plane passing through any one pair of hydrothecæ is at right angles with the planes which pass through the pairs at each side of it.

Staurotheca dichotoma, n. sp. (Pl. XXXVI. figs. 1, 1a).

Trophosome.—Stem strongly fascicled towards its proximal end, becoming monosiphonic distally, dichotomously branched in a single plane, the branches mostly extended at their distal ends by a tendril-like prolongation, which when it reaches a neighbouring branch becomes attached to it by its extremity. Hydrothecæ deep, nearly cylindrical, slightly tumid below, orifice circular, entire.

Gonosome.—Gonangia elongated ovoid, narrowing below into a short peduncle which springs from a point just below a hydrotheca, and narrowing above into a short tubular prolongation, which is terminated by the small circular orifice.

Locality.—Station 145A, off Marion Island; depth, 85 to 150 fathoms.

This is a well-marked form, with a somewhat flabelliform habit, caused by its dichotomous ramification in a single plane, with the frequent inosculations of its strong and rather rigid branches. It attains a height of about three inches. The pairs in which the hydrothecæ are grouped are not regularly separated from one another by distinct constrictions, these occurring only at distant and uncertain intervals.

The tendril-like prolongations of the branches usually terminate in a little suckerlike disc, which attaches itself to some neighbouring branch. The point of its attachment may be the walls of a hydrotheca or some part of the surface of the hydrocaulus; while in some cases the tendril was seen to have entered the orifice of a hydrotheca.

A condition closely resembling this may be seen in certain other Hydroids, as in *Dictyocladium dichotomum* of the present Report (p. 77), and in *Thuiaria persocialis*, in which the branches of the colony are frequently connected to one another by similar bonds of union.¹

Dictyocladium, n. gen.

Name from δίκτυον, a net, and κλάδος, a branch, in allusion to the net-like disposition of the branches.

Generic Character. Trophosome.—Hydrocaulus consisting of a ramified monosiphonic tube, the branches given off in a single plane, united to one another in such a way as to form a network, and with joints at distant and unequal intervals. Hydrothecæ more or less adnate to the branches, on all sides of which they are disposed.

Gonosome.—Gonangia situated in the axils of the ramification.

¹ Journ. Linn. Soc. Lond. (Zool.), vol. xii. p. 271, pl. xvii. figs. 4-6.