We must perceive that in the midst of such changes in the nature of the liquid, the animals which it nourished could not remain the same. The species, their very genus, changed with the layers; and, although at short intervals we may meet with a recurrence of similar species, it is correct to say, in a general sense, that the shells of the ancient layers have their peculiar shapes, which are gradually lost, and not found again in recent layers, still less in the sea itself, where we never detect analagous species, nor are many of the species itself found; that the shells of recent layers, on the contrary, resemble in genus those still to be found in our seas, and that in the most recent and most shifting of these layers, and in certain lakes and more limited deposites, there are some species which the most practised eye cannot distinguish from those to be found on neighbouring coasts.

There has been in animal nature a succession of changes which has been occasioned by those of the liquid in which the animals lived, or which at least have had relation to them, and these variations have gradually brought the classes of aquatic animals to their present state: in fact, when the sea finally quitted the continent, its inhabitants differed but very little from those which it now produces.

We say, *finally quitted*, because if we scrutinize with the most exact care these relics of organic beings, and discover amidst marine layers, even the most ancient, layers composed of animal or vegetable productions of the earth and soft water; and amongst the most recent layers, that is the most superficial, we shall find those in which terrestrial animals are buried beneath masses of marine productions. Thus the various catastrophes which have shaken the layers have not only produced by de-