

and Adaptation in the struggle for existence, also appears to these persons not sufficient. They demand, over and above, that the descent of species from common ancestral forms shall be proved in a particular case; that, in contradistinction to the *synthetic* proofs adduced for the Descent Theory, the *analytic* proof of the genealogical continuity of the several species shall be brought forward.

This "analytical solution of the problem of the origin of species" I have myself endeavoured to afford in my recently published "Monograph of the Calcareous Sponges." For five consecutive years I have investigated this small but highly instructive group of animals in all its forms in the most careful manner, and I venture to maintain that the monograph, which is the result of those studies, is the most complete and accurate morphological analysis of an entire organic group which has up to this time been made. Provided with the whole of the material for study as yet brought together, and assisted by numerous contributions from all parts of the world, I was able to work over the whole group of organic forms known as the Calcareous Sponges in that greatest possible degree of fulness which appeared indispensable for the proof of the common origin of its species. This particular animal group is especially fitted for the analytical solution of the species problem, because it presents exceedingly simple conditions of organization, because in it the morphological conditions possess a greatly superior, and the physiological conditions an inferior, import, and because all species of Calcispongiæ are remarkable for the fluidity and plasticity of their form. With a view to these facts, I made two journeys to the sea-coast (1869 to Norway, 1871 to Dalmatia), in order to study as