

## THE DRAGMAS.

These spicules, which are secreted several together in the same scleroblast, are placed as an appendix to the microscleres which are secreted each in a single scleroblast, since they do not differ from them in form, and it would be cumbrous to subdivide the microscleres into two groups, say the monogennema and syngennema.

1. *Sigmadragma*.—A sheaf of sigmaspires.

2. *Toxadragma*.—A sheaf of toxaspises.

3. *Orthodragma* (Fig. XII., *j*).—A sheaf of straight trichodal rods (Pl. XVIII. fig. 13). In describing *Dragmastra* (*Stelletta*) *normani*, I used the term trichite-sheaves for these spicules. The term trichite may be retained to denote the individual hair-like rods of which the sheaf is composed. "Trichodal" will be used as an adjective to denote exceptional tenuity.

## Series II. ASTERS.

Section (*a*) *Streptasters*.

The asters are divided into two subsections, the true asters or euasters, and the streptasters or those in which the actines do not proceed from a centre, but from a longer or shorter axis, which is usually spiral.

1. *Spiraster* (Fig. XII., *s*).—A spire of one or more turns, produced on the outer side into several spines.

2. *Metaster* (Fig. XII., *u*).—A spire of less than a single revolution, with fewer but relatively longer spines than the spiraster. The spire sometimes has the appearance of a straight rod; this may be due to the aspect in which it is presented, and to the fact that it does not make a whole revolution. It forms a link between the spiraster and the next form—the plesiaster.

3. *Plesiaster* (Fig. XII., *v*, *w*).—The spines, or as they may now be termed, actines, proceed from a very short straight axis, so that they almost appear to radiate from a common centre. In forms with less than four actines no axis as a rule is discoverable, and the actines may actually proceed from a centre; in those with more than three, the axis can always be made out, though in certain positions of the spicule it appears as though all the actines proceeded from a centre except one, which proceeds from one of the actines arising at a little distance from the common origin; in this case the part of the actine which extends between the common centre and the origin of the excentric actine represents the axis. The plesiasters are always much larger when fully grown than the metasters, with which they are associated, and the metasters are larger than the spirasters; the three forms present a perfect gradational series, so that it is frequently