

Polyplumaria pumila, n. sp. (Pl. IV. figs. 7, 8).

Trophosome.—Colony attaining a height of one or possibly two inches; stem strongly fascicled and giving off opposite pinnæ, which do not carry hydrothecæ, and are also fascicled; hydrocladia alternate, scarcely exceeding one-twentieth of an inch in length, borne on the main stem and primary pinnæ, each giving off its accessory ramulus from a point close to the base of the proximal hydrotheca; hydrothecal internodes continuous. Hydrothecæ cylindrical, rather distant, adnate only by their base to the rachis, and with the internodes which support them carrying besides the lateral nematophores a single mesial nematophore at the proximal, and another at the distal side of the hydrotheca.

Gonosome.—Gonangia pyriform, with obliquely truncated summit.

The specimens were fragmentary, and did not afford sufficient evidence of the size attained by the perfect colony; but it is probable that it reaches a height of between one and two inches. It is thus a very much smaller, and altogether more delicate species than the *Diplopteron insigne* of the "Porcupine," which attains a height of about six inches.

The accessory ramuli carry one, two, or three (possibly in some cases more) hydrothecæ, and have a rather long proximal internode, which is always destitute of hydrotheca.

I was unable to find in the present species the second pair of minute lateral nematophores which in *Polyplumaria (Diplopteron) insignis* is developed at the distal side of the hydrotheca. *Polyplumaria pumila* is further distinguished from *Polyplumaria insignis* by the more cylindrical form of the hydrothecæ, which do not present the slightly everted margin which gives a somewhat campanulate form to the hydrothecæ of *Polyplumaria insignis*. All the known species are doubly pinnate.

The gonangium is borne on a short cylindrical peduncle, and has a truncated summit and a short transverse segment at its very much contracted base.

All the species as yet discovered are inhabitants of the deeper sea zones.

Dredged at Station 75, July 2, 1873; lat. 38° 37' N., long. 28° 30' W.; depth, 450 fathoms; bottom, sand.

Heteroplou, nov. gen.

Name, from ἕτερος, dissimilar, and ὄπλον, a weapon, in allusion to the presence of two different kinds of nematophores.

GENERIC CHARACTER. *Trophosome*.—Hydrocladia pinnate; hydrothecal internode with the lateral nematophores moveable, and with a mesial fixed spine-like nematophore below the hydrotheca.

Gonosome not known.

The genus *Heteroplou* combines the characters of the Eleutheroplean with those of the Statoplean Plumularidæ. The hydrothecæ are flanked each by a pair of moveable nematophores of precisely the same kind as in the typical Eleutheroplea, while the mesial