

The genus *Cladocarpus* was founded for a Hydroid obtained in the eastern part of the North Atlantic, during one of the expeditions of H.M.S. "Porcupine."<sup>1</sup> The same species also occurs in the collection of the Challenger. The essential characters of the genus are found in the nature of the phylactocarp, which differs from that of every other phylactocarpal Plumularidan in the fact of its not being a transformed hydrocladium, but a special appendage which springs from the hydrocladium. The hydrocladium itself has undergone no essential modification, the greatest change which in any case takes place consists in a greater or less diminution of its length, caused by a reduction in the number of its internodes and hydrothecæ.

In all the species of *Cladocarpus* at present known, the phylactocarps are twig-like appendages, more or less ramified, destitute of hydrothecæ, but richly provided with more or less modified nematophores. In every instance known they spring from a hydrocladium immediately behind its first or proximal hydrotheca, and the gonangia they are destined to protect are borne either by the phylactocarp itself or by the common stem close to the origin of the hydrocladium from which the phylactocarp springs.

Besides *Cladocarpus formosus*, the original species of the "Porcupine," the Challenger collection contains another fine species. Three other species of the genus are among the Hydroids dredged during the exploration of the Gulf Stream by the United States Coast Survey,<sup>2</sup> while to the same genus I must refer a Plumularidan dredged by G. O. Sars in the North Atlantic, and described by him under the name of *Aglaophenia bicuspis*.<sup>3</sup> They appear to be all inhabitants of deep water.

*Cladocarpus pectiniferus*, n. sp. (Pl. XVII.).

*Trophosome*.—Colony attaining a height of about six inches; stem slender, monosiphonic, simple, springing from a tuft of tubular filaments; hydrocladia alternate, distant, attaining the length of an inch. Hydrothecæ distant, deep, narrow, nearly cylindrical, with entire margin, and destitute of intrathecal ridge; mesial nematophore small, quite detached from the hydrotheca; lateral nematophores cylindrical, overtopping the hydrotheca.

*Gonosome*.—Phylactocarp springing from the proximal internode of the hydrothecal ramulus, and consisting of a very short stem, which immediately divides into two jointed and pectinated branches which carry the gonangia on their sides.

The present species is closely allied to *Cladocarpus dolichotheca* and *Cladocarpus ventricosus* of the Gulf Stream exploration. From both these species it differs in the single bifurcation and pectinated branches of the phylactocarp, and in the fact that the

<sup>1</sup> Report on the Hydroids collected during the Expeditions of H.M.S. "Porcupine." *Trans. Zool. Soc. Lond.*, 1873, vol. viii, part 8.

<sup>2</sup> Hydroids of the Gulf Stream, p. 49, pls. xxx.-xxxiii.

<sup>3</sup> G. O. Sars, *loc. cit.*, p. 98, tab. ii. figs. 7-10.