

In all the specimens examined the phylactocarps were enveloped in a glairy mass, insoluble in boiling water, but completely soluble in a solution of caustic potash. I have no doubt of this being the remains of the protoplasmic contents of the nematophores, and that in the living state it had been emitted as pseudopodial outflows from the cup-shaped nematophores here so largely developed.

I believe that the present species must be identified with the *Aglaophenia (Lyto- carpia) secunda* of Kirchenpauer,<sup>1</sup> though in some points, especially in the form of the hydrotheca and of the comb-like phylactocarps, it can scarcely be brought into complete accord with Kirchenpauer's figures. Kirchenpauer's specimens were obtained in the South Sea, the China Sea, and the Pelew Islands. From the last-named locality they were brought by Semper, who, according to Kirchenpauer, regarded the species as one of those so much dreaded by the natives on account of its stinging properties.

The limits of the plate would not allow a figure to be given of more than a portion of the entire Hydroid. The Challenger collection contains a specimen which is more than two and a half feet in length.

Dredged off Zamboanga, Philippines, 30th January 1875, from a depth of 10 fathoms.

*Lyto- carpus spectabilis*, n. sp. (Pl. XV.).

*Trophosome*.—Colony attaining a height of five inches; main stem strongly fasciated sub-dichotomously branched, the branches closely set with opposite primary pinnæ, which are fasciated at their origin, and destitute of hydrothecæ, but which carry the alternately disposed hydrocladial pinnæ; hydrocladia about one-tenth of an inch in length, borne also by the main stem in the intervals of the primary pinnæ. Hydrothecæ wide, with undulated margin, an anterior parietal fold, and a very short intrathecal ridge; mesial nematophore thick, adnate to the hydrotheca walls for somewhat more than half their height, and then continued as a strong, free, spine-like process, which slightly overtops the hydrotheca margin, and has a lateral as well as a terminal aperture; lateral nematophores spine-like, conical, overtopping the hydrotheca.

*Gonosome*.—Phylactocarps given off at intervals among the hydrocladia, each replacing a hydrocladium, and consisting of a jointed rachis composed of some eight or nine internodes, the proximal internode carrying an ordinary hydrotheca, and each of the following internodes sending off two opposite, strong, conical spine-like processes, each with a terminal and a lateral orifice. Gonangium nearly sessile, borne by the modified second internode of the rachis.

*Lyto- carpus spectabilis* is a beautiful bipinnate form, and presents in its details several features of interest. The margin of the hydrotheca, instead of presenting the serrated condition usual among the phylactocarpal *Plumularidæ*, is merely sinuous, while the

<sup>1</sup> Kirchenpauer, *loc. cit.*, p. 35, pls. i.-iii. fig. 15.