

The internodes of the stem in the southern form are perhaps slightly longer and more slender than those of the northern, but no difference can be found which would justify the specific separation of the two forms.

The soft parts of the trophosome were well preserved in the specimens.

*Thyroscyphus*, Allman.

*Thyroscyphus*, Allman, *Hydroids of the Gulf Stream*, p. 10.

*Generic Character. Trophosome.*—Hydrocaulus composed of consecutive internodes, each supporting a pedunculate hydrotheca. Hydrothecæ with the cavity divided from that of the peduncle by a perforated diaphragm, and having the orifice surmounted by a roof which is composed of four triangular membranous valves.

*Gonosome* not known.

The genus *Thyroscyphus* was formed for a Hydroid dredged off Sand Key, from a depth of 10 fathoms, during the United States' exploration of the Gulf Stream. The species which compose it differ from the other operculate forms of the Campanularinæ in the operculum of its campanuliform hydrothecæ consisting of exactly four valves well differentiated from the walls of the hydrotheca, instead of the much greater and indeed indefinite number of segments which in others crown the hydrotheca, or into which the margin of the hydrotheca in these is cleft; and in the fact of the hydrocaulus being composed of a succession of distinct internodes, each with its pedunculate hydrotheca.

*Thyroscyphus ramosus*, Allman (Pl. XII. figs. 2, 2a).

*Thyroscyphus ramosus*, Allman, *Hydroids of the Gulf Stream*, p. 11, pl. vi. figs. 5, 6.

*Trophosome.*—Hydrocaulus monosiphonic, consisting of a main stem set with pinnately disposed, alternate, simple or branched ramuli. Hydrothecæ borne both by main stem and ramuli, distichous and alternate, large and deep, cylindrical towards the summit, but gibbous below on the side which faces the internode; peduncle short, composed of two oblique, annular segments.

*Gonosome* not known.

*Locality.*—Bahia.

Though the present Hydroid differs to some extent in habit from *Thyroscyphus ramosus* of the collections obtained by the United States' exploration of the Gulf Stream, I have no hesitation in regarding it as specifically identical with that form.

The Challenger specimen has a height of about four inches. The ramuli which are given off from the main stem are sometimes simple, sometimes once or twice branched. The peduncles of the hydrothecæ always spring from a point close to the distal end of an internode, where they are supported on the summit of a short, thick, lateral process of the