and the one in which the operculum was most marked. The whole group of Stylasteraceans requires careful revision, when very likely it may be found necessary to merge *Cryptohelia* and *Endohelia* in *Stylaster*.

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, H. Lusitanicum and H. Sieboldi, in general appearance and in the arrangement of its parts. A more or less funnel-shaped sponge presents two surfaces, covered with a net-work 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 net-work of pores, some of which seem to be inhalent and others exhal-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 H. Lusitanicum. In one of them it is nearly flat (Fig. 66), forming a uniform cakelike 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 net-work, with groups of large openings at nearly equal intervals. It is slightly raised in the cen-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