

nutions of Temperature upon the Land, which have been inferred from the remains of the vegetation of the Sea. Thus, in strata of the Transition series, we have an association of a few *existing* families of *Endogenous* Plants,* chiefly Ferns and Equisetaceæ, with *extinct* families both *Endogenous* and *Exogenous*, which some modern botanists have considered to indicate a Climate hotter than that of the Tropics of the present day.

In the Secondary formations, the species of these most early families become much less numerous, and many of their genera, and even of the families themselves entirely cease; and a large increase takes place in two families, that comprehend many existing forms of vegetables, and are rare in the Coal formation, viz. *Cycadeæ* and *Coniferæ*. The united characters of the groups associated in this series, indicate a Climate, whose temperature was nearly similar to that which prevails within the present Tropics.

In the Tertiary deposits, the greater number of the families of the first series, and many of those of the second, disappear; and a more complicated *dicotyledonous* † Vegetation takes place of

* Endogenous Plants are those, the growth of whose stems takes place by addition from within. Exogenous are those in which the growth takes place by addition from without.

† Monocotyledonous Plants are those, the embryo of whose seed is made up of one cotyledon or lobe, like the seed of a Lily or an Onion. Dicotyledonous Plants are those, the embryo of