

cylindrical peduncle to which the hydrotheca-bearing portion is attached by a very oblique splint-like joint (fig. 2c).

The hood-like roof which arches over the orifice of the hydrotheca is present in all the hydrothecæ, whether of the pinnæ or of the stem, and consists of a very thin, transparent, chitinous membrane. So delicate is it that it is easily torn away, and it was only in some cases that it was sufficiently perfect to enable its form to be satisfactorily determined.

The gonangia are beautiful objects and constitute a striking feature of the species. They are relatively narrow, but have a length which is equal to about twice that of an internode of the stem. With their axis gently curved they gradually taper from a rounded base towards the terminal circular orifice. They are thickly set from base to summit with minute spines, whose points are directed towards the summit of the gonangium. When the stem is viewed in profile the gonangia, though strictly distichous in their origin, are seen to be for the most part directed with a secund disposition towards one side of the stem.

The largest example of *Desmoscyphus acanthocarpus* in the collection measured about two inches in height. The species is a member of the rich Hydroid fauna occurring off the coast of Bahia.

Hypopyxis, n. gen.

Name from ὑπό, under, and πύξις, a box, in allusion to the cup-like appendages which lie below the hydrothecæ.

Generic Character. *Trophosome*.—Hydrocaulus divided by well-marked joints into internodes, each carrying numerous pairs of hydrothecæ. Hydrothecæ opposite, adnate to one another by their opposed sides, each having attached to its base two minute cup-shaped appendages.

Gonosome.—Gonangia destitute of marsupium, springing from the hydrocaulus in the intervals of the pairs of hydrothecæ.

The genus *Hypopyxis* has in its opposite and connate hydrothecæ close relations with *Desmoscyphus*. From *Desmoscyphus*, however, it is distinguished by the presence of the cup-like appendages at the base of the hydrothecæ.

That these appendages must be regarded as sarcothecæ can scarcely be doubted, and *Hypopyxis* will thus afford an additional example of the very exceptional occurrence of these bodies in genera not referable to the Plumularinæ.

Hypopyxis labrosa, n. sp. (Pl. XXXV. figs. 1, 1a).

Trophosome.—Stem simple or very sparingly branched, monosiphonic, and set with pinnately disposed, alternate ramuli, which are divided by very oblique joints into