Similar individual descriptions became gradually more numerous, and up to 1860 the following may be noted as most important:—*Dactylocalyx pumiceus*, Stuchbury,[1] 1841, *Euplectella aspergillum*, Owen,[2] 1841, *Farrea* sp., Owen,[3] 1857, *Aphrocallistes beatrix*, Gray,[4] 1858, and *Myliusia callocyathus*, Gray,[5] 1859.

A more profound study of the skeletal structure of *Hyalonema sieboldii* was made in 1860 by Max Schultze.[6] He also discovered, in those spicules which did not externally exhibit a cruciate or stellate, but merely a simple rod-like form, an intersection of the axial canals in a median swelling, which indicated the fundamental stellate type of all the spicules. He was also the first to discover the close affinity of *Hyalonema* and *Euplectella*, which, on account of the common character of the spicular tuft, he united in the group "Lophospongiæ."

Bowerbank[7] (1862) was less fortunate in his perception of the affinities of the Hexactinellid genera known to him, viz., *Alcyoncellum* (*Euplectella*, Owen), Quoy and Gaimard, *Hyalonema*, Gray, *Dactylocalyx*, Stuchbury, and *Farrea*, Bowerbank. For while he placed the genus *Alcyoncellum*, Quoy and Gaimard (with *Euplectella*, Owen, in parenthesis), in his suborder Silicea with *spiculo-radiate skeletons*, between *Ecionema*, Bowerbank, and *Polymastia*, Bowerbank, he referred the genus *Hyalonema*, Gray, to another quite different suborder, characterised by *spiculo-reticulate skeletons*, between *Halichondria*, Flemming, and *Isodictya*, Bowerbank. Of each of the two genera, *Dactylocalyx*, Stuchbury (=*Iphiteon*, Mus. Paris), and *Farrea*, Bowerbank, he made, on the other hand, a special suborder, of which the former was characterised chiefly by *solid siliceo-fibrous*, and the second (*Farrea*) by *canaliculated siliceo-fibrous skeletons*.

In Gray's System of Sponges,[8] which appeared in 1867, the Hexactinellida then known were not yet united into a common group. For while Gray placed the family of the Euplectellidæ, consisting of *Alcyoncellum* and the closely allied *Euplectella*, with his Esperiadæ and Tethydæ, in the order of the Acanthospongiæ (with *spicules of more than one form or kind in the same Sponge*) and within the subsection Spiculospongiæ (with free spicules), on the other hand he united the family of the Aphrocallistidæ, consisting of the genus *Aphrocallistes*, with the family of the Dactylocalycidæ, including *Dactylocalyx*, Stuchbury, *Myliusia*, Gray, *MacAndrewia*, Gray, and *Farrea*, Bowerbank, in a special order, "Corallispongiæ," within the subsection "Dictyospongiæ" (in which the skeleton is formed of a continuous siliceous or horny network). The Corallispongiæ were characterised by Gray as:—"Hard, coral-like Sponges, entirely formed of siliceous spicules, anchylosed together by siliceous matter into a network. Mass covered with a thin coat of sarcode when alive."

[1] *Proc. Zool. Soc. Lond.*, vol. ix. pp. 86, 87.
[2] *Proc. Zool. Soc. Lond.*, vol. ix. pp. 3–5.
[3] *Trans. Linn. Soc. Lond.*, vol. xxii. pp. 117–124.
[4] *Proc. Zool. Soc. Lond.*, vol. xxvi. pp. 114, 115.
[5] *Proc. Zool. Soc. Lond.*, vol. xxvii. pp. 437–440.
[6] Die Hyalonemen, 1860, 4.
[7] *Phil. Trans.*, vol. clii. 2 pp. 747, 830, 1087.
[8] *Proc. Zool. Soc. Lond.*, 1867, pp. 117, 492, 1001.