

lie scattered in the soft tissues of *Euplectella aspergillum* and *Euplectella cucumer* are described and figured.

In Max Schultze's well-known research, "Ueber Hyalonema," published in 1860, there are also some observations on *Euplectella* spicules. It is interesting to note that Schultze regarded *Alcyoncellum speciosum*, Quoy and Gaimard, as identical with *Euplectella aspergillum*, Owen. The same view was held by Bowerbank, who in 1862, in his third communication On the Anatomy and Physiology of the Spongiadæ,¹ regarded it as indisputable that the older generic name *Alcyoncellum* of Quoy and Gaimard should replace the name of *Euplectella* given by Owen. He himself, however, inconsistently employed not the specific designation *speciosum* but *aspergillum*. Instead of adopting the generic diagnosis proposed by the French authors, Bowerbank preferred the following summary of the characters of the genus *Alcyoncellum*:—"Sponge fistulate; fistula single, elongate, without a massive base. Skeleton: primary fasciculi radiating from the base in parallel, straight, or slightly spiral lines; secondary fasciculi at right angles to the primary ones. Oscula congregated, with or without a marginal boundary to their area."

In his British Spongiadæ (1865), Bowerbank figured and described different parts of the skeleton of *Alcyoncellum aspergillum*, *Alcyoncellum corbicula*, and a new but not minutely described species, *Alcyoncellum robustum*, Bowerbank (strictly *Alcyoncellum robusta*).²

In a short historico-critical paper on Venus' Flower Basket, published in 1868, Gray maintained the identity of *Alcyoncellum speciosum*, Quoy and Gaimard, and *Euplectella aspergillum*, Owen.³ Since the designation *Alcyoncellum* was first employed as a generic name for a calcareous Sponge (*Alcyoncellum gelatinosum*, Blainville) by Blainville, Owen's generic name *Euplectella* might be preferred; but the original specific designation *speciosa* of Quoy and Gaimard should be restored, so that this beautiful siliceous Sponge should in future be called *Euplectella speciosa*, Quoy and Gaimard.

In the following year, 1867, Gray described the structure of the skeleton of a young specimen of the same species.⁴ He refers the bent form of the tubes to the presence of Crustacea which appear constantly in the interior. *Euplectella cucumer*, Owen, is not regarded as a distinct species, but only as a form-variety of *Euplectella aspergillum*, Owen.

During his stay in the Philippines Semper had opportunity of examining numerous specimens of *Euplectella aspergillum*. He questioned the identity of *Alcyoncellum speciosum*, Quoy and Gaimard, and *Euplectella aspergillum*, Owen, and wished to

¹ *Phil. Trans.*, vol. clii. p. 1103.

² *Loc. cit.*, figs. 257, 258.

³ *Ann. and Mag. Nat. Hist.*, ser. 3, vol. xviii. p. 487-490.

Ann. and Mag. Nat. Hist., ser. 3, vol. xix. pp. 44, 138.