usually contracted, turned inwards to the mouth, and difficult to distinguish, but sometimes they were prominent over the conical hypostome, and formed a single circlet, composed of eight to sixteen cylindrical tentacles (Pl. II. figs. 5-7, y). The entoderm of the hydranths exhibited the same dark coloration as that of the hydrorhiza.

The hydranths of *Halisiphonia spongicola* (a Campanularian Hydroid allied to *Lafoëa*) were not preserved in the few specimens of Stannomidæ in which it occurred; but in this case the chitinous hydrotheca, very similar to that of *Halisiphonia megalotheca* (Allman), permitted me to recognise the genus of the symbiotic Hydroid.

Gonophores.—Sexual zooids bearing eggs in their walls were observed in both species of Stylactis, but not in Halisiphonia; they were, however, rare, and not found in the majority of hydrosomes. They were in both species ovate or club-shaped naked bodies, which arose from the hydrorhiza between the hydranths (Pl. II. figs. 6, 7, g). Halisiphonia exhibited a few chitinous oviform gonangia (Pl. IV. fig. 9, g). The entoderm of the gonophores in Stylactis is of the same dark phæodium-like colour as that of the hydrorhiza and the hydranths.

Halisiphonia spongicola, n. sp. (Pl. IV. fig. 9).

Habitat.—North Pacific, Station 241; depth, 2300 fathoms. Central Pacific, Station 272; depth, 2600 fathoms; symbiotic with Stannoma and Psammophyllum.

Halisiphonia with a reticular hydrorhiza, the anastomosing tubes of which are cylindrical, of equal breadth. Hydranths probably cylindrical, enclosed in a slender cylindrical hydrotheca, which arises by a thin and short pedicle from the hydrorhiza. Gonangia ovate, with a circular opening, twice as broad and about as long as the hydrothecæ, arising scattered between them from the hydrorhiza.

Halisiphonia spongicola is very similar to Halisiphonia megalotheca, described by Allman.¹ This latter species was collected by the Challenger at Station 160 (south of Australia), at a depth of 2600 fathoms. Allman gives the following description of it:— "Hydrocaulus a creeping and adherent tube which supports at irregular intervals pedunculated hydrothecæ. Hydrothecæ very large, cylindrical, gradually passing below into the long smooth cylindrical peduncle. Gonangia spathuliform, borne on short peduncles, and with the summit opening by a long narrow transverse slit."

The trophosome of Halisiphonia spongicola is very similar to the figure given by Allman, but its network is much more developed, and traverses the whole body of Psammophyllum flustraceum (p. 52, Pl. IV. fig. 5), and probably also that of Stannoma coralloides (Pl. III. fig. 5); from the surface of the former is prominent only the distal part of the hydrothecæ, with their openings. It seems, therefore, more reasonable to call the trophosome of this symbiotic species hydrorhiza (as in Stylactis),

¹ Zool. Chall. Exp., pt. lxx. p. 31, pl. xvi. figs. 1, 1a.