

Fabio Colonna¹ upheld similar views in Italy. He tried to show that the "Glossopetren" were not tongues of serpents but the teeth of dog-fish, which occurred along with remains of marine bivalves and snails in certain strata; while in others he recognised the remains of terrestrial animals and plants.

During the seventeenth century Nikolaus Steno and other Continental geologists contested the erroneous and ludicrous ideas of their contemporaries; while in England, Robert Hooke, John Ray, and John Woodward guided scientific thought to the true explanation of fossil remains. Leibnitz, the founder of the Academy of Science in Berlin, and Scheuchzer, the Swiss geologist, further advanced the scientific research of fossils, so that, by the middle of the eighteenth century, no man of science and letters believed that fossils might be products of the earth itself.

The English physicist and mathematician, Robert Hooke (1635-1703), was one of the most brilliant original thinkers of his own or any age. It was he who for the first time suggested the use that might be made of fossils, in revealing the historical past of the earth. In an important work upon earthquakes written in 1688,² he stated that fossil molluscs deserved to be regarded as historical, since they represented monuments no less valuable than coins and manuscripts, but he added that it certainly would be extremely difficult to construct a chronology of the earth upon the evidence of fossils. Many fossil Ammonites, Nautilids, and other conchylia undoubtedly differed from known living forms, but he said it had to be remembered how scanty was the existing knowledge of marine animals, especially of those which inhabited the greater ocean depths. Hooke, however, inclined to the opinion that the fossils of unknown forms might really be extinct species, annihilated by earthquakes. He regarded it as certain that a number of fossil species had been confined to definite localities. And from the occurrence of fossil Chelonias and large Ammonites in the strata of Portland Isle, Hooke concluded that the climate of England had once been much warmer. This was explicable, in Hooke's opinion, upon the assumption either that the earth's

¹ *Osservazioni sugli animali aquatici e terrestri*, 1616.

² This treatise is published in the *Opera posthuma Robert Hooke*, ed. Rich. Waller, London, 1705.