

ascertained with accuracy. The largest fragments measured about one inch and a half in height, and the pinnately disposed branches attained a length of from one-half to three-fourths of an inch. Hydrothecæ in all respects like those of the branches are carried by the stem along its entire length. The branches, as in all the known species of *Grammaria*, are greatly contracted at their origin. This contracted portion is occupied by a simple cavity into which the tubes of the compound branch open.

Grammaria insignis, n. sp. (Pl. XXIII. figs. 3, 3a, 3b).

Trophosome.—Colony attaining a height of six inches, set with pinnately disposed alternate ramuli, which often carry secondary ramuli with a similar disposition. Hydrothecæ cylindrical, not dilated at the orifice, disposed in four longitudinal series.

Gonosome not known.

Locality.—Station 145, off Marion Island; depth, 50 to 75 fathoms.

This is a large and handsome species. The main stem is towards its base much thicker than the ultimate ramuli, but gradually tapers towards the distal end of the colony. The hydrothecæ, as in all the known species of *Grammaria*, are borne both along the stem and the branches, and the ultimate ramuli are here, as in every other known species, very much constricted at the origin. *Grammaria insignis* is the only species of *Grammaria* in the collection which has its hydrothecæ disposed in four longitudinal series. In all the others six such series are present.

Family SERTULARIDÆ.

Character of the Family. Trophosome.—Hydrothecæ in two or more series, with the cavity differentiated by a more or less complete floor from that of the hydrocaulus, to which their sides are for a greater or less extent adnate. Hydrocaulus not formed by inseparably coalesced tubes, of which one is axial and carries the hydrothecæ, and the others peripheral, definite in number, and destitute of hydrothecæ. Hydranths with conical hypostome.

Gonosome.—Gonophores hedrioblastic.

Sertularia, Linnæus (in part).

Sertularia, Linnæus, Syst. Nat. (Gmel.), p. 3844.

Generic Character. Trophosome.—Hydrocaulus simple or branched, divided by equidistant joints into internodes, each carrying a pair of opposite hydrothecæ, or two alternate hydrothecæ, or a single one. Hydrothecæ sessile, in two series,