

pening in a determined order as part of a general plan. Some changes in the constitution of the globe have brought in succession various combinations of the manifold influences of those chemical and mechanical agencies which govern inanimate nature ; and such appears to be the law of God's providence, that to these combinations the forms of each newly created system of life should correspond. The several successive systems of organic life which have been discovered in the earth, were, therefore, really successive creations, and must be expected to differ in large and general characters.

Thus the species, genera, and families of fossil plants and animals vary from formation to formation, and system to system : yet as the constitution of different races, enjoying animal and vegetable life, is unequally adjusted to external circumstances, it does not follow that the creation of many new, should be always accompanied by destruction of all the old, forms. On the contrary, the extensive collections of fossils now made in England, prove this to be an erroneous notion : for many fossils, as Terebratulæ — Astacidæ — Modiolæ — Gervilliæ, generically, and certain species of them individually, existed during the deposition of great ranges of strata, and endured the changes, whatever they were, which brought into existence many new and remarkable forms. It seldom, however, happens that any one *species* occurs in more than one *system* of strata ; and thus we may consistently speak of the *oolitic* fauna and flora, as distinguished from the whole series of plants and animals belonging to the *cretaceous* or *sali-ferous* period, satisfied from adequate inquiry that few species are common to any two systems.

Though at present geological investigations have not been prosecuted in all accessible parts of the land, so as every where to bring proof of the universality of these laws of successive systems of life, enough is known to assure us that in every country yet examined, the fossils of the tertiary, secondary, and primary strata differ essentially, and by large and general characters.