

each has formed of the objective "*form-relationships*" of organisms. These form-relationships, however, as the reader has seen, are in reality the necessary result of true *blood relationship*. Consequently, every morphologist in promoting our knowledge of the natural system, at the same time promotes our knowledge of the pedigree, whether he wishes it or not. The more the natural system deserves its name, and the more firmly it is established upon the concordance of results obtained from the study of comparative anatomy, ontogeny, and palæontology, the more surely may we consider it as the approximate expression of the true pedigree of the organic world.

In entering upon the task contemplated in this chapter, the genealogy of the vegetable kingdom, we shall have, according to this principle, first to glance at the *natural system of the vegetable kingdom* as it is at present (with more or less important modifications) adopted by most botanists. According to the system generally in vogue, the whole series of vegetable forms is divided into two main groups. These main divisions, or sub-kingdoms, are the same as were distinguished more than a century ago by Charles Linnæus, the founder of systematic natural history, and which he called *Cryptogamia*, or secretly-blossoming plants, and *Phanerogamia*, or openly-flowering plants. The latter, Linnæus, in his artificial system of plants, divided, according to the different number, formation, and combination of the anthers, and also according to the distribution of the sexual organs, into twenty-three different classes, and then added the *Cryptogamia* to these as the twenty-fourth and last class.

The *Cryptogamia*, the secretly-blossoming or flowerless