## DESCRIPTION OF GENERA AND SPECIES.

## PLUMULARIDÆ.

Sub-family—ELEUTHEROPLEA.

Plumularia, Lamk. (in part).

Plumularia, Lamarck, Hist. Nat. des An. sans Vert., 1st ed., 1815. Aglaophenia, Lamouroux, Hist. des Pol. Coral. flex., 1816.

Plumularia flabellum, n. sp. (Pl. I. figs. 1-4).

Trophosome.—Colony attaining a height of about five inches, stem springing from a dense mass of entangled filaments, much branched, branches pinnately disposed, main stem and principal branches strongly fascicled, hydrocladia alternate, averaging about three-tenths of an inch in length; hydrotheca-bearing internodes separated from one another by a single internode destitute of hydrotheca. Hydrotheca adnate by its entire height to its internode; hydrothecal internode carrying, besides the pair of lateral nematophores, a single mesial nematophore, which springs from a point at some distance below the hydrotheca; intervening internodes carrying a single mesial nematophore.

Gonosome not known.

Plumularia flabellum is a very beautiful Hydroid. Its primary branches, which are of unequal length, and given off at irregular distances, are pinnately disposed and set with hydrocladia, while many of the primary branches also send off pinnately-disposed ramuli, which, like the primary branches, are themselves destitute of hydrothecæ, but carry pinnately-disposed hydrocladia. Hydrocladia are also borne by the main stem in the intervals of the branches. The pinnate disposition of all the branches and ramuli, and the fact of their lying in one and the same plane, confer upon the colony the flabelliform habit which has suggested the specific name.

This fine species was dredged off Marion Island, 26th December 1873, from a depth of 50-75 fathoms.

Plumularia laxa, n. sp. (Pl. I. figs. 5, 6).

Trophosome.—Colony attaining a height of about four inches, stem much and irregularly branched, rooted by a dense mass of entangled filaments, main stem and principal