

Suborder II. Tetractina (identical with our Choristida).

Suborder III. Oligosilicina (including as families the Chondrosidæ and Halisarcidæ).

Suborder IV. Pseudotetraxonia (a single family, the Tethyidæ).

Suborder V. Clavulina (including as families the Polymastidæ, Suberitidæ, and Clionidæ; the last provisional).

Order III. Cornucospongiæ. Skeleton consisting either of monaxon spicules cemented together by spongin, or only of spongin, which may or may not incorporate foreign bodies.

Suborder I. Halichondridæ (including the families Halichondridæ, Spongillidæ, Desmacidonidæ, and Ectyonidæ).

Suborder II. Ceratina (including the families Spongelidæ, Spongidæ, Aplysillidæ, and Darwinellidæ).

The line of separation between the Spiculispongiæ and the Cornucospongiæ would appear from this classification to be as marked or nearly so as that between them and the Hexactinellida.

Lendenfeld's classification is as follows:—

Subclass Silicea (equivalent to our Micromastictora).

Order I. Hexactinellida, O. Schmidt.

Order II. Chondrospongiæ, Lendenfeld. Mesogloea hard. Spicules tetraxon, monaxon, anaxon, or absent; generally corticate.

Order III. Cornucospongiæ, Vosmaer. Mesogloea soft. (The rest of the definition is similar to Vosmaer's.)

It will be seen that the character on which Vosmaer chiefly relies in distinguishing the two orders Spiculispongiæ and Cornucospongiæ is the presence of spongin in the latter and its absence in the former. This character is, however, by no means absolute, for spongin occurs in several Sponges of the order Spiculispongiæ; setting aside Monaxonid species of the order, in which it is nevertheless present, I need now only indicate the Lithistida, *e.g.*, *Theonella swinhoei*, and the Choristida, *e.g.*, *Pacillastra (Normania) schulzii*, as possessing spongin which unites some of the spicules together. But even were this not the case the two groups so evidently pass into each other that it is difficult to understand how two investigators, so intimately acquainted with the species of both orders, should expect to be able to separate them thus sharply; any line drawn between them must be one of mere convenience, and consequently not of the same value as that between them and the Hexactinellida, nor indeed in any way comparable.

But, it may be enquired, what of the additional character alleged by Lendenfeld to be