should be introduced into our schools of every grade, as it might be with great success.

It ought to be mentioned, in this connection, that, within a few years past, geology has experienced several severe attacks of a peculiar character. Men of respectable ability, and decided friends of revelation, having got fully impressed with the belief that the views of geologists are hostile to the Bible, have set themselves to an examination of their writings, not so much with a view of understanding the subject, as of finding contradictions and untenable positions. The next step has been to write a book against geology, abounding, as we might expect from men of warm temperament, of such prejudices, and without a practical knowledge of geology, with striking misapprehensions of facts and opinions, with positive and dogmatic assertions, with severe personal insinuations, great