

especially long and strongly developed, and have an approximately perpendicular disposition (Pl. LVI. figs. 1, 2).

The principal spicules of the parenchyma are large and medium-sized oxydiacts of varying length, which are tubercled towards the pointed ends, and are in the middle either smooth or provided with an annular swelling, or with four projecting bosses or ray-rudiments. They occur either in isolated distribution or in strands which vary in direction. They are, for the most part, parallel to the outer and inner bounding surface, or disposed radially to the same. Some especially large and thick diacts lie longitudinally near the gastral surface. I have hardly ever observed large hexacts, though here and there isolated medium-sized regular oxyhexacts occur, with slightly spinous rays. Small hexact forms also occur with smooth rays. On the other hand, all through the parenchyma, in tolerably uniform though scattered distribution, oxyhexasters occur with short principal rays, and with a varying number of long divergent smooth terminals, two of which are usually borne at the end of each principal ray (Pl. LVI. fig. 7). Besides these, we have to note the less abundant occurrence of small discohexasters with four or more long, tolerably straight terminals, each provided with a small four-toothed, terminal, transverse disc (Pl. LVI. fig. 9). Not unfrequently, also, somewhat larger discohexasters occur, in which each of the short simple principals bears from three to six or more slightly S-shaped terminals. These are united in a usually somewhat slender, perianth-like bundle, and are terminally roughened on their outer extremities, which always bear a four-toothed disc (Pl. LVI. figs. 3, 4). In quite isolated distribution small discohexasters occur, with moderately short principal rays terminally expanded into a disc, which bears on its outer convex surface a large number of delicate diverging terminals, forming a brush-like tuft, and bearing on their extremities minute four-toothed discs (Pl. LVI. figs. 10, 11).

In the dermal skeleton, medium-sized, smooth hypodermal oxypentacts occur, in which the proximal ray is radially disposed, while the four long tangentials, intersecting at right angles, follow the superficial curvature of the sponge in being slightly curved inwards.

In the large rectangular meshes of these pentact hypodermalia, numerous autodermal pentacts and tetracts occur in the dermal membrane. They agree exactly with the small rough dermalia in the genus *Rossella*. It has to be noted, however, that the number of tetracts exhibiting a simple right-angled intersection of rays (Pl. LVI. fig. 5) is in proportion to that of the otherwise very similar pentacts (Pl. LVI. fig. 6) decidedly greater in this *Acanthascus* than in *Rossella* (Pl. LVI. fig. 2). These rough dermal pentacts when compared with those of the genus *Rossella* exhibit a slight divergence in this, that there is no boss- or knob-like rudiment of the sixth distal ray. The tetracts are also without any such rudimentary ray (Pl. LVI. figs. 5, 6).

On the inner side of the body-wall, the special gastral skeleton is represented by a