

diverse new kinds now, which have not been from the beginning.”

With regard to the inequalities of the earth's surface, Hooke enters fully into the effects of the earthquakes by which he thinks they have been produced. Some earthquakes raise the earth's surface, either by upheaval or by piling up “a great access of new earth”; others depress the surface: those of a third type disrupt and subvert parts of the earth; while by a fourth class liquefactions, vitrifications, calcinations, sublimations and other effects are produced. He shows how universal is this active principle of terrestrial change, no country in the whole world having escaped being shaken sometime or other by earthquakes.

Having demonstrated from organic remains that the dry land must have lain for some time under water, Hooke argues that this water could not have been the Flood of Noah, which did not continue long enough “for the production and perfection of so many and so great and full-grown shells; besides, the quantity and thickness of the beds of sand with which they are many times found mixed, do argue that there must needs be a much longer time of the sea's residence above the same, than so short a space can afford.”¹ The large size of some of the shells as well as their resemblance in form to some of those found in tropical seas leads him to ask whether it is impossible that the South of England, where these shells are found, may for some ages past have lain within the Torrid Zone. Thus fossil organic remains

¹ p. 341.