

the numerous tetracts, that the rays are somewhat curved, even in the cross plane (Pl. XL. fig. 12). The spicules of the basal tuft, which vary greatly in size, are smooth superiorly, but inferiorly beset with isolated barbs, while the helmet-shaped thickened lower end bears four long cruciate, flat or roundish, anchor teeth of variable length, directed upwards and outwards (Pl. XL. figs. 8, 9).

6. *Hyalonema (Stylocalyx) elegans*, n. sp. (Pl. XXXI. figs. 1-7).

In the Mid Pacific, to the south-east of the Christina Islands (Station 271, lat. $0^{\circ} 33' S.$, long. $151^{\circ} 34' W.$), from a depth of 2425 fathoms and a Globigerina ooze bottom, an extremely delicate and soft *Hyalonema* was trawled. The compressed roundish inferiorly pointed body has a thickness of about 2 cm., and bears a basal tuft of a few projecting spicules which measure 12 to 14 cm. in length (Pl. XXXI. fig. 1). At the upper end of the body a central cone slightly projects, and from it four cruciately disposed radial plates extend, dividing the central cavity into four divisions. The superior openings of these cavities are seen as irregular roundish gaps on the upper surface. It is improbable that a terminal sieve plate extended over these apertures; no trace of such a structure persists. On the upper half of the body, indeed, the whole outer skin seemed to have been rubbed away, while traces of the same are still recognisable on the lower somewhat bulging conical portion.

The loose parenchyma contains not only simple smooth medium-sized oxyhexacts, and numerous smooth (or rarely terminally roughened) (Pl. XXXI. fig. 3) oxydiacts of medium size and inconsiderable length, but also a great number of small smooth oxyhexacts with curved rays.

The dermal skeleton (Pl. XXXI. fig. 2) consists of somewhat strongly developed, smooth oxypentacts, on which numerous autodermal pentact pinuli are apposed. The latter exhibit four moderately long, terminally slightly toothed basal rays, and a more or less spinose distal (Pl. XXXI. fig. 4) which may attain a length of 0.5 mm. Besides these, numerous medium sized eight-rayed amphidiscs occur, bearing on their axial rod several somewhat irregularly distributed boss-like, projecting, lateral tubercles, and exhibiting straight, bell-shaped terminal umbels which are so long that their flat lancet-shaped rays almost meet one another (Pl. XXXI. fig. 6). There are also numerous minute amphidiscs with slightly arched short umbels, 0.02 to 0.04 mm. in length (Pl. XXXI. figs. 5, 7). Isolated large broad amphidiscs also occur, but I am doubtful whether they really belong to this species. From their scarcity and irregular disposition it seems probable that they owe their origin to one of the other species of *Hyalonema* which lay in the same glass and which contain these broad amphidiscs in abundance. The basal tuft exhibits numerous firm spicules with six to two rays, which are straight and terminally beset with strong teeth, or else truncated or rounded.