could have been based, as in the supposed case, on a period perhaps a hundred times more extended?

There exist wonderful analogies in nature between the geological history of the vertebrated animals as an order, and the individual history of every mammifer — between the history, too, of fish as a class and that of every single fish. "It has been found by Tiedemann," says Mr. Lyell, "that the brain of the fœtus in the higher class of vertebrated animals assumes in succession the various forms which belong to fishes, reptiles, and birds, before it acquires those additions and modifications which are peculiar to the mammiferous tribes." "In examining the brain of the mammalia," says M. Serres, "at an early stage of life, you perceive the cerebral hemispheres consolidated, as in fish, in two vesicles isolated one from the other; at a later period you see them affect the configuration of the cerebral hemispheres of reptiles; still later, again, they present you with the forms of those of birds; and finally, at the era of birth, the permanent forms which the adult mammalia present." And such seems to have been the history of the vertebrata as an order, as certainly as that of the individual mammifer. The fish preceded the reptile in the order of creation, just as the crustacean had preceded the fish, and the annelid the crustacean. Again, though the fact be somewhat more obscure, the reptile seems to have preceded the bird. We find, however, unequivocal traces of the feathered tribes in well-marked foot-prints impressed on a sandstone in North America, at most not more modern than the Lias, but which is generally supposed to be of the same age with the New Red Sandstone of Germany and our own country. In the Oolite — at least one, perhaps two formations later — the bones of the two species of mammiferous quadrupeds have been found, apparently of the marsu-