The number of species of plants in the various divisions of the Tertiary strata, is as yet imperfectly known. In 1828, M. Ad. Brongniart considered the number then discovered, but not all described, to be 166. Many of these belonging to Genera at that time not determined. The most striking difference between the vegetables of this and of the preceding periods is the abundance in the Tertiary series, of existing forms of Dicotyledonous Plants and large trees, *e. g.* Poplars, Willows, Elms, Chestnuts, Sycamores, and many other Genera whose living species are familiar to us.

Some of the most remarkable accumulations of this vegetation are those, which form extensive beds of *Lignite* and *Brown-coal.** In some parts of Germany this Brown-coal occurs in strata of more than thirty feet in thickness, chiefly composed of trees which have been drifted, apparently by fresh water, from their place of growth, and spread forth in beds, usually alternating with sand and clay, at the bottom of then existing lakes or estuaries.

The Lignite, or beds of imperfect and stinking Coal near Poole in Dorset, Bovey in Devon, and Soissons in France, have been referred to the first, or *Eocene* period of the Tertiary formations.

* See an admirable article on Lignites by Alexandre Brongniart in the 26th vol. of the Dictionnaire des Sciences Naturelles.

508