

on the 18th November 2349 B.C., a great comet stood above the Equator, its tail came into contact for some hours with the earth, shook out waterspouts, and simultaneously the subterranean waters escaped and inundated the earth's surface. The Flood destroyed plants, animals, and human beings.

The famous zoologist, John Ray, in his *Three Physico-theological Discourses* (London, 1693), took much the same standpoint as Woodward. He accentuated, however, the great importance of running water as an agent of surface erosion, and explained the wide continental flats and deserts as a result of the occasional escape of subterranean waters and the occurrence of gigantic floods.

Johann Jacob Scheuchzer, the Zürich professor, turned his attention to geological, geographical, zoological, and botanical pursuits during his frequent travels, and was an ardent fossil and mineral collector. A few geological sections which he made in the neighbourhood of Lake Lucerne were the first attempts in the literature to reproduce bent strata and other features of mountain structure by means of accurate sectional drawing. But his works afforded as little insight into the mineralogical composition and stratigraphy of the rocks, and the distribution of fossils, as those of his predecessors and contemporaries.

Italy, at the beginning of the eighteenth century, possessed two geologists, Antonio Vallisnieri and Lazzaro Moro, who sought to counteract the tendency of their time towards the theoretical construction of an earth history. Vallisnieri (1661-1730), who held the post of Professor of Medicine at Padua, was an enthusiastic fossil-collector, and entered strong protest against the idea that the Flood was accountable for the annihilation of all pre-existing organisms. His writings point out that marine deposits are widely distributed in Italy at both sides of the Apennines, and are also present in Switzerland, Germany, England, Holland, and other lands, and Vallisnieri therefore argues that those deposits prove incontestably the former presence of the sea over these localities. He favours Strabo's doctrine, and explains how different areas of the earth's surface may have frequently undergone relative changes of level, how portions which are now dry land may formerly have been under sea-water. He further explains the presence of marine fossils in these deposits, on the natural assumption that the inhabitants of the sea as they died fell to the bottom, and were there incorporated in the deposits. Vallisnieri