

portion, on the other hand, as equivalent to the terminal. The fact that the fibulæ are provided with bent terminal rays, instead of the oxyhexasters which are present so abundantly in other species of *Holascus*, is also in agreement with my theory. It has lately been shown that neither the oxyhexasters, nor the prickly small discohexacts, represented in the diagrammatic section (Pl. XVI. fig. 2), belong to the species, but have been accidentally intruded.

The *dermal skeleton* consists of rough sword-shaped hexact hypodermalia with greatly prolonged proximal rays, and toothed, slightly thickened distals, on which several (frequently four) narrow pointed diacts are disposed, and with their outer extremities extended for a greater or less distance beyond the points of the distal ray (Pl. XVI. fig. 2).

The *gastral membrane* is supported by the transverse rays of the rough pentact-hypogastralia, whose long distal ray penetrates radially into the parenchyma.

The spicules of the basal tuft of fibres consist for the most part of very long diacts, which are smooth on the outer pointed extremities, but are beset further down with barbs, and bear at their inferior extremities a conical pointed knob, from the side of which three or four strong anchor-teeth project outwards and upwards. The intersection of the axial canal lies, as a rule, at some distance from the inferior extremities, and corresponds usually with the four lateral prongs, which are cruciately arranged (Pl. XVI. fig. 11). In some long spicules which run out to points on both ends, I have also found the axial cross of the central canal in the middle, and the hook-like teeth so directed on the two sides that their points were turned away from the centre (Pl. XVI. fig. 12).

The skeleton of the tolerably compact terminal sieve-plates chiefly consists of strong hexacts, which form quadrate meshes by the apposition of the transverse rays. Their distal, freely projecting ray is spindle-shaped, thickened, and sparsely covered with small conical teeth, while the short proximal is a simple cone, and entirely tubercular. (Pl. XVI. fig. 8). The four cruciate, long, transverse rays are smooth, and gradually run out to a point. To these transverse rays, but more especially to the outwardly projecting distal, diacts with pointed extremities are closely affixed (Pl. XVI. fig. 8).

*Holascus polejaevii*, n. sp. (Pl. XVII. figs. 1-5).

The single, probably young, specimen figured on Pl. XVII. fig. 1, represents a new species of *Holascus*, which I dedicate to the meritorious investigator of the Calcareia and Keratosa, Dr. Poléjaeff. This form was trawled to the south of Australia (Station 157, lat. 53° 55' S., long. 108° 35' E.), from a depth of 1950 fathoms, and a bottom of Diatom ooze. The specimen has been injured at the upper end, so that both the terminal sieve-plate and the marginal ridge are wanting.

The sack-shaped, somewhat thin-walled body has a length of 10 mm., and a