## John Ray

alludes to them as effects of "the general congregation of sulphureous, subterraneous vapours." He thinks that the observed greater frequency of earthquakes and volcanoes on islands and sea-coasts may possibly be due to "the saline quality of the sea-water which may conduce to the producing of the subterraneous fermentation with the sulphureous minerals there placed." "These fermentations subjacent to the sea, being brought to a head of ripeness, may take fire, and so have force enough to raise a sufficient quantity of the earth above it to make its way through the sea, and there make itself a vent." "The foment or materials that serve to produce and effect conflagrations, eruptions or earthquakes, I conceive to be somewhat analogous to the materials of gunpouder."1 This philosopher had therefore advanced no further, in regard to the hypogene agents in geology, than the writers of antiquity and of the middle ages.

How far the ideas imposed by the prevailing theological beliefs of the period could influence even a man of eminent scientific ability is perhaps most fully illustrated in the case of John Ray (1627-1705), the ablest botanist and zoologist of his day, to whom science has been indebted for some masterly contributions to its progress. With his wide sympathies for Nature, he could hardly avoid entering the geological field, and as he was a loyal and devoted member of the Church of England, he could scarcely escape from carrying with him more or less of the ecclesiastical prejudices of his time. Where these prejudices were not involved he could see things as they are, and draw

<sup>1</sup> pp. 421, 424.