

recorded eruptions of Vesuvius and Etna, and starting with the proposition that the fossil shells are really productions of the sea, he proceeds to unfold his theory that the position of these shells, and the origin of the rocks that enclose them, are to be assigned to the operation of volcanic action.

In the beginning, he says, the globe was completely covered with water, which was then fresh and perhaps not more than 175 perches in depth. No prominences diversified the smooth stony surface of the globe which underlay the water. On the third day of creation, however, when it pleased the Almighty to reveal the solid earth, vast subterranean fires were kindled, whereby the surface of stone was broken up, and huge masses of it began to appear above the water, so as to form the land and mountains. These disrupted masses, while rising or after they had risen, and in some cases even before they appeared above the water, were rent open by the violence of the subterranean fires, and they discharged from their orifices vast quantities of material, such as earth, sand, clay, stones both solid and liquid, metals, sulphur, salts, bitumen and every kind of mineral substance. Part of this material flowed in river-like streams down the sides of the mountains into the water below, part fell in showers from the air into which the ejected detritus had been hurled by the impetuosity of the fire. The saline and bituminous ingredients now began to give to the water the salt and bitter taste which the sea has retained ever since, while the other insoluble substances formed a new bottom above the original stony surface.