

of secondary formations. The immense crocodiles and great tortoises of Maestricht are in the chalky layer; but these are marine animals. This first appearance of fossil bones seems then to prove, that there were dry lands and fresh waters before the formation of the chalk; but, neither at that epoch, nor whilst the chalk was forming, nor even long afterwards, was it incrustated with the relics of terrestrial mammifera; or at least the small number of those which it is alleged have been found, form only an exception perfectly inconsequential.

We begin to find the bones of marine mammifera, that is, of lamantins and seals, in the thick shelly limestone, which is above the chalk in the neighbourhood of Paris; but there is no bone of a terrestrial mammiferous animal.

In spite of the most indefatigable researches, I have found it impossible to discover any distinct trace of this class prior to the layers deposited on the coarser limestone; lignites and molasses certainly have them; but I much doubt whether these earths are all, as is believed, anterior to the limestone; the places where they have furnished bones are too limited, too few, but that we may suppose there is some irregularity or some recurrence in their formation. On the contrary, when we reach the deposits immediately above the limestone, the bones of terrestrial animals appear in great numbers.

Thus as it is rational to believe that shells and fishes did not exist at the period of the formation of the primordial layers, we may also believe that the oviparous quadrupeds began with fishes, and from the first production of secondary formations; but that terrestrial quadrupeds have not appeared, at least in considerable numbers, until a long time,