

the North Atlantic. Heller¹ has described several new Plumularidæ from the Adriatic. To Professor Millen Coughtrey,² of Otago, we owe descriptions of New Zealand species, and to Surgeon James Armstrong,³ of the Indian Medical Department, descriptions of species collected by him on the eastern shores of India.

Besides the expedition of the Challenger, other recent exploratory expeditions have largely added to our knowledge of this group. The exploration of the Gulf Stream, by the United States Coast Survey,⁴ has brought to light many new and beautiful forms, the voyages of the "Porcupine"⁵ have made us acquainted with new species from the North Atlantic, and the explorations by the United States Coast Survey Steamer "Blake" in the Carribbean Sea and along the Atlantic Coast of the United States have brought to our knowledge the occurrence in those regions of a rich plumularian fauna, among which are several new and highly interesting forms.⁶

To the number of species thus determined and described the collection of hydroids brought home by the Challenger makes a large and valuable addition. Of this collection the family of the Plumularidæ forms a considerable proportion. Among these, four species, namely, *Acanthella effusa*, *Acanthocladium huxleyi*, *Aglaophenia macgillivrayi*, and *Lytocarpus longicornis* had been already described by Busk from the voyage of the "Rattlesnake," and one, namely, *Lytocarpus secundus*, by Kirchenpauer, from specimens brought home by Semper from the Pelew Islands. The Challenger also obtained from dredgings off Bermuda a species (*Aglaophenia ramosa*) already described in the Report on the Hydroida of the United States exploration of the Gulf Stream.

The only form which can be identified with a species occurring in the European seas is *Cladocarpus formosus*. This species was dredged by the "Porcupine" from the seas lying to the north of Scotland, and by the Challenger from the seas of Japan. The species is a well-marked one, and the great distance between the Atlantic and Pacific stations without any intermediate station having been discovered, is a remarkable and significant fact.

But by far the greater part of the Plumularidæ brought home by the Challenger consists of species new to science, while among these a considerable number must be assigned to

¹ Prof. C. Heller, Die Zoophyten und Echinodermen des adriatischen Meeres, Wien, 1868.

² Millen Coughtrey, Notes on the New Zealand Hydroida. *Journal of the New Zealand Institute*, vol. vii. 1874.

³ Description of some new species of Hydroid Zoophytes from the Indian Coasts and Seas, by Surgeon James Armstrong, Marine Survey Department. *Journal of the Asiatic Society of Bengal*, vol. xlvi., 1879.

⁴ Geo. J. Allman, Report on the Hydroida collected during the exploration of the Gulf Stream, by L. F. De Pourtalès, United States Coast Survey. *Mem. of Mus. Comp. Zool. at Harvard College*, vol. v., No. 2, 1877.

⁵ Geo. J. Allman, Report on the Hydroida collected during the expeditions of H.M.S. "Porcupine." *Trans. Zool. Soc. Lond.*, 1873.

⁶ Reports on the results of dredging under the supervision of Alexander Agassiz in the Caribbean Sea in 1878-79, and along the Atlantic Coast of the United States during the summer of 1880, by the U.S. Coast Survey Steamer "Blake," Commander J. R. Bartlett, U.S.N., commanding. Report on the Acalephæ by J. Walter Fewkes. *Bull. Mus. Comp. Zool. at Harvard College*, vol. viii. p. 127.