

embedded in our layers. Thus much has been gathered from those bones of the larger species, which more readily strike the workmen; whilst those of the smaller are usually neglected, unless chance brings them into the hands of a naturalist, or some striking circumstance, such as their abounding in certain places, should draw the attention of the common observer.

#### RELATIONS OF THE SPECIES WITH THE STRATA.

What is more important, and is even the most essential object of all my toil, and establishes the actual relation with the theory of the earth, is to know in what layers we find a particular species, and if there be any general and relative laws, either relative to zoological subdivisions, or to the greater or lesser resemblance of the species with those of the present day.

The recognised laws in this respect are very remarkable and very clear.

First, it is certain that oviparous quadrupeds appear much more frequently than viviparous; that they are ever more abundant, larger, and more various, in the older layers, than at the actual surface of the globe.

The ichthyosauri, the plesiosauri, many tortoises, many crocodiles, are beneath the chalk in the formations commonly called those of Jura. The monitors of Thuringia would be still more ancient, if, as is the opinion of the school of Werner, the copper slate which includes them, in the midst of so many sorts of fishes which are supposed to be of fresh water origin, is amongst the most ancient beds