

of the hydranth is fixed within the hydrotheca by bands which stretch from it to the walls of the hydrotheca, and it is only the distal end of the hydranth which admits of retraction and extension. The tentacular crown, even in its state of extreme contraction, is incapable of being withdrawn into the cavity of the hydrotheca, and, notwithstanding the complete development of the hydrothecæ, the hydranths derive almost as little protection from them as those of *Halecium* do from the hydrothecæ in that genus, where these receptacles are rudimental. However extensile may be the bands which stretch from the body of the hydranth to the walls of the hydrotheca, it would seem that they operate in fixing the body of the hydranth and thus preventing the complete retraction of the hydranth within the hydrotheca. A condition entirely similar to this occurs in *Sertularia exserta*. See above, p. 56.

The depth of 770 fathoms from which *Thuiaria hyalina* was dredged adds to the interest of the species, and the transparency and absence of colour in its perisarc has probably some relation with the great depth of its habitat.

*Desmoscyphus*, Allman.

*Desmoscyphus*, Allman, Journ. Linn. Soc. Lond. (Zool.), vol. xii.

*Generic Character. Trophosome*.—Colony dendritic; hydrocaulus divided by joints into internodes, each internode corresponding to one or more pairs of hydrothecæ. Hydrothecæ of the ramuli all brought to one side of the ramulus and adnate to it by their epicauline walls, adnate also or in close apposition to one another by their opposed sides.

*Gonosome*.—Gonophores adelocodonic, gonangia destitute of marsupium.

The genus *Desmoscyphus* was originally constituted for a Hydroid from New Zealand. In the extent to which the hydrothecæ are adnate to the hydrocaulus it agrees with many species of *Thuiaria*, while another point of agreement with that genus will be found in the fact that in some parts of the colony a single internode may carry many hydrothecæ. From *Thuiaria*, however, it is obviously separated by the hydrothecæ on the ramuli being all brought to one side of the ramulus, where they become in almost every instance adnate to one another in pairs along their opposed sides. In *Desmoscyphus pectinatus*, one of the species obtained by the Challenger, while the hydrothecæ are closely approximate, their walls have not actually coalesced with one another, though the hydrothecæ present the essential character of the genus in being all brought to one side of the branch, instead of being distichous as in *Thuiaria* and *Sertularia*.

It is only in the branches that the characteristic condition of the hydrothecæ is constant. In the main stem, especially towards its proximal end, the hydrothecæ may recede from one another and ultimately become disposed in two opposite series, separated as in *Thuiaria* and *Sertularia* by the entire width of the stem.