

Thomson on the "Porcupine" expedition, off the Strait of Gibraltar, and very probably the same form as was figured in the *Depths of the Sea*, p. 419. To this dried specimen the following description refers.

In contrast to the cylindrical or barrel-like shape of most of the specimens of *Rossella antarctica*, Carter, the form of *Rossella velata*, Wyville Thomson, is perfectly ovoid, 6.5 cm. long, by 4.5 broad. The superior pole exhibits a circular, sharp-edged aperture, 1.6 cm. in diameter,—the opening of the equally broad, cylindrical, gastral cavity (4 cm. in depth) into which the efferent canals open. The roundish apertures of the latter are especially wide in the blind basal portion of the cavity, and become gradually narrower towards the upper end. The external surface of the body is not uniformly smooth, nor beset merely with minute, sharply-defined papillæ, as in *Rossella antarctica*, but is rather to be described as hillocky, with numerous gently convex protuberances, from 5 to 6 mm. in breadth, and not sharply defined from the reticulate, connected, intervening depressions. They are distributed over the whole surface, with some regularity, at intervals of about 10 mm. between the summits. The network of beams, which extends radially in relation to these projecting eminences, is doubtless covered during life by the fine rectangular lattice-work of the smaller dermalia. The whole external surface of the sponge is covered by the greatly-developed system of most beautiful prostalia, which project radially, in small groups, from the apices of the hillocky elevations. These tufts of pleuralia consist of simple pointed diacts and pentacts, in which the four tangential rays arise at right angles to the radial ray, at a distance of about 10 mm. from the surface of the body. They intersect, not at acute angles, but in a perfect cruciform fashion; they are also directed mutually at right angles. At the upper end of the sponge, near the oscular margin, only the radially disposed, long oxydiacts persist, forming a marginal fringe, which attains the conspicuous length of 3 to 4 cm. At the lower pole of the sponge-body, on a flat surface measuring 6 to 7 square cm., thick tufts of spicules arise from the apices of hillocky elevations. The tufts bear twenty or more basalia, 5 to 8 cm. in length, and taken together form a loose basal tuft. On most of these long basalia one can recognise, even with the naked eye, at the outer extremity, a small four-rayed anchor.

The parenchyma contains, as in *Rossella antarctica*, medium-sized oxyhexacts and oxydiacts, which are frequently roughened towards the pointed extremities. The middle portions of the oxydiacts are either smooth, or provided with an annular swelling or with four cruciate projections—traces of the undeveloped rays. Small oxyhexasters with short principal rays, each bearing two long divergent terminals, are very abundant. Between these there is a somewhat abundant, but locally variable occurrence of discohexasters similar to the above, but with toothed, somewhat incurved, transverse discs at the ends of the terminal rays, and also of discohexasters in which the