

great desire was to bring the facts of science into complete and unquestionable harmony with the words of Holy Writ.

A special interest is attached to De Luc's *Letters on some parts of Switzerland*, which were originally addressed to Queen Charlotte, and were afterwards published in 1778. In the preface to these letters he proposes the term *Geology* as the most suitable for a scientific study purporting to deal with the history of the earth. The preface is written in bombastic style, announcing that a new outline of cosmology and geology would be enunciated by the writer. The *Letters* themselves contain little that could be supposed to bear out the high promises of the preface, but a year later De Luc's theory appeared in a work of five volumes, entitled *Physical and Moral Letters on the History of the Earth and of Man*. The moral discourses are comprised in the first part of the work. Then the scientific letters begin with a *résumé* of the theories of the earth's origin constructed by Burnet, Whiston, Woodward, Leibnitz, Scheuchzer, and others, all of which are found erroneous and set aside by De Luc. He then describes his travels in different parts of Europe, and records any geological observations he had made.

He states his reasons for disbelieving in the enormous erosive activity which contemporaneous writers ascribed to water. And he strongly expresses himself in favour of the eruptive origin of basalt, as against the ideas held by Werner's school. The fifth volume is that in which De Luc unfolds his own theory. He distinguishes *primordial mountains*—composed of rocks of unknown origin, such as granite, schist, serpentine, quartzite—from *secondary mountains*, composed of stratified deposits containing fossils, and clearly of aqueous origin. As there are terrestrial plants and animals among the fossils of the "secondary mountains," De Luc supposes that, although the ocean must have originally covered the earth's surface, there must have been land areas at the time when the strata of the "secondary mountains" were deposited. The floor of this restricted ocean was, he said, formed by the "primordial mountains," but in the heart of these mountains there were cavities of irregular shape disposed tier upon tier above one another, so that the firm rock merely formed a scaffolding. Owing to subterranean fire or any other disturbing cause, it sometimes happened that the rock pillars in these hollow areas gave way, and crust-inthrows ensued. The