

and which possessed the form of a single plastid. At first the entire body of one of these small primary plants consisted only of a most simple cytod (a plastid without kernel), and afterwards attained the higher form of a simple cell, by the separation of a kernel in the plasma. (Compare above, vol. i. p. 345.) Even at the present day there exist various most simple forms of Algæ which have deviated but little from the original primary plants. Among them are the Algæ of the families Codiaceæ, Protococcaceæ, Desmidiaceæ, Palmellaceæ, Hydrodictyeæ, and several others. The remarkable group of Phycobromaceæ (Chroococcaceæ and Oscillariaceæ) might also be comprised among them, unless we prefer to consider them as an independent tribe of the kingdom Protista.

The monoplasic Protophyta—that is, those primary Algæ formed by a single plastid—are of the greatest interest, because the vegetable organism in this case completes its whole course of life as a perfectly simple “individual of the first order,” either as a cytod without kernel, or as a cell containing a kernel.

Among the primary plants consisting of a single cytod are the exceedingly remarkable Siphonaceæ, which are of considerable size, and strangely “mimic” the forms of higher plants. Many of the Siphonaceæ attain a size of several feet, and resemble an elegant moss (*Bryopsis*), or in some cases a perfect flowering plant with stalks, roots, and leaves (*Caulerpa*) (Fig. 17). Yet the whole of this large body, externally so variously differentiated, consists internally of an entirely simple sack, possessing the negative characters of a simple cytod.

These curious Siphonaceæ, *Vaucheria*, and *Caulerpæ* show