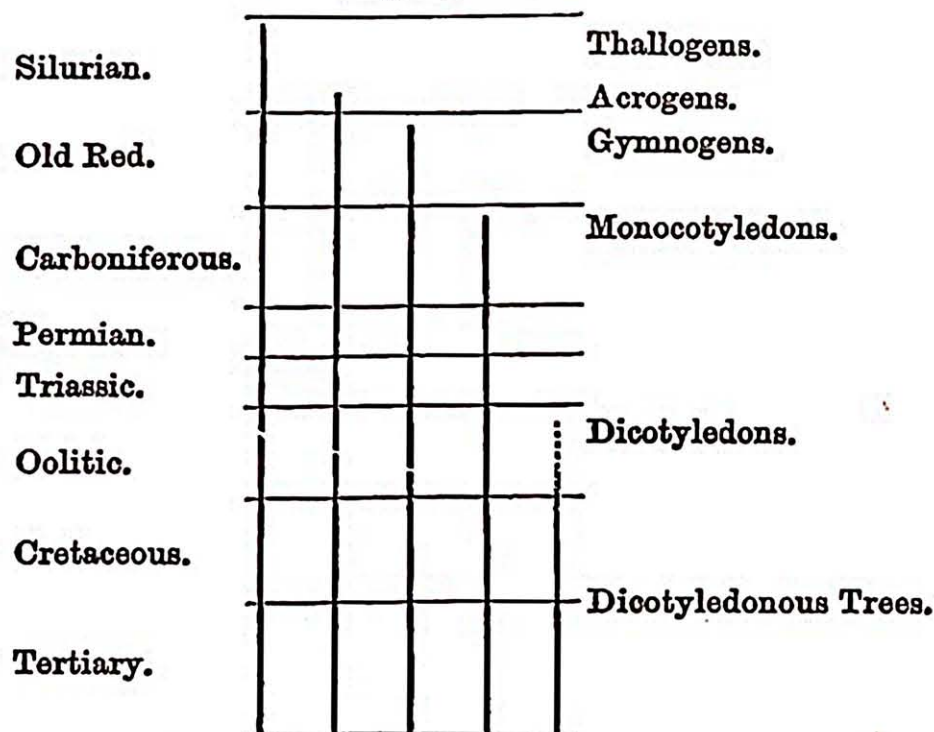


ciently complete. And in tracing through time the course of the vegetable kingdom, let us adopt as our standard to measure it by, the system of Lindley.

Commencing at the bottom of the scale, we find the Thallogens, or flowerless plants which lack proper stems and leaves,—a class which includes all the algæ. Next succeed the Acrogens, or flowerless plants that possess both stems and leaves, such as the ferns and their allies. Next, omitting an inconspicuous class, represented by but a few parasitical plants incapable of preservation as fossils, come the Endogens,—monocotyledonous flowering plants, that include the palms, the liliaceæ, and several other families, all characterized by the parallel venation of their leaves. Next, omitting another inconspicuous tribe, there follows a very

Fig. 1.\*



Geologic [Thal. Ac. Gy. Mon. Dic.] arrangement.

Lindley's [Thal. Ac. Mon. Gy. Dic.] arrangement.

#### THE GENEALOGY OF PLANTS.

\* The horizontal lines in this diagram indicate the divisions of the various geologic systems; the vertical lines, the sweep of the various classes or sub-classes of plants across the geologic scale, with, so far as has yet been