

there. The argument is irresistible to show that many distinct creations have occupied the surface successively and passed away; corroborating the same conclusion drawn from other facts.

*Fifteenth Law.*—*Contemporaneous species in any one locality, or in localities not distant from one another, have appeared and disappeared together.*

Some have maintained that the formations pass insensibly into one another, so that near the limits, the fossils of the two adjoining formations are mixed together; and that as individual species have died out, others have taken their place. And it is sometimes true, that there is no trenchant division between adjacent formations. Moreover species do sometimes become extinct, as we have shown elsewhere in respect to existing nature, though there is not the slightest evidence that these species, as they drop out, are replaced by new ones. But in the rocks the group of species that characterize a formation in almost all cases, show themselves together at the bottom, and continue to live together till the close of the period, when all disappear, and the new formation that follows contains an entirely distinct group. So few are the exceptions to this distribution of the species, that it must be considered as the general law, and the exceptions the result of local and unusual causes.

*Sixteenth Law.*—*Numerous and successive systems of life, all different from one another, have occupied the globe since it became habitable.*

Long ago Deshayes, a distinguished naturalist, declared that "in surveying the entire series of fossil animal remains, he had discovered five great groups so completely independent that no species whatever is found in more than one of them." Adding the existing group, it makes six entire changes of inhabitants, which accords with the palæontological classification which we have given, viz., the first reaching to the top of the Permian; the second embracing the Trias; the third the Oolite; the fourth the Chalk, and the fifth the Tertiary.

But the ablest palæontologists of the present day feel as if this were a very inadequate view of the subject, falling far short of the number of changes in inhabitants which the earth has experienced. Says the late eminent palæontologist, M. Alcide D'Orbigny, "A first creation took place in the Silurian stage. After that was annihilated by some geological cause, and after a considerable time, a second creation took place in the Devonian stage, and successively *twenty-seven times* have distinct creations repeopled all the earth with plants and animals, following each time some geological disturbance, which had totally destroyed living nature. Such is the certain but incomprehensible fact, which we are bound to state, without trying to pierce the superhuman mystery that envelops it."

*Seventeenth Law.*—*All the diversities of organic life that have appeared on the globe were only wise and necessary adaptations to its changing condition.*

There is abundant evidence that changes of climate, food, etc., have been great and numerous, and had there not been a corresponding change in the