CHAPTER VII.

PLANTS FROM THE TERTIARY TO THE MODERN PERIOD.

It may be well to begin this chapter with a sketch of the general physical and geological conditions of the period which was characterised by the advent and culmination of the dicotyledonous trees.

In the Jurassic and earliest Cretaceous periods the prevalence, over the whole of the northern hemisphere and for a long time, of a monotonous assemblage of gymnospermous and acrogenous plants, implies a uniform and mild climate, and facility for intercommunication in the north. Toward the end of the Jurassic and beginning of the Cretaceous, the land of the northern hemisphere was assuming greater dimensions, and the climate probably becoming a little less uniform. Before the close of the Lower Cretaceous period the dicotyledonous flora seems to have been introduced, under geographical conditions which permitted a warm temperate climate to extend as far north as Greenland.

In the Cenomanian or Middle Cretaceous age we find the northern hemisphere tenanted with dicotyledonous trees closely allied to those of modern times, though still indicating a climate much warmer than that which at present prevails. In this age, extensive but gradual submergence of land is indicated by the prevalence of chalk and marine limestones over the surface of both continents; but a circumpolar belt seems to have been maintained, protecting the Atlantic and Pacific basins from