

phical approximation to the Equator, is found in the fossil species of this order to accompany the higher degrees of Antiquity of the strata in which they occur; and this without respect to the latitude, in which these formations may be placed. M. Ad. Brongniart (Prodrome, p. 167) enumerates twelve species of *Calamites* and two of *Equiseta* in his list of plants found in strata of the Carboniferous order.

Ferns. *

The family of Ferns, both in the living and fossil Flora, is the most numerous of vascular Cryptogamous plants.† Our knowledge of the geographical distribution of existing Ferns, as connected with Temperature, enables us in some degree to appreciate the information to be derived from the character of fossil Ferns, in regard to the early conditions and Climate of our globe.

* See Pl. 1. No. 6. 7. 8. 37. 38. 39.

† Ferns are distinguished from all other vegetables by the peculiar division and distribution of the veins of the leaves; and in arborescent species, by their cylindrical stems without branches, and by the regular disposition and shape of the scars left upon the stem, at the point from which the Petioles, or leaf stalks, have fallen off. Upon the former of these characters M. Ad. Brongniart has chiefly founded his classification of fossil Ferns, it being impossible to apply to them the system adopted in the arrangement of living Genera, founded on the varied disposition of the fructification, which is rarely preserved in a fossil state.