

so thickly beset with rather long, narrow spines, diverging obliquely outwards, that a somewhat bushy appearance results (Pl. XXX. fig. 16). An essentially different appearance is presented by the pinuli which lie on the funnel-shaped concave upper surface, in the strands of the sieve. The basal rays are here narrower and longer; the weakly developed distal ray has a decidedly greater length—0·8 mm., and bears only a small number of short apposed spines (Pl. XXX. fig. 17). On the inner surface of the gastral cavity and wider efferent canals, a special gastral or canalicular skeleton occurs. This consists of moderately large, smooth, simple oxyptacts, with the four transverse rays inserted on the gastral or canalicular membrane, and sparsely furnished with slim autogastral pinuli of various sizes. The four straight basal rays of the latter are rather long and thin, and gradually pointed; the distal ray is slim and beset with short, somewhat apposed, lateral spines.

Among the dermal amphidiscs there frequently occurs a large, comparatively broad form (0·5 mm. long by 0·2 mm. broad), with short, much arched umbels, and eight broad lancet-shaped umbel rays. The strongly developed axial rod is for the most part smooth, but generally exhibits at the middle point four cruciately disposed, rounded tubercles,—the remnants of the four abortive transverse rays. In the superior sieve-plate these large broad amphidiscs which occur all over in the external skins are, curiously enough, absent. On the other hand, medium-sized (0·3 mm.) amphidiscs of another form occur, with narrow, much arched, eight-rayed umbels, which occupy more than a third of the total length, sometimes almost meeting in the middle. The slim axial rod is beset with tubercles (Pl. XXX. fig. 11). Besides these, somewhat smaller and narrower amphidiscs, with eight medium-sized umbel rays occasionally occur, and in great numbers the decidedly smaller forms with short, broadly-arched many-rayed umbels which occurred so abundantly in the external skin (Pl. XXX. fig. 13).¹

In the basal pad the familiar strongly-developed six- to two-rayed spicules occur abundantly. Their rounded ends are covered with tubercles, while the proximal main portion of the ray is smooth. The bundle of needles in the basal tuft is unfortunately torn away. At the inferior extremity of the body one can see the distinct defect left by their removal.

Hyalonema poculum, n. sp. (Pl. XXXIII. figs. 1–7).

In the neighbourhood of the island of Juan Fernandez, west of Valparaiso (lat. 33° 42' S., long. 78° 18' W., Station 300), a cup-shaped *Hyalonema* was dredged from a Globigerina ooze bottom at a depth of 1375 fathoms. The inferior extremity and tuft of basal needles is torn away. The upper funnel-shaped concave end of the comparatively thin-walled cup has a transverse diameter of about 5 cm., while the lower

¹ Too few rays have been represented in Pl. XXX. fig. 13. There are from thirteen to sixteen.