

of the Scottish School naturally dealt in the main with the inorganic part of the science, with the elemental forces which have burst through and cracked and worn down the crust of the earth. It asked the mountains of its birthplace by what chain of events they had been upheaved, how their rocks, so gnarled and broken, had come into being, how valleys and glens had been impressed upon the surface of the land, and how the various strata through which these wind had been step by step built up. It encountered no rocks like those which had arrested the notice of the early Italian geologists, charged with fossil shells, corals, and bones of fish, such as still lived in the adjoining seas, and which at once suggested the former presence of the sea over the land. Neither did it meet with deposits showing abundant traces of ancient lakes, rivers, and land-surfaces, each marked by the presence of animal and plant remains, like those which set Steno and Moro thinking. 'The rocks of Scotland are, as a whole, unfossiliferous. It was therefore rather with the records of physical events, unaided by the testimony of organic remains, that the Scottish geologists had to deal. Their task was to unravel the complicated processes by which the rocky crust of the earth has been built up, and by which the present varied contour of the earth's surface has been produced—to ascertain, in short, from a study of the existing economy of the world, what has been the physical history of our planet in earlier ages. The marvellous story told by the organic remains in the earth's crust had not yet been in any way conjectured.

Hitherto, while men had been accustomed to believe that the earth was but some 6000 years old, they sought in the rocks beneath and around them evidence only of the six days' creation or of the flood of Noah. Each new cosmological system was based upon that belief, and tried