

*huxleyi* confer upon this beautiful species an aspect which in gracefulness is perhaps not surpassed by any other Plumularian.

The hydrothecæ are remarkable from the way in which the orifice lies in a plane parallel to the axis of the supporting internode, instead of being, as in most cases, nearly at right angles to it. The internodes are very short, and the hydrothecæ are consequently brought unusually near to one another. The deep serration of the hydrotheca margin usual in the Statoplean section, here gives place to a shallow crenation, and the very long curved continuation of the mesial nematophore beyond the orifice contributes still further to the singular aspect of the hydrotheca. In the front of the hydrotheca is a strong parietal fold, having some resemblance to an anterior intrathecal ridge, while the true intrathecal ridge is nearly obsolete.

The stem and branches, notwithstanding their slenderness, are polysiphonic, the accessory tubes ceasing a little before the distal termination of the branches, which then become monosiphonic for the remainder of their course.

The gonophore can be seen through the walls of the gonangium to be encircled just below its summit by a wreath of refringent spherules, similar to those to which Kirchenpauer first drew attention in the gonophore of his macrorhynchial section of *Aglaophenia*. He believed them to be confined to this group, and incorrectly regarded them as ova.<sup>1</sup>

The phylactocarps are for the most part longer than the hydrocladia, and with the symmetrical arrangement of their parts are objects of great beauty, while they are full of interest in the evidence they afford of the extent to which various parts of an organism may become modified in order to fit them for a change of function.<sup>2</sup>

Mr. Busk has identified the present species with the *Plumularia huxleyi* of the voyage of the "Rattlesnake,"<sup>3</sup> and a comparison of the Challenger Hydroid with authentic specimens from the collection made during that voyage, has enabled me to confirm this determination.

Dredged at Station 188, September 10, 1874, lat. 9° 59' S., long. 139° 42' E.; depth, 28 fathoms; bottom, mud. Also at Station 190, September 12, 1874, lat. 8° 56' S., long. 136° 5' E.; depth, 49 fathoms; bottom temperature 23°·9 C; bottom, mud.

*Aglaophenia*, Lamouroux (in part).

*Plumularia*, Lamarck, Hist. Nat. des An. sans Vert., 1815.

*Aglaophenia*, Lamouroux, Hist. des Pol. Coral. flex., 1816.

*Aglaophenia macgillivrayi*, Busk, sp. (Pls. X. and XX. figs. 4-6).

*Plumularia macgillivrayi*, Busk, Voyage of the "Rattlesnake," vol. i. p. 400, 1852.

*Trophosome*.—Colony attaining a height of upwards of fifteen inches; stem fascicled,

<sup>1</sup> Kirchenpauer, *loc. cit.*, Band v., Ueber die Hydroidenfamilie Plumularidæ, p. 16.

<sup>2</sup> See general remarks on the morphology of the Phylactocarp, p. 10.

<sup>3</sup> Busk, Voyage of the "Rattlesnake," vol. i. p. 395.