

nature and habits of animals and plants, suffering and death must have been the consequence, as the history of existing races proves.

But there is not the slightest evidence that any such effect followed the modification of forms. Peculiar as they often were, they seem to have been wisely prepared to subserve the wants and happiness of the species, nor was life thereby shortened.

Eighteenth Law.—*All the minor systems of life that have appeared, were but harmonious parts of one all-comprehending system of organization, whose culmination we witness in existing nature.*

Diverse as the different floras and faunas are in the different creations, they are all embraced in the same system of classification, which groups together existing organisms. They have all had similar organs and similar senses, have been both carnivorous and herbivorous, have had the same relations to light and heat as at present. Nowhere do we find different and antagonistic systems, but all the wide diversities of structure and habit coalesce into one harmonious whole; showing that the complicated and numberless details, stretching over almost interminable ages, were but the development of the vast plan of creation in the Divine Mind.

SECTION IV.

INFERENCES FROM PALÆONTOLOGY, IN CONNECTION WITH DYNAMICAL GEOLOGY.

Inference 1. *The present continents of the globe (except, perhaps, some high mountains) have been for long periods beneath the ocean, and have been subsequently elevated.*

Proof 1. Two thirds at least of these continents are covered with rocks, often several thousand feet thick, abounding in marine organic remains; which must have been quietly deposited, along with the sand, mud, and calcareous or ferruginous matter in which they are enveloped, and which could have accumulated but slowly. 2. Some very high mountains contain marine fossils at or near their summits. For example, there are marine shells of cretaceous age upon the tops of the Pyrenees; cretaceous and tertiary fossils upon the summits of the Rocky Mountains, and foraminifera of cretaceous age high up on the flanks of Mt. Lebanon.

The amount of land above the ocean has varied in every period of the earth's history, and it may be that large tracts, now submerged, once were important theatres of terrestrial life.

Inference 2. *The periods of repose between catastrophes have been long.*

Proof 1. Catastrophes are indicated by unconformability of the strata, or a great change in the character of the deposits. 2. Catastrophes have been comparatively infrequent, while deposition has always continued slowly