

these diacts with spinose terminal portions four cruciate hemispherical tubercles usually occur.

This species, *Hyalonema thomsoni*, differs from *Hyalonema lusitanicum*, Bocage, not only in general form and in the long projecting cone, but more especially in the large amphidiscs with short narrow umbel rays, and in the absence of small oxyhexacts with curved rays.

Though I have no hesitation in including the three forms described above within the one species, *Hyalonema thomsoni*, Marshall, I am in doubt as to a specimen of *Hyalonema* dredged near the Azores (Station 73, lat. 38° 3' N., long. 31° 14' W.), at a depth of 1000 fathoms, from a Pteropod ooze ground. This fragment, which has a total length of only 3 cm., represents the lateral portion (about one-third) of a pear-shaped body, about 8 mm. in breadth at the upper end, while the inferior portion narrowed to 2 mm. projects as a broken tuft of few spicules. The superior extremity of the body is not preserved.

The parenchymal spicules consist of smooth oxydiacts of various lengths, with or without central tubercles, and of moderately large smooth oxyhexacts and smaller forms with straight somewhat roughened rays,—all exactly agreeing with those already described in *Hyalonema thomsoni*. The hypodermal smooth oxypentacts and the somewhat slim auto-dermal pinuli of the skin do also not differ essentially from those of *Hyalonema thomsoni*, and the same may be said of the substantial spicules of the basal pad (Pl. XXXIV. figs. 15, 17), or of the long spicules of the root-tuft, distinguished by their four-toothed terminal anchors (Pl. XXXIV. fig. 16), which exhibit an axial cross.

Only the amphidiscs, still discoverable in the small and isolated remnants of the skin, are somewhat divergent from those of the specimens of *Hyalonema thomsoni*, in the apparent absence of the large form bearing short hemispherical terminal umbels with six or eight narrow hook-shaped umbel rays, and in such slight differences in the form of the small amphidiscs, as may be discovered by inspecting Pl. XXXIV. figs. 12, 13, 14. Since the apparent absence of the large amphidiscs may very probably be referred to the incompleteness of the specimen in which the skin was almost gone, and since besides the small divergent amphidiscs exactly congruent forms also occur, there seems no reason to erect a separate species for this fragment, and I therefore content myself with designating it *Hyalonema thomsoni*, var. *exiguum*.

## 2. *Hyalonema (Stylocalyx) apertum*, n. sp. (Pls. XXXVII., XXXVIII.).

In the Sagami Bay, west of Yokohama in Japan (Station 232, lat. 35° 11' N., long 139° 28' E.), from a depth of 345 fathoms and a green mud bottom, several specimens of *Hyalonema* were dredged. In some of these the body is still well preserved, but in most only the basal tuft and the *Palythoa* incrustation remain. The body of the