end a rounded or conical hypostome, and beyond it a circlet of a few short simple tentacles; their number seems to be usually (or always?) eight. The tentacles are usually highly contracted and turned inwards, rarely distinctly protruded (fig. 6, \dot{y}).

The gonophores are wanting in the great majority of the specimens examined. They were, however, very distinct in a few specimens which were found in Stannophyllum globigerinum and in Stannarium alatum. They are shortly pedunculate, of the same ovate or club-shaped form as the hydranths, but twice or three times as long and broad, without tentacles, and represent sporosacs, which in a few cases were distinctly filled with eggs (fig. 6, e). The entoderm of the gonophores and hydranths exhibits the same dark brown or greenish colour as that of the hydrorhiza.

Stylactella abyssicola, n. sp. (Pl. II. fig. 7).

Habitat.—Northern and Central Pacific; symbiotic with Stannomidæ and Spongelidæ; Stations 244, 271, 272; depths between 2300 and 2900 fathoms.

Stylactis with a reticular hydrorhiza, the anastomosing tubes of which are of variable breadth, fusiform dilatations alternating with narrower cylindrical portions. Hydranths ovate, pedunculate, springing at short intervals from the hydrorhiza, provided with a simple circlet of twelve to sixteen tentacles. Gonophores of about the same size as the hydranths, arising scattered between them from the hydrorhiza.

Stylactella abyssicola is much less abundant than the preceding closely-allied species; it occurs in several specimens of Psammophyllum and Stannophyllum, taken at Stations 244, 271, and 272. It is easily distinguished from the smaller Stylactella spongicola by the larger size of all the parts, and the irregular formation of the tubes of the hydrorhiza. These are not cylindrical and of equal breadth, but exhibit irregular fusiform dilatations (often a single one between every two hydranths). Often also the nodal points of the anastomosing tubes exhibit triangular dilatations. The diameter of the tubes is usually between 0.2 and 0.3 mm., twice or thrice as large as in Stylactella spongicola, and the chitinous perisarc is thicker than in the latter; the network of the hydrorhiza is looser and its meshes larger.

The hydranths arise from the hydrorhiza with short peduncles, usually of their own length; they are club-shaped or ovate, 0.5 to 0.6 mm. in diameter, and bear beyond the shortly conical hypostome a single circlet of tentacles (about ten or twelve to sixteen). I was, however, able in a few cases only to recognise the form of the hydranths distinctly (fig. 7, y). The same must be said of the gonophores, which are scarcely larger than the hydranths, of the same form, but without tentacles (fig. 7, y), springing from the hydrorhiza (h) scattered between the hydranths.