

has been seen and in part corrected ; and the future of Scotch Geology bids fair to be characterized by the doing of more and the saying of less.

In the same year in which Mr. Maclaren published his "Geology of Fife and the Lothians," the "Silurian System" of Sir Roderick Murchison appeared, — one of those great works which form eras in the history of science, and from which, as from the charts of some distinguished voyager, after explorers have learned to shape their course aright, and to recognize as familiar and easily definable, tracts previously unnamed and unknown. In both the old world and the new, the great divisions first laid down in this work by Sir Roderick have been detected and identified, and an introductory book added to the organic history of our planet, from the rich and varied materials which they supply. For, however, several years after its publication, our Scottish Grauwacke continued to remain a *terra incognita*, as before ; for though there appeared from time to time truthful descriptions of the deposit itself, its place in the scale was still doubtful. Two years after (1841), Mr. James Nicol, — now Professor of Geology in Queen's College, Cork — produced his Prize Essay on the Geology of Peeblesshire ; and to an accurate description of the mineralogical components of the Grauwacke of that county added a new locality for its fossils, in Grierston, near Traquair, where, in a slate quarry, there occur thin but continuous layers of graptolites, often in a state of the most exquisite keeping. Some of the finest Scottish specimens of this ancient organism which I have yet seen I have derived from this Grierston deposit. We also find Mr. Nicol referring, in his Essay, to that limestone quarry of Wrae Hill in which Sir James Hall had found his fossil shells ; but its lime, when he wrote, had been exhausted, or so covered up by the rubbish of the workings, that its organisms could be