

breadth of 4 mm. From the narrowed lower end there arises a basal tuft, 4.5 mm. in length.

The spicules, which principally serve for the formation of the quadrate lattice-like network of the parietal skeleton, are simple hexacts with smooth, frequently somewhat bent rays (Pl. XVII. fig. 2), to which some comitalia are here and there apposed. Of loose parenchymalia there are present, in addition to some small regular hexacts, simple thin diacts, and three different kinds of rosettes. Among the latter the well-known oxyhexaster form, with three long, diverging, terminal rays on each of the moderately short principal rays, is most frequent (Pl. XVII. fig. 3); less frequently an oxyhexaster occurs, from each of whose strong principal rays, which are expanded outwardly in petaloid fashion, a bundle of eight or more strong, straight, moderately diverging, terminal rays proceeds (Pl. XVII. fig. 4). Graphiohexasters only occur scattered through the outer region of the parenchyma, and are provided with long bundles of fine, slightly diverging, terminal rays (Pl. XVII. fig. 2).

The sword-shaped hypodermalia have a long, often somewhat bent, proximal ray, a slightly thickened, scaly, pronged distal ray, and four simple, smooth, pointed, transverse tangential rays. Close to the proximal and distal rays, narrow diacts occur here and there which run to a point on both ends, and exhibit central thickened knots. As in the other species of *Holascus*, these diacts extend for a considerable distance beyond the extremity of the hypodermalia (Pl. XVII. fig. 5).

The hypogastralia are simple pentacts whose long distal ray may be applied to the corresponding proximal ray of a principal hexact or of one of the hypodermalia (Pl. XVII. fig. 2).

Of the basalia only the upper part is preserved, and this does not differ essentially from that of the basalia of *Holascus fibulatus*.

4. *Holascus ridleyi*, n. sp. (Pl. XVII. figs. 6-8).

In the neighbourhood of the Philippines (Station 211, lat. 8° 0' N., long. 121° 42' E.), the dredge brought up from a blue mud ground, and a depth of 2225 fathoms, a portion (about 5 cm. long, and 2 cm. broad) of the lateral wall of a *Holascus*, the siliceous spicules of which though agreeing indeed in some points with those of *Holascus polejaevii*, are so markedly different in others that it must be described as a distinct species. I shall name this after Mr. Stuart O. Ridley, the meritorious investigator of the Challenger Monactellida.

The principal skeletal framework consists of substantial, long, smooth-rayed tetracts, forming the quadrate meshes of the side wall, and, closely apposed to the latter, delicate comitalia with a variable number of rays (Pl. XVII. fig. 6).

The intersections of the longitudinal and of the transverse bands of fibres, which lie more towards the interior, do not all contain the axial cross of a principal tetract. In