

same. Some few species, classed by the predecessors of the latter among zoophytes, had in the meantime been ascertained to be differently constructed, and furnished with less simplicity, but being in consequence removed into a different category, they were not allowed to disturb the received opinions on polype anatomy. Still more recent discoveries have shewn, however, that these are very erroneous, and that the animals of even our native polypidoms form at least two classes distinguished by a very remarkable dissimilarity of organization. By the one they are allied to the tunicated and acephalous mollusca, more especially to the compound families of the former, and hence may be denominated *Ascidian* polypes; by the other they form a link of the chain or circle which associates the radiated animals, and, assuming the hydra for their representative, we shall call them *Hydraform* polypes.

The ascidian polypes never occur in a separate and naked form, but are always placed within the cells of a polypidom of a calcareous, membranous, or fibro-gelatinous consistence. The form of the cells in many genera, as *Eschara*, *Flustra* and *Cellepora*, suggests a belief that their tenants, although arranged in a close and determinate manner, are each separate from their neighbours and complete in themselves,—an opinion that is held by some of our best naturalists; but the observations of Dujardin on some allied fossil polypidoms, render it very probable that there are pores of communication between the cells;* while those made by Professor Grant seem to have proved that the polypes of the *Flustra* are connected together by a living axis, and are hence truly compound beings. Since the *Vesiculifera* also, which are admitted to be composites, belong unquestionably to this remarkable form of animated entities, it is safer,

mated nearer than was believed to the mollusca, of which they might at some future time be considered a family. The opinion certainly rested on few and hasty observations, and no anatomical details were given in its support. See his *Edit. of Soland. Zoophyt. pref. p. vii.* For example, he not only recognizes a relationship between *Lobularia* and *Actinia*, but he tells us that the polypes of the *Flustræ*, *Cellariæ* and *Sertulariæ* are similar to those of *Lobularia*! *Coral. Flex. p. 332.* Such loose observations as these are, have no influence on the progress of discovery. The observations of Savigny were evidently more specific and correct; but I am not aware that the details have been yet published.—See his *Mem. sur les Anim. s. Vert. ii. p. 65.*

* Blainville's *Actinologie*, p. 675.