the development of its subordinate groups. The flowering plants of this class generally possess, as their name indicates, two seed lobes or germ leaves (cotyledons). The number of leaves composing its blossom is generally not three, as in most Monocotyledons, but four, five, or a multiple of those numbers. Their leaves, moreover, are generally more highly differentiated and more composite than those of the Monocotyledons; they are traversed by crooked, branching bunches of vessels or "veins." To this class belong most of the leafed trees, and as they predominate in the tertiary period as well as, at present; over the Gymnosperms and Ferns, we may call the cænolithic period that of leafed forests.

Although the majority of Dicotyledons belong to the most highly developed and most perfect plants, still the lowest division of them is directly allied to the Gymnosperms, and particularly to the Gnetaceæ. In the lower Dicotyledons, as in the case of the Monocotyledons, calyx and corolla are as yet not differentiated. Hence they are called *Apetalous* (Monochlamydeæ, or Apetalæ). This sub-class must therefore doubtless be looked upon as the original group of the Angiosperms, and existed probably even during the Trias and Jura periods. Among them are most of the leafed trees bearing catkins—birches and alders, willows and poplars, beeches and oaks; further, the plants of the nettle kind —nettles, hemp, and hops, figs, mulberries, and elms; finally, plants like the spurges, laurels, and amaranth.

It was not until the chalk period that the second and more perfect class of the Dicotyledons appeared, namely, the *group with corollas* (Dichlamydeæ, or Corollifloræ). These arose out of the Apetalæ from the simple cover of the