

acquire their forms in some cases, by "the tumultuous movements of terrestrial exhalations;" and that the tusks of elephants were mere earthy concretions. Mercati conceived that their peculiar configuration was derived from the influence of the heavenly bodies; while Olivi regarded them as mere "sports of nature." Felix Plater, Professor of Anatomy at Basil, in 1517, referred the bones of an elephant, found at Lucerne, to a giant at least nineteen feet high; and in England similar bones were regarded as those of the fallen angels!

At the beginning of the 18th century, numerous theologians in England, France, Germany, and Italy, engaged eagerly in the controversy respecting organic remains. The point which they discussed with the greatest zeal, was the connection of fossils with the deluge of Noah. That these were all deposited by that event, was for more than a century the prevailing doctrine, which was maintained with great assurance; and a denial of it regarded as nearly equivalent to a denial of the whole Bible.

The questions also, whether fossils ever had an animated existence, was discussed in England till near the close of the 17th century. In 1677, Dr. Plot attributed their origin to "a plastic virtue latent in the earth." Scheuchzer in Italy, however, in ridicule of this opinion, published a work entitled, *Querulæ Piscium* or the *Complaints of the Fishes*; in which those animals are made to remonstrate with great earnestness that they are denied an animated existence.

Such discussions led to the accumulation of facts; and these at length led to just views on the subject, and the great works on Comparative Anatomy and Palæontology now extant, by such men as Cuvier, Owen, Agassiz, D'Orbigny, Pictet, Bronn, Brongniart, Lindley, Hutton, and a multitude of others, are the result.

*Character of Fossils.*—In a few instances animals have been preserved entire in the more recent rocks.

About the beginning of the present century, the entire carcass of an elephant was found encased in frozen mud and sand in Siberia. It was covered with hair and fur, as some elephants now are in the Himalayah mountains. The drift along the shores of the Northern Ocean, abounds with bones of the same kind of animals; but the flesh is rarely preserved. In 1771, the entire carcass of a rhinoceros was dug out of the frozen gravel of the same country.

Many well-authenticated instances are on record, in which toads, snakes, and lizards, have been found alive in the solid parts of living trees, and in solid rocks, as well as in gravel, deep beneath the surface. But in these instances the animals undoubtedly crept into such places while young, and after being grown could not get out. Being very tenacious of life, and probably obtaining some nourishment occasionally by seizing upon insects that might crawl into their nidus, they might sometimes continue alive even many years.

Frequently the harder parts of the animal are preserved in the soil or solid rock, scarcely altered.

Sometimes the harder parts of the animal are partially impregnated with mineral matter; yet the animal matter is still obvious to inspection.

More frequently, especially in the older secondary rocks, the