

contact, partly by transverse connecting trabeculæ (synapticulæ) between closely approximated parallel spicules; so that the adhesive process commences at one portion of the sponge, and is gradually continued to a greater or less extent.

“The order LYSSACINA may be divided into four families—(1) Euplectellidæ, (2) Asconematidæ, (3) Hyalonematidæ, (4) Rossellidæ—which, apart from numerous other characters, may be easily distinguished as follows by the radially or tangentially directed spicules of the external membrane.

“The Euplectellidæ possess in the external membrane dagger-shaped six-rayed spicules with an elongated proximal ray.

“The Asconematidæ have ‘pinuli,’ that is six- or five-rayed spicules, whose strongly developed distal ray is in the form of a pine-tree, while the proximal ray is either entirely wanting or only feebly developed; ‘amphidisks’ are entirely wanting in this group.

“The Hyalonematidæ possess both pinuli and amphidisks.

“The Rossellidæ bear spicules in which the distal ray is either entirely wanting or much reduced, while the proximal ray is either strongly developed or also wanting;



FIG. 170.—Characteristic spicules of the Uncinataria.
a, “Uncinatum,” b, “Clavula” of *Farrea haeckelii*, n. sp.; c, “Scopula” of *Eurete carteri*, n. sp.

indeed two rays belonging to the same tangential axis may both be wanting, so that only simple tangentially directed rods remain.

“The DICTYONINA may be divided into two suborders, Uncinataria and Inermia. The former are characterised by the possession of sharply pointed rods, ‘uncinata,’ which are abundantly provided with proximally directed recurved hooks; the latter are devoid of such ‘uncinata.’

“In the first family of Uncinataria, the tubular or calyciform Farreidæ, there are found in the external membrane radially disposed acicular rods, the ‘clavulæ,’ while the five remaining families, instead of such ‘clavulæ,’ possess ‘scopulæ,’ that is radially directed structures formed like brooms or forks, with from two to eight prongs, the latter are termed Scopularia, whilst the former are called Clavularia.

“To the Scopularia belong—

“1. Euretidæ, in the form of a branched anastomosing tubular structure, or of a goblet with lateral outlets.

“2. Melittionidæ, of goblet or tubular form, with honeycomb-like walls,