

remember that the two men who in all England had the most extensive acquaintance with fossils refused to admit them to be of organic origin. Martin Lister (1638-1712), an active and able fellow of the Royal Society, published a remarkable history of all the shells then known, with accurate plates, which included not only the living species but many fossil forms placed with them for comparison. Yet strange to say, he stoutly refused to believe that the fossils had ever belonged to living creatures. "For our English inland quarries," he said, "I am apt to think there is no such matter as petrifying of shells in the business; but that these cockle-like stones are everywhere as they are at present, *lapides sui generis*, and never were any part of an animal," that they "have no parts of a different texture from the rock or quarry whence they are taken, that is, that there is no such thing as *shell* in these resemblances of shells." He admitted that some of the fossils are like *Murices*, or *Tellinae* or *Turbines*, etc., yet he had never met with any one of them on any English sea-shore or fresh-water; whence he concluded "that they were not cast in any animal-mold, whose species or race is yet to be found in being at this day." Having made up his mind with the evidence fully before him, it was only natural that, as Woodward tells us, "he bravely continued to the last firm and unshaken in his opinions."

Lister made the ingenious suggestion that volcanic eruptions may be due to the subterranean decomposition of iron-pyrites. Even among those who from

<sup>1</sup> *Phil. Trans.* vol. v. (1671), p. 2282.