

the simpler forms which predominated through the two preceding periods. Smaller Equisetaceæ also succeed to the gigantic Calamites ; Ferns are reduced in size and number to the scanty proportions they bear on the southern verge of our temperate climates ; the presence of Palms attests the absence of any severe degree of cold, and the general character marks a Climate nearly approaching to that of the Mediterranean.

We owe to the labours of Schlotheim, Sternberg and Ad. Brongniart the foundation of such a systematic arrangement of fossil plants, as enables us to enter, by means of the analogies of recent plants, into the difficult question of the Ancient Vegetation of the Earth, during those periods when the strata were under the process of formation.

Few persons are aware of the nature of the evidence, upon which we have at length arrived at a certain and satisfactory conclusion, respecting the long disputed question as to the vegetable origin of Coal. It is not unfrequent to find among

whose seed is made up of two lobes, as in the Bean and Coffee seed. The stems of Monocotyledonous Plants are all Endogenous, i. e. increase from within by the addition of bundles of vessels set in cellular substance, and enlarge their bulk by addition from the centre outwards, e. g. Palms, Canes, and Liliaceous plants. The stems of Dicotyledonous Plants are all Exogenous, i. e. increase externally by the addition of concentric layers from without ; these form the rings, which mark the amount of annual growth in the Oak and other forest trees in our climate.