

The zoarium appears to be dimorphous, or rather polymorphous, as it sometimes encrusts foreign bodies, in a single unattached layer. But even in its independent erect form, or more complete condition, as it may be termed, it is extremely variable in habit. Sometimes it presents long cylindrical distant branches, and sometimes assumes the form of stunted tufts or short branches, or even little more than irregular nodulated masses.

On a transverse section the interior of a branch exhibits no central axis nor inter-laminar expansion. The interzoecial walls are extremely delicate and closely perforated in all parts.

In the dried condition the cavity of each zoecium is seen to be divided into two compartments, an anterior and a posterior, by a vertical diaphragm formed of an extremely delicate membrane. The hinder compartment, which in the dry state is very much the larger, lodges the polypide and communicates directly with the oral orifice, whilst the anterior, which probably exists as a chamber only in the dry state, being merely the space between the vertical diaphragm and the anterior calcareous wall, in the ordinary zoecia does not appear to contain anything, but in others it is into this space that the subjacent oecium intrudes, and may often be seen in the form of a spherical vesicle containing a vitelline mass or embryo. As a similar arrangement exists in *Siphonicytara* it is not improbable that this division of the zoecial cavity into two compartments by a flexible membranous diaphragm will be found pretty generally in all zoecia of which the wall is wholly rigid, and that it is intended for the purpose of allowing the compression of the perigastric cavity necessary to effect the protrusion of the polypide, which would otherwise seem to be scarcely possible in a perfectly unyielding box.

### 11. *Myriozoum*, Donati.

*Myriozoum*, Donati, 1750, d'Orb., Smitt (pars).

*Millepora* (pars), Pallas, 1766, Solander, Strom, Fabricius.

*Myriapora*, Blainv., 1834.

? *Foricala* (pars), d'Orb.

*Cellepora* (pars), *Leieschara*, Sars.

*Gemellipora* (sp.), Smitt.

*Character*.—Zoarium erect, branched, continuous; branches cylindrical, obtuse; or oviform. Surface punctured or reticulate. Avicularia, when present, immersed and usually placed near the orifice, either above, below, or on one or both sides. Orifice notched or sinuate, or canaliculate below.

The transition from the typical form of *Myriozoum* as exhibited in the well known *Myriozoum truncatum* to other cylindrical escharine growths, is so gradual that it is in