

also gave expression to various hypotheses regarding the relationship of mountain-chains, the action of water, and the presence of the ocean above the continent, as indicated by the occurrence of oysters and other marine organisms in the Libyan deserts on the way to the oasis of Ammon. Eratosthenes taught that the changes of form accomplished by means of water, by volcanoes and earthquakes, and by fluctuations of the sea, are insignificant in proportion to the size of the whole earth.

Thus it will be seen that the majority of the older Hellenic philosophers gave their attention to speculative considerations on the origin of the universe and the earth; but under the manifold activities of the Roman empire, a new and more realistic spirit became infused into the investigations of the great thinkers. Amongst these the first place must be given to the historian and traveller Strabo (born *circa* 63 B.C.), whose geography, comprising seventeen volumes, was written about the beginning of the reign of Tiberius. Strabo had a thorough mastery of the Greek literature, and in reference to the occurrence of the above-mentioned fossils in the Libyan desert, he agreed with the Greek philosophers that the sea had once covered certain portions of the land, but he also pointed out that the same district may sometimes rise, sometimes sink, and fluctuations of the sea-level are associated with such movements of land-surfaces. He further taught that elevations and subsidences of the land are not confined to individual rocks or islands, but may affect whole continents; that Sicily, Procida, Capri, Leucosia, the Sirenian and CEnotrian islands had been separated from Italy by earthquakes, and that probably all islands off the shores of continents had originally formed part of the mainland. The oceanic islands far from any mainland have, according to Strabo, been thrown up by subterranean fires. In support of this view Strabo cited the case of a volcanic eruption in the year 196 B.C. between Thera and Therasia. For four days flames rose from the ocean, and as these died down it was observed that a new island had been formed, measuring twelve stadia in circumference. Again, near Methone in the Hermionian Sea, a mountain, seven stadia high, had been thrown up during outbursts of sulphurous vapours and fire; and the town of Spina, near Ravenna, formerly a seaport, was now ninety stadia inland. Strabo is therefore rightly regarded as the father of modern