essential points of structure, but was more conical in form. The young specimen differed from the young of *Hyalonema lusitanicum* at the same age in being wider and more cylindrical, but the external wall, which afterwards becomes that of the lower surface, showed the same arrangement in squares which we find in the young of the other species, so that apparently the graceful, round-meshed, wide netting of the under surface does not appear in the early stages.

"The coil is developed much in the same proportion and in the same way as in *Hyalonema lusitanicum*, the fibres spreading out and incorporating with the sponge substance. The characteristic bow-like spicules are abundant in the young sponge, and

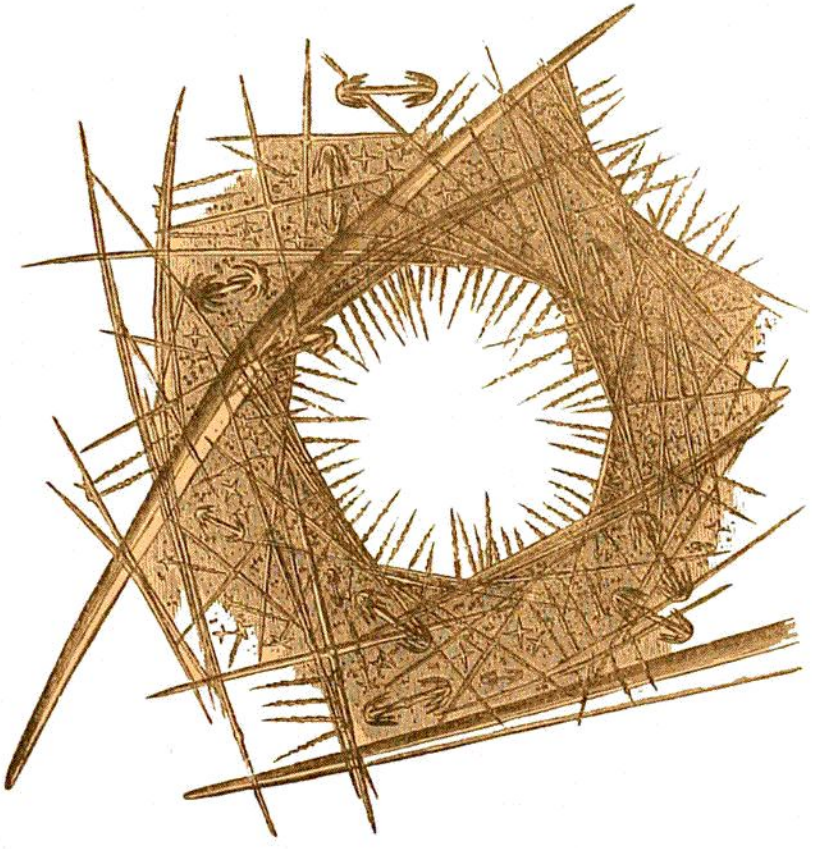

FIG. 7.—*Hyalonema toxeres*, Wyville Thomson. Part of the membrane from the upper surface, × 40.

these, with the larger amphidiscs, place it beyond a doubt that it is the young of *Hyalonema toxeres*.

"A quantity of loose spicules brought up in the dredge at the same time were referred to this species. They were somewhat stouter than those of *Hyalonema lusitanicum*, and less regular in outline. There was one coil nearly complete, involved in a calcareous expansion of a branch of *Diplohelia profunda*. Two very young polyps, apparently of *Palythoa fatua*, were commencing the formation of their investing crust at the top of the coil of the young specimen, just below the sponge body."

Since the three specimens studied by Wyville Thomson are also at my disposal for