

far the observed augmentation of temperature, as we descend below the surface, may be referable to other causes unconnected with the supposed pristine fluidity of the entire globe.

CHAPTER IX.

THEORY OF THE PROGRESSIVE DEVELOPMENT OF ORGANIC LIFE AT SUCCESSIVE GEOLOGICAL PERIODS.

Theory of the progressive development of organic life—Evidence in its support inconclusive—Vertebrated animals, and plants of the most perfect organization, in strata of very high antiquity—Differences between the organic remains of successive formations—Comparative modern origin of the human race—The popular doctrine of successive development not established by the admission that man is of modern origin—Introduction of man, to what extent a change in the system.

Successive development of organic life.—IN the preceding chapters I have considered whether revolutions in the general climate of the globe afford any just ground of opposition to the doctrine that the former changes of the earth which are treated of in geology belong to one uninterrupted series of physical events governed by ordinary causes. Against this doctrine some popular arguments have been derived from the great vicissitudes of the organic creation in times past; I shall therefore proceed to the discussion of such objections, especially as they have been formally advanced in these words by a late distinguished philosopher, Sir H. Davy. “It is impossible,” he affirms, “to defend the proposition, that the present order of things is the ancient and constant order of nature, only modified by existing laws: in those strata which are deepest, and which must, consequently, be supposed to be the earliest deposited, forms even of vegetable life are rare; shells and vegetable remains are found in the next order; the bones of fishes and oviparous reptiles exist in the following class; the remains of birds, with those of the same genera mentioned before, in the next order; those of quadrupeds of extinct species in a still more recent class; and it is only in the loose and slightly consolidated strata of gravel and sand, and which are usually called diluvian formations, that the remains of animals such as now people the globe are found, with others belonging to extinct species. But, in none of these formations, whether called secondary, tertiary, or diluvial, have the remains of man, or any of his works, been discovered; and whoever dwells upon this subject must be convinced, that the present order of things, and the comparatively recent existence of man as the master of the globe, is as certain as the destruction of a former and a different order, and the extinction of a