

Hippurites which peopled the seas and multiplied with such astonishing profusion during the Secondary period. Henceforth the testaceous Mollusca approximate in their forms to those of the present time. The older and newer Tertiary Series contain few peculiar genera. But genera now found in warmer climates were greatly developed within the British area during the earlier Tertiary times, and *species* of cold climates mark the close of the later Tertiaries.

What occurs to us, however, as most remarkable in the Tertiary epoch is the prodigious increase of animal life ; it seems as if it had then attained its fullest extension. Swarms of testaceous Mollusca of microscopic proportions—Foraminifera and Nummulites—must have inhabited the seas, crowding together in ranks so serried that the agglomerated remains of their shells form, in some places, beds hundreds of feet thick. It is the most extraordinary display which has appeared in the whole range of creation.

Vegetation during the Tertiary period presents well-defined characteristics. The Tertiary flora approaches, and is sometimes nearly identical with, that of our days. The class of dicotyledons shows itself there in its fullest development ; it is the epoch of flowers. The surface of the earth is embellished by the variegated colours of the flowers and fruits which succeed them. The white spikes of the Gramineæ display themselves upon the verdant meadows without limit ; they seem provocative of the increase of Insects, which now singularly multiply. In the woods crowded with flowering trees, with rounded tops, like our oak and birch, Birds become more numerous. The atmosphere, purified and disembarrassed of the veil of vapour which has hitherto pervaded it, now permits animals with such delicate pulmonary organs to live and multiply their race.

During the Tertiary period the influence of the central heat may have ceased to make itself felt, in consequence of the increased thickness of the terrestrial crust. By the influence of the solar heat, climates would be developed in the various latitudes ; the temperature of the earth would still be nearly that of our present tropics, and at this epoch, also, cold would begin to make itself felt at the poles.

Abundant rains would, however, continue to pour upon the earth enormous quantities of water, which would give rise to important rivers ; new lacustrine deposits of fresh water were formed in great numbers ; and rivers, by means of their alluvial deposits, began to form new land. It is, in short, during the Tertiary epoch that we trace an alternate succession of beds containing organic beings of marine origin, with others peculiar to fresh water. It is at the end of this period that continents and seas take their respective places as