

I have applied the term "*Uncinata*" to the rod-like forms which run out to a point at both ends, and are provided with barbs pointed in the same direction. For such forms Carter<sup>1</sup> has lately suggested the name "*Barbula*," but this term would not be generally understood. In some species these more or less thickly placed prongs lie close to the body of the rod, while in others they are obliquely directed. They are sometimes delicate and narrow, sometimes broad and scale-like.

Certain Hexactinellidan families have typical and regular *Uncinata*, while in others they are absent. They are usually directed at right angles to the surface, with their external points in the skin (Pl. LXXIV. fig. 1, Pl. LXXXIV. fig. 1); occasionally they lie obliquely to the surface or quite irregularly (Pl. LXXVIII. fig. 2; Pl. XCV. fig. 2).

Among the asymmetrical diaets a form occurs in which one of the two rays bears numerous obliquely and outwardly directed teeth or scales, whilst the other remains smooth (Pl. XXX. fig. 7), or exhibits only small knobs (Pl. XL. fig. 6).

Feeble, irregular, undulating curvature is exhibited especially on the frequently numerous tuft-like, long and filiform diaets (Pl. V. fig. 14). The simple arc-like form occurs, on the other hand, in shorter and stronger diaets (Pl. III. fig. 21; Pl. LXII. fig. 6; Pl. LXIII. fig. 4). A spiral cork-screw-like form is illustrated by the diaets of *Hyalostylus dives*, which are rough on one side (Pl. LXX. figs. 5, 8). More marked curvature of both rays in the same plane is exhibited by small diaets in *Holascus stellatus* (Pl. XIV. fig. 12). In other cases the rays are bent towards each other in a hook-like fashion, but on opposite sides (Pl. XVI. figs. 5-7).

#### MONACTS.

While the derived nature of a monact spicule is in many cases determinable by the presence of rudimentary abortive rays (Pl. LXV. fig. 8), or by the persistent intersection of the corresponding axial canals at one end of the spicule; this becomes difficult when neither rudiments of other rays, nor traces of their axial canals persist. The presence of a knob or disc-like expansion at one end does not of itself determine the monact character of the spicule in question, since, as we have seen in the anchor-shaped diaets, the axial cross of the central canal, which is the decisive character, lies at some distance from the thickened end, and may thus demonstrate the diact character of the simple spicule.

It seems to me, however, that those spicules, called by Carter "*Clavulæ*," which run to a point at one end, and bear a knob or terminal toothed umbel at the other (Pl. LXXI.-LXXV.) as characteristically seen in the genus *Farrea*, are really monacts; although I have, like O. Schmidt, been unable to detect an axial canal in their terminal umbel, or in the swollen portion below. This opinion is, however, the more probable,

<sup>1</sup> *Ann. and Mag. Nat. Hist.*, 1885.