

The hydrothecæ when traced to their origin from the axial tube are seen to be funnel-shaped, gradually tapering away from the orifice to the point of origin, and curving gently and with great elegance away from the supporting tube. The orifice is capable of being closed by the two membranous valves, which meet so as to form a ridge like that of the roof of a house, and which are composed of numerous, easily separated, very thin laminae.

*Cryptolaria geniculata* is one of the three species in which the gonosome has been detected. While the two others—*Cryptolaria abyssicola* and *Cryptolaria diffusa*—have been dredged from the great depths of 2600 and 2500 fathoms respectively, the present species has been brought up from the comparatively moderate, though still very considerable, depth of 315 fathoms.

*Cryptolaria gracilis*, n. sp. (Pl. XX. figs. 2, 2a).

*Trophosome*.—Colony attaining a height of about two inches; stem slender, flaccid, much and irregularly branched, and with the distal portion for a great extent destitute of the peripheral tubes. Hydrothecæ alternate and distichous.

*Gonosome* not known.

*Locality*.—Station 169, near New Zealand; lat. 37° 34' S., long. 179° 22' E.; depth, 700 fathoms.

*Cryptolaria gracilis* is an unusually well marked species. It forms small, tree-like, much-branched colonies, and while the slender flexile branches have their distal portions formed as in the other species by the free extension of the axial tube, this tube is here destitute of the peripheral investment for a greater extent than is the case in any other with which I am acquainted. It is apparently on this condition that the slenderness and flaccidity of the branches mainly depends.

*Cryptolaria diffusa*, n. sp. (Pl. XXI. figs. 1, 1a).

*Trophosome*.—Stem slender, loosely and irregularly branched. Hydrothecæ narrow, rather widely set, and with a nearly dichotomous arrangement.

*Gonosome*.—Gonangia springing from distance to distance along the stem, flask shaped, about twice the width of the hydrothecæ, curving away from the stem, solitary or geminate.

*Locality*.—Station 101, off Sierra Leone; depth, 2500 fathoms.

This is a very loosely branched slender form, with a straggling unattractive habit, and is of special interest from the great depth at which it has been found, and from the fact that it is one of the only three species of *Cryptolaria* in which the gonosome has been detected.