

Torrid Zone, its species are most abundant in the temperate zone, decrease in size and number as we approach the regions of cold, and arrive at their greatest magnitude in the warm and humid regions of the Tropics, where their numbers are few.

M. Ad. Brongniart* has divided fossil Equisetaceæ into two Genera; the one exhibits the characters of living *Equiseta*, and is of rare occurrence in a fossil state; the other is very abundant, and presents forms that differ materially from them, and often attain a size unknown among living Equisetaceæ; these have been arranged under the distinct genus *Calamites*, † they abound universally in the most ancient Coal formation, occur but sparingly in the lower strata of the Secondary series, and are entirely wanting in the Tertiary formations, and also on the actual surface of the earth.

The same increased development of size, which in recent Equisetaceæ accompanies their geogra-

* Histoire des Végétaux Fossiles, 2nd Livraison.

† Calamites are characterized by large and simple cylindrical stems, articulated at intervals, but either *without sheaths*, or presenting them under forms unknown among existing Equiseta; they have sometimes marks of verticillated Branches around their articulations, the leaves also are without joints. But the most obvious feature wherein they differ from Equiseta, is their bulk and height, sometimes exceeding six or seven inches in diameter, whilst the diameter of a living Equisetum rarely exceeds half an inch. A Calamite fourteen inches in diameter has lately been placed in the Museum at Leeds.