

## CHAPTER VII.

### *THE APPARITION AND SUCCESSION OF ANIMAL FORMS.*

**T**IME was when naturalists were content to take nature as they found it, without any over-curious inquiries as to the origin of its several parts, or the changes of which they might be susceptible. Geology first removed this pleasant state of repose, by showing that all our present species had a beginning, and were preceded by others, and these again by others. Geologists were, however, too much occupied with the facts of the succession to speculate on the ultimate causes of the appearance and disappearance of species, and it remained for zoologists and botanists, or as some prefer to call themselves, biologists, to construct hypotheses or theories to account for the ascertained fact that successive dynasties of species have succeeded each other in time. I do not propose in this paper so much to deal with the various doctrines as to derivation and development now current, as to ask the question, What do we actually know as to the origin and history of life on our planet?

This great question, confessedly accompanied with many difficulties and still waiting for its full solution, has points of intense interest both for the Geologist and the Biologist. "If," says the great founder of the uniformitarian School of Geology, "the past duration of the earth be finite, then the aggregate of geological epochs, however numerous, must constitute a mere moment of the past, a mere infinitesimal portion of eternity." Yet to our limited vision, the origin of life fades