

of four-footed animals on the globe, and at the present day there is little chance of new living species being discovered. Certainly the incompleteness and often poor preservation of the fossil remains of land mammals offered obstacles to exact identification. But they could be surmounted with the help of the laws of correlation enunciated by him, according to which all the individual parts of an organism stand in a definite morphological relationship to one another, so that one part could not undergo a change without a corresponding modification taking place in the correlated parts.

Summarising the results of his own researches on fossil bones, Cuvier shows that these occur in strata of different age, that the fishes, amphibians, and reptiles existed before mammalia, that the extinct genera (*Palæotherium*, *Anoplotherium*, etc.) occur in older strata than the forms belonging to living genera, and that the few fossil forms which differ little from living species are restricted to the very youngest deposits in river alluvium, marshes, caves, etc.

The exact investigation of fossil mammalia gives, according to Cuvier, no ground for the Lamarckian conception that the forms still existing have been produced by gradual modifications of the forms that had previously existed. On the contrary, Cuvier's conception was that *specific features are constant, and remain so even in domesticated breeds.*

Regarding the length of period during which man has existed on the globe, Cuvier points out that no human remains have been found along with the latest accumulations of four-footed animals in Europe, Asia, and America, and that in all probability man did not make his appearance in those parts of the globe until after the last great world catastrophe. And although no exact determination of the time is attainable, Cuvier calculates from data of the rate of increase in sand-dunes, in the thickness of peat deposits, and river deltas, that the last great earth's revolution took place not more than 5000 or 6000 years ago. Large parts of the terrestrial surfaces of the globe were then submerged, and the floor of the former ocean was in many places upraised and re-constituted as islands and continents. Some few human beings who were not destroyed during this catastrophe wandered into the new lands and multiplied, founded colonies, erected monuments, collected facts of natural history, conceived scientific systems.