

to the proximity of the axial cross of the next spicule, where they are rounded off and terminate, they are sometimes continued right along to the middle of the second spicule; thus three axial canals may not unfrequently be seen running alongside in one strand.

In his last description of *Farrea occa*¹ Carter states that the conical prominences which project freely on either side of the narrow meshed lattice-work are bent outwards. I cannot, however, admit the accuracy of this as a general statement. As a rule the prominences are straight and directed at right angles to the surface. As Carter correctly notes, they gradually decrease in length towards the base of the stock.

As to the loose parenchymalia lying between the beams of the dictyonal framework, I shall first discuss the *uncinata*. These have been already well described and figured by Carter (*loc. cit.*). His description is as follows:—"Acerate, straight, unsymmetrically fusiform, that is, the outer or projecting part being thicker than the inner two-thirds of the spicule, which is thus rendered long and whip-like; sharp-pointed at each end, spined at short intervals throughout, the spines long, smooth and slender, respectively supported on bracket-like processes, which, being spirally arranged around the shaft, give it an irregular zig-zag appearance, all sloping in the same direction, that is backwards, or towards the sponge, at a very slight angle upon the shaft, whose outer or thickened end is extremely sharp." He calls them *barbulæ*,² a diminutive of the English barb, and says that they are "common to almost all the Hexactinellida." This assertion I cannot, however, admit. Among the numerous Lyssacina which I have examined, structures like these uncinates only occur in the genera *Pheronema*, *Poliopogon*, and *Semperella*. Among the Dictyonina I have not found them in the genera *Myliusia*, Gray; *Dactylocalyx*, Gray, *Scleroplegma*, O. Schmidt, *Margaritella*, O. Schmidt, *Euryplegma*, F. E. S., *Joanella*, O. Schmidt, and *Aulocystis*, F. E. S., and these may therefore be designated as *Inermia*, in opposition to the Dictyonalia with uncinates—the *Uncinataria*.

As Carter notes, the uncinates exhibit in *Farrea occa* an extraordinary variability in length, though this depends to some extent on the age of the individual uncinates and of the regions of the sponge in which they occur. Further, in the form, number, and arrangement of their inturned spines, there are in one and the same sponge very marked differences. Rarely, and only in the younger portions of the tubes, I find the spines distant and very divergent from the stem as represented in Pl. LXXI. fig. 4, and Pl. LXXIII. fig. 3. Sometimes a spiral arrangement of the spines can be detected; in other cases this is impossible, and the distribution appears to be quite irregular. The expansion of the distal third portion of the uncinates as contrasted with the interior is very marked, especially on the large and strongly developed forms, where, too, the inner end is not unfrequently distinguished from the outer by the development of weak spines.

¹ *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xv. p. 388.

² Since I had used the Latin term *uncinatum* (a rod beset with barbs) before I received Carter's memoir, and since Latin or Greek terms seem to me to have the preference as being cosmopolitan and not national, I have adhered to my original designation.