

parenchyma includes small rosettes in varying abundance and irregular distribution. One of these forms admits of the designation plumicome. Each of the six simple cylindrical principal rays bears a small plano-convex transverse disc, from which very fine S-shaped terminals arise in concentric rows in perianth-like fashion, very much as in the plumicome of *Polylophus philippinensis* represented in Pl. LIV. figs. 4, 6. Finally, there are very minute isolated rosettes, in which the short simple principal rays bear terminal transverse discs, having a thick brush-like fringe of somewhat long and very thin, radially disposed, knobbed terminals, like those in the rosette of *Rossella antarctica*, figured in Pl. LV. fig. 6.

I must further note that I was not able to find these two extremely delicate and inconspicuous forms of spicules in all the specimens which I examined, but only in a few.

The hypodermalia are simple smooth oxypentacts in which the unpaired proximal ray is always straight and somewhat long, and penetrates radially, like a nail, far into the parenchyma. The four tangential rays, intersecting at right angles, extend close beneath the dermal membrane, corresponding to the curvature of the general sponge surface in exhibiting a more or less marked inward curvature (Pl. LIII. fig. 5). In the quadrate meshes, which are formed by the apposition of these tangential rays of adjacent hypodermal pentacts, smaller pentacts of a similar type occur, with their tangential rays disposed parallel or diagonally to the tangentials of the larger forms. The dermal membrane itself contains exclusively numerous cruciate autodermal tetracts in which the rays are more or less roughened, somewhat narrowed towards the extremity, and ending finally in a conical point or in a slightly blunted fashion.

At the lower somewhat truncate basis of the egg-shaped sponge, the hypodermal oxypentacts are modified into long anchors by the thickening and more marked curvature of the tangentials, and by the decided thickening and elongation of the proximal tangential ray. These anchors are gradually more and more protruded from the sponge body, and may serve for the attachment of the sponge to its soft substratum. At the margin of the oscular aperture, I have sometimes observed long, pointed, rod-like needles, projecting radially to a more or less marked extent. These may be fitly regarded as marginalia.

In the evidently much younger and completely closed spherical specimen, the skin exhibits only hypodermal oxypentacts, and simple, strongly developed, cruciate autodermal tetracts. Internally, between the simple oxyhexacts, moderately long oxydiacts occur, with central nodes of intersection. Numerous discohexasters are also present (Pl. LIII. fig. 4).