

nematophore which lies below the hydrotheca is fixed, and resembles that of the ordinary Statoplean genera in all respects, except in the fact of its being quite detached from the hydrotheca, and in the presence of an imperfect septum close to its distal extremity, thus showing a tendency to the bithalamic form of the Eleutheroplean nematophore.

In all other important points the species on which the genus *Heteroplon* has been founded presents the essential features of the Eleutheroplea, with which, notwithstanding the presence of a fixed nematophore, it must be associated.

*Heteroplon pluma*, n. sp. (Pl. VIII. figs. 1-3).

*Trophosome*.—Colony attaining a height of about four inches; stems sparingly branched monosiphonic, springing in groups from a creeping stolon; hydrocladia about one-fourth of an inch in length, carrying a hydrotheca on every internode, a hydrotheca also carried by the stem close to the origin of every hydrocladium, stem with groups of two or three short internodes at irregular intervals. Hydrothecæ with entire margin, adnate to the rachis by about three-fourths of their height; lateral nematophores borne each on a short process of the hydrothecal internode; hydrothecal internode also carrying a single moveable nematophore at the distal side of the hydrotheca; mesial fixed nematophore close to the proximal end of the internode, in the form of a short, blunt, somewhat curved spine, with an oblique terminal orifice.

The hydrothecal pinnæ of the present species are closely set along the stem, and the general habit of the colony is more that of an *Aglaophenia* than of a *Plumularia*—a feature which is not without interest when viewed in connection with the presence of the fixed nematophore. Notwithstanding, however, the presence of a fixed nematophore, and the *Aglaophenia*-like habit of the species, the whole assemblage of characters is so decidedly that of the Eleutheroplean Plumularidæ, that there need be no hesitation in assigning it to this group.

The specimen was dredged at Station 162, April 2, 1874, off East Moncœur Island, Bass Strait, from a depth of 38 to 40 fathoms; bottom, sandy.

Sub-family—STATOPLEA.

Section—PHYLACTOCARPA.

*Acanthocladium*, nov. gen.

*Name from ἀκανθα, a thorn, and κλάδος, branch, in allusion to the spiny terminations of the branches.*

GENERIC CHARACTER. *Trophosome*.—Distal portion of branches destitute of hydrocladia, whose places are taken by a long, spine-like appendage on each internode.

*Gonosome*.—Phylactocarp replacing a hydrocladium, and consisting of a rachis with