Genus 11. Stannoma, n. gen.1

Definition.—Stannomidæ with arborescent body, divided into numerous free or anastomosing cylindrical branches.

The genus Stannoma differs from the other Stannomidæ in the arborescent form of the body, which is like a small tree or coral stock. The ramifications of the corm are sometimes regular and dichotomous, at other times irregular.

Two species of Stannoma were found in the Challenger collection, both taken at two neighbouring stations in the Central Pacific, viz., Station 271 (2425 fathoms) and Station 272 (2600 fathoms). The Radiolaria in the ooze covering the bottom at these two stations make up the pseudo-skeleton in both species; the xenophya are imbedded in a scanty clear maltha, which is supported by a dense framework of thin spongin-fibrillæ.

The branches of the arborescent body are cylindrical in both species. They are free in Stannoma dendroides (Pl. III. fig. 1), while they anastomose and form a loose network (similar to Clathria) in Stannoma coralloides (Pl. III. fig. 5). A transverse section (Pl. III. figs. 2, 3) shows numerous brown tubes of the symbiotic Hydroid (h); the tubes seem to belong to two different genera (Stylactis, Halisiphonia). The branches of the reticular hydrorhiza give a firm support to the arborescent sponge, and between them branch its canals, the course of which could not be made out. The dry Stannoma is very light and friable, the surface loosely woolly and finely sandy; the dermal membrane which covers the surface of Stannophyllum is absent here.

Stannoma dendroides, n. sp. (Pl. III. figs. 1-4).

Habitat.—Tropical Pacific, Station 271; depth, 2425 fathoms; bottom, Globigerina ooze. Station 272; depth, 2600 fathoms; bottom, Radiolarian ooze.

Sponge arborescent, irregularly branched (partly dichotomous, partly polychotomous), with slender cylindrical branches tapering towards the conical distal end. Branches free, without anastomoses.

The body of the tree-like sponge is 30 to 50 mm. high, 20 to 30 mm. broad, very soft and flexible, in the dry state friable. The short stem, 10 to 20 mm. in height, 3 to 5 mm. in thickness, is either cylindrical or inversely conical, tapering towards the small base, and divided into three to six stout main branches, 3 to 4 mm. in diameter. These divide again into secondary and tertiary branches of varying lengths, between

¹ Stannoma = Cemented body, στεγνώμα.