

hanging expansion of the curved outer end of the ray. In the former case they are radially symmetrical, in the latter bilaterally symmetrical, with a plane of symmetry, indicated by the S-shaped curvature of the terminal ray.

Although the radial terminal discs vary greatly in form, they all agree in this that the outer terminal surface is convexly arched or conical, while the lateral margin is provided with small teeth or longer protuberances. If the marginal teeth are large in relation to the central body of the disc a many toothed anchor form results (Pl. XXV. fig. 6). If the middle portion of the anchor, on the other hand, is more strongly developed, the result is a hemispherical form with a toothed margin, or a campanulate form with long marginal protuberances (Pl. XII. fig. 4). The number and form of the marginal teeth varies in different rosettes. It is frequently four, but in other cases six, eight, twelve, or indefinitely more.

To all rosettes in which the secondary rays bear on their ends a transversely directed, radially symmetrical terminal disc, I would apply the term "*discohexasters*." Those forms, however, in which S-shaped terminal rays bear on their ends a bilaterally symmetrical disc-like thickening, I would call "*floricomes*"—a term used in reference to the resemblance of the bundle of rays to a flower perianth, and first employed by Bowerbank in the description of *Euplectella aspergillum*. In these floricomes the formation of small marginal teeth is usually confined to the terminal portion of the disc-like thickening that projects or overhangs externally (Pl. III. fig. 11; Pl. XIX. fig. 5), so that a hand or claw-like form arises. In other instances small teeth are formed over the whole margin of the disc-like thickening (Pl. XVIII. figs. 6, 7).

With these regular hexacts numerous irregular forms are contrasted. The latter are characterised by the variable formation of one or more rays; the distinctions are associated with difference in length of ray, or with modification of form. To the first category belong the sword-like hexacts, which are found beneath the skin of many Euplectellidæ, such as *Euplectella aspergillum*, (Pl. III. fig. 10), *Euplectella crassistellata* (Pl. XII. fig. 4), and others. In these the five outer rays are simple, smooth, round, and run out to a point; they are either altogether or almost exactly of equal length, while the sixth ray, directed inwards, is also smooth, round, and pointed, but is fully twice as long as the others. Frequently, too, besides the ray directed inwards, the outer radius on the same axis is longer than the tangentials, so that the resemblance to a cross-hilted sword may become very obvious, as in *Tægeria pulchra* (Pl. XI. fig. 5). This lengthening of the rays, in one or in two axes, is quite frequent, *e.g.*, in those hexacts with long thread-like rays, which are found so abundantly in the parenchyma of *Malaccosaccus vastus*. In this form the two rays on the radial axis are usually shorter than the four tangentials. The inverse relation occurs in the hexacts which lie in the gastral membrane of *Asconema setubalense*, where the two rays of the radial axis are longer than the four tangentials (Pl. XXI. fig. 5).