

or throughout the whole body, as in *Euplectella aspergillum*, in its mature condition. I can, therefore, regard neither the union of spicules into a continuous trabecular skeleton, nor

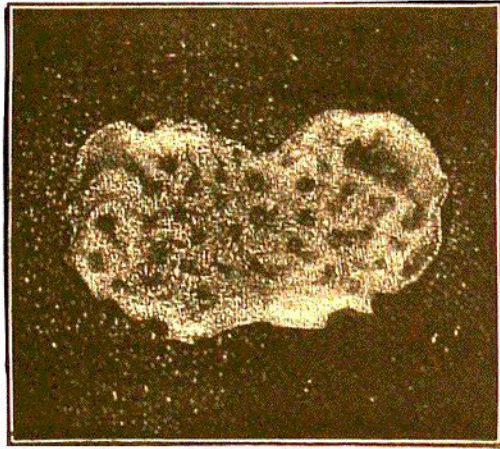


FIG. 168.—*Myliusia callocyathus*, Gray, a representative of the Inermia.

that particular mode of their union by means of the opposition of the corresponding branches of spicules and covering with a common envelope, as a sufficiently constant character for the diagnosis of the DICTYONINA, and for the division of the Hexactinellida into two primary classes, although I do not wish to deny that there are certain differences in the mode of union of the rays of the spicules between the DICTYONINA on the one hand, and the LYSSACINA, which are provided with a firmly united skeleton, on the other.

“On the contrary I find the chief difference between the above mentioned divisions of the Hexactinellida to be this—that in the DICTYONINA the skeleton is already deposited during the formation and growth of all the parts of the body, and hence typically and necessarily by the

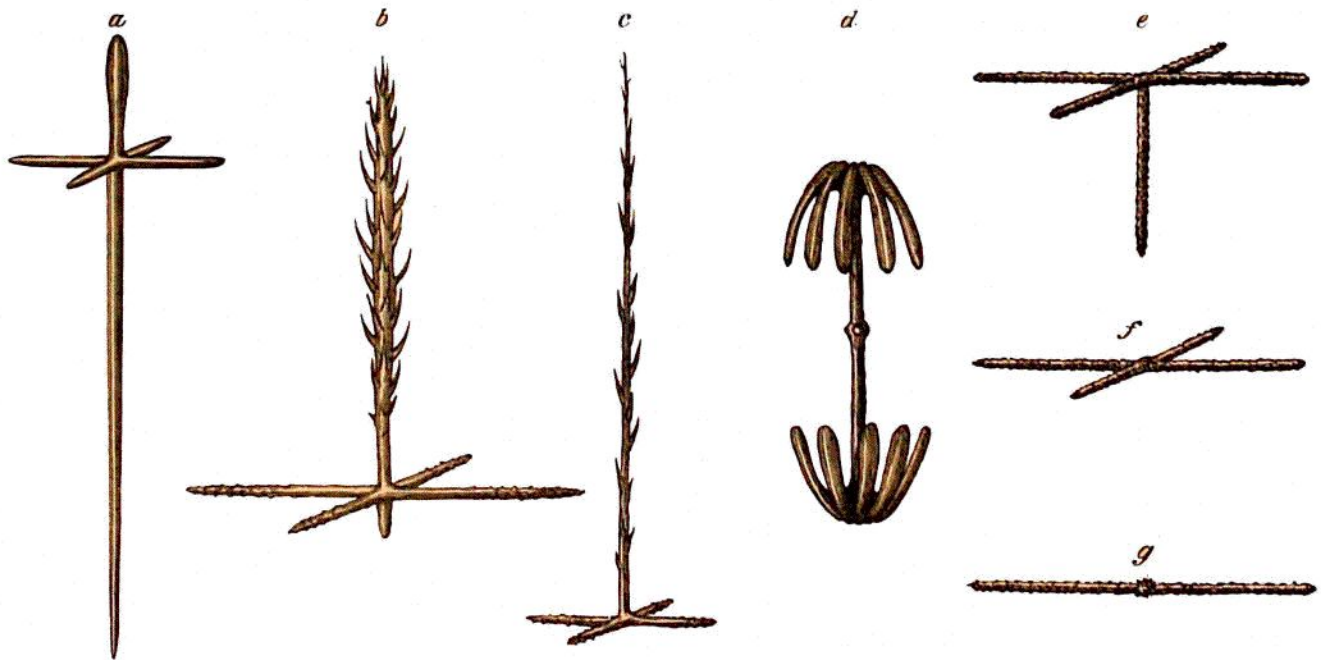


FIG. 169.—Characteristic forms of the dermal spicules of the four families of Lyssacina.

*a*, dagger-shaped spicule of *Walteria flemmingii*, n. gen. et sp. (a Euplectellid); *b*, “Pinulus,” fir-tree shaped spicule of *Sympagella nux*, O. Sch. (an Asconematid); *c*, “Pinulus,” and *d*, “Amphidisk” of the external surface of *Hyalonema sieboldi*, Gray (a Hyalonematid); *e*, *f*, *g*, dermal spicules of *Rossella antarctica*, Carter (a Rossellid).

union of certain spicules in more or less regular arrangement, whilst in the LYSSACINA either a continuous trabecular skeleton is entirely wanting or only formed at a later stage, partly by the enclosing of irregularly disposed spicules at their points of crossing or of