

a point; the free distal is at least twice as long, and bears short spines. At the boundary of the two, in the centre of the diact, are four conical projections arranged in a circle (Pl. XXVIII. fig. 2). The gastral skeleton was not well preserved; but it seemed not to differ essentially from the dermal.

4. *Hyalonema toxeres*, Wyville Thomson (Pl. XXIX.).

Near the West Indian island St. Thomas (Station 24), lat. 18° 38' 30" N., long. 65° 5' 30" W.; several specimens of a *Hyalonema* were dredged from a Pteropod ooze ground at a depth of 390 fathoms. The species has already been shortly described by Sir Wyville Thomson in his preliminary account of the Voyage of the Challenger—The Atlantic. I subjoin the account there given of this form.¹

“Two examples of the sponge-body of a very handsome *Hyalonema* were sifted out of the coral mud. Unfortunately, in both cases, the sponge had been torn from the central coil, and the absence of the coil might have thrown some little doubt upon the form and mode of finish of the complete animal; so that it was extremely fortunate that a young specimen of the same species, about 40 mm. in length, was caught in the tangles quite perfect.”

“*Hyalonema toxeres*, Wyville Thomson, resembles closely the other known species, *Hyalonema lusitanicum* and *Hyalonema sieboldi*, in general appearance and in the arrangement of its parts. A more or less funnel-shaped sponge presents two surfaces, covered with a network of different patterns formed by varying arrangements of large five-rayed spicules. The upper concave surface shows a number of oscular openings irregularly arranged, and the lower surface a more uniform network of pores, some of which seem to be inhalent and others exhalent. The central axis of this sponge is closely warped into the upper part of a coil of long and strong glassy spicules, which, as in the other species, serve to anchor the sponge in the soft mud. Both of the specimens dredged have the sponge more flattened and expanded than it is in *Hyalonema lusitanicum*. In one of them it is nearly flat (fig. 5), forming a uniform cake-like expansion, 80 mm. in length, by 70 mm. in width, and about 8 mm. in thickness. The upper or oscular surface is covered by an exceedingly close network, with groups of large openings at nearly equal intervals. It is slightly raised in the centre. The central elevation is followed by a slight depression, and the upper wall then passes out nearly horizontally to a sharp peripheral edge, fringed with long, delicate spicules, each consisting of a slender central shaft, with a cross of four short transverse processes in the centre. The outer half of the central axis is delicately feathered.

“The lower surface of the sponge (fig. 6) is protected by a singularly elegant

¹ *Loc. cit.*, vol. i. p. 273.