

ness with which corals and shells are formed, it will give us some faint notion of the vast series of ages that must have elapsed in order to allow the formation of those rocks, and their regular deposition, under the water, to so great a thickness. If, as all things combine to prove, this deposition took place in a slow and gradual manner in each formation, we must conclude, that the successive species of animals found in them followed each other at long intervals, and are not the work of a single epoch.

466. It was once believed that animals were successively created in the order of their relative perfection; so that the most ancient formations contained only animals of the lowest grade, such as the Polyps, the Echinoderms, to which succeeded the Mollusks, then the Articulated Animals, and, last of all, the Vertebrates. This theory, however, is now untenable; since fossils belonging to each of the four departments have been found in the fossiliferous deposits of every age. Indeed, we shall see that even in the lower Silurian formation there exist not only Polyps and other Radiata, but also numerous Mollusks, Trilobites, (belonging to the Articulated,) and even Fishes.

SECTION II.

AGES OF NATURE.

467. Each formation, as has been before stated, (460,) contains remains peculiar to itself, which do not extend into the neighboring deposits above or below it. Still there is a connection between the different formations, more strong in proportion to their proximity to each other. Thus, the animal remains of the Chalk, while they differ from those of all other formations, are, nevertheless, much more nearly related