

*Eudendrium*, Ehrenberg (in part).*Eudendrium*, Ehrenberg, Corall. Rothen Meeres, p. 72.

*Generic Character. Trophosome.*—Colony dendritic; hydrocaulus invested with a well-developed perisarc. Hydranths with a trumpet-shaped hypostome, which is surrounded by a single verticil of filiform tentacles.

*Gonosome.*—Gonophores adelocodonic, developed from the body of the hydranth at the proximal side of the tentacles, or from the sides of the hydrocaulus, monothalamic in the female colony, polythalamic in the male.

The genus *Eudendrium* was separated by Ehrenberg from *Tubularia*, with which it had been previously confounded. Its foundation as an independent genus is quite in accordance with its structural characters, though the grounds on which Ehrenberg believed himself justified in insisting on it are derived from characters comparatively trivial and destitute of generic value. The genus as defined by Ehrenberg accordingly contains forms which cannot be generically associated in a natural system. It was reserved for subsequent systematists, especially van Beneden and Strethill Wright, to indicate the true grounds of the revision, the most important of which, so far as concerns the trophosome, are found in the trumpet-shaped hypostome with its single verticil of tentacles.

Among the comparatively small number of Gymnoblasic Hydroids admitting of determination in the collection of the Challenger, are two species of *Eudendrium*—one a well-known European species, the other an undescribed species presenting some remarkable and distinctive characters.

*Eudendrium vestitum*, n. sp. (Pl. I. figs. 1, 1a).

*Trophosome.*—Hydrocaulus slender, monosiphonic, much branched, branches alternate, dilated at the summit and with the perisarc extended over the base of the hydranths. Hydranths partially retractile within the dilated summit of the branches.

*Gonosome.*—Gonophores (female?) oviform, pedunculate, springing from the sides of the branches.

*Locality.*—Station 151, off Heard Island; depth, 75 fathoms.

The specimen of *Eudendrium vestitum* contained in the collection forms a dense tuft of slender profusely branched stems fixed to the detached spine of an Echinus, and attaining a height of about three-fourths of an inch. The branches are given off at a high angle and are remarkable for the way in which their chitinous perisarc is continued over the base of the hydranths, so that these when contracted have the appearance of being partly enclosed in a chitinous cup which recalls in some respects the hydrotheca of the Calyptoblastea. Here, however—a condition which has its parallel in certain species of *Perigonimus* and in some allied forms—the perisarc is adherent for a greater