

genera common in tropical regions; such as *platax*, *cartharias*, *myliobates*, &c. In the lower tertiaries of London, the basin of Paris, and Monte Bolca, at least a third of the species belong to genera which are now extinct."

In the chalk, two thirds of the species belong to extinct genera; and in the oolitic system, not a single species can be referred to a living genus!

The same conclusion as to the great general analogy and real specific differences between the fossils of the tertiary series and living races comes with equal force from a consideration of the families of reptiles. Among *chelonida*, occur freshwater *trionyces* and *emydes*, as well as marine *chelonæ* and terrestrial *testudines*: among *saurians* we have no more the *geosaurus*, *mastodonsaurus*, *streptospondylus*, *megalosaurus*, *ichthyosaurus*, *plesiosaurus*, nor *iguanodon*; but instead of these extraordinary creatures of the oolitic and saliferous epochs, genuine crocodiles, very nearly agreeing with existing types, appear for the first time, and in considerable variety: decided *batrachia* show themselves in the freshwater beds of *Æningen* and the brown coal of the Rhine, and in this latter deposit are accompanied by snakes.

Without stopping to notice the few remains of birds which lie (exclusively?) in tertiary formations, we shall pass to consider the very interesting question of the relation of the quadrupeds of the tertiary periods to the present free and domesticated tribes.

In general it is to be remarked, that, concerning the date of some of the fossil animals, especially when they occur in lacustrine deposits not interstratified with marine formations, there is danger of confounding tertiary with diluvial species; but this difficulty applies only to some particular cases, and will be better discussed when we come to speak of the diluvial deposits, to which we shall defer the reasonings we have to offer on fossil mammalia in general.