

2. *Angiosperms*, which produce true fruits enclosing the seeds. In this group there are two well-marked subdivisions differing in the structure of the seed and stem. They are the *Endogens*, or inside growers, with seeds having one seed-leaf only, as the grasses and the palms; and the *Exogens*, having outside-growing woody stems, and seeds with two seed-leaves. Most of the ordinary forest-trees of temperate climates belong to this group.

On referring to the geological table, it will be seen that there is a certain rough correspondence between the order of rank of plants and the order of their appearance in time. The oldest plants that we certainly know are Algæ, and with these there are plants apparently with the structures of Thallophytes but the habit of trees, and which, for want of a better name, I may call *Protogens*. Plants akin to the Rhizocarps also appear very early. Next in order we find forests in which gigantic Ferns and Lycopods and Mare's-tails predominate, and are associated with pines. Succeeding these we have a reign of Gymnosperms, and in the later formations we find the higher Phænogams dominant. Thus there is an advance in elevation and complexity along with the advance in geological time, but connected with the remarkable fact that in earlier times low groups attain to an elevation unexampled in later times, when their places are occupied with plants of higher type.

It is this historical development that we have to trace in the following pages, and it will be the most simple and at the same time the most instructive method to consider it in the order of time.