3. *Trichodragmata* (woodcut, Fig. IV., 2); hair-like spicules arranged in more or less compact bundles. Such forms are very common in the genus *Esperella*.

4. *Toxa* (woodcut, Fig. IV., 4); bow-shaped spicules, tapering towards either extremity and with the ends often spinose. These occur in many sponges. A slight modification of the type is found in the "forcipiform" spicule of *Halichondria forcipis*.[1] In one sponge, *Amphilectus pilosus*, nobis, we have found the toxa, which in the young condition are very distinct and strongly curved, passing by gradual transitional stages into simple, much elongated, slender oxea of such a size, that, did they occur apart from the small toxa, they would certainly be classed amongst the megasclera (*vide* Pl. XIX. figs. 5*a*–5*a*''''). This fact well illustrates the difficulty in classifying spicules according to size and form.

5. *Toxodragmata* (woodcut, Fig: IV., 5); more or less compact bundles of toxa, which have all developed in one and the same cell.

B. *Hooked Forms.*

1. *Sigmata* (woodcut, Fig. V., 1, 2); each consisting of a slender, cylindrical shaft, which is curved over so as to form a more or less sharp hook at each end. The two terminal hooks may curve both in the same direction, when the spicule is said to be simple (woodcut, Fig. V., 2), or they may curve in different directions, when it is said to be contort (woodcut, Fig. V., 1). There is, however, no real distinction between the two, and, as a matter of fact, the spicules are nearly always contort to some extent.

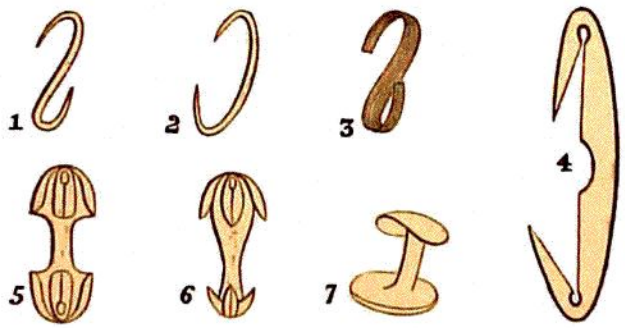

FIG. V.—Hooked forms of microsclera.

Sigmata are perhaps the commonest of Monaxonid microsclera, being very characteristic of the Desmacidonidæ.

2. *Sigmadragmata* (woodcut, Fig. V., 3); more or less compact bundles of sigmata, which have all developed in one and the same cell.

3. *Diancistra* (woodcut, Fig. V., 4); hooked forms of very peculiar shape; characteristic of the subfamily Hamacanthinæ. The spicule resembles a large stout sigma, but the inner margin of both shaft and hook thins out into a fine knife-edge, notched as

[1] *Vide* H. J. Carter, *Ann. and Mag. Nat. Hist.*, ser. 4, vol. xiv. p. 247, pl. xiv. fig. 32; *cf.* also the same spicule in *Forcepia colonensis*, *tom. cit.*, p. 248, pl. xv. fig. 47.