

SECTION II.

THE GENUS BOLINA AND ITS SPECIES; WITH REMARKS ON ALLIED GENERA.

The genus *Bolina* was first described by Mertens, from two species observed in the Pacific and in Behring Strait.¹ It is considered as differing from other genera of Ctenophoræ by the great development of the mantle lobes, and by the circumstance of its eight rows of locomotive flappers not extending beyond the body itself; and though this characteristic is not strictly correct in as far as I shall be able to show that the ambulacral rows are not strictly circumscribed within their apparent limits, the genus itself is a very natural group, which ought to be generally acknowledged. I have already stated (page 201), that the genus *Bolina* differs so far from *Mnemia* as to constitute a distinct family, the lobes of the spherosome being only actinal prolongations of the anterior and posterior spheromeres, while in *Mnemia* and *Aleinoe* they arise as lateral folds between the lateral and the anterior and posterior spheromeres. I have also pointed out generic differences between *Bolina elegans* *Mert.* and *Bolina septentrionalis* *Mert.*, which will require their separation; but I would retain the name of *Bolina* for the type to which *B. septentrionalis* *Mert.*, our *B. alata*, and Sars's *Mnemia norvegica* belong. It is difficult to give a correct idea of the form of these animals, as they assume most diversified aspects in their various movements, and in the different attitudes in which they have to be considered. Having had ample opportunities repeatedly and for a longer time to examine a new species of this genus which I have kept alive, at intervals, for months, I shall attempt to give a more complete idea of its remarkable structure, which may throw some new light upon the organization of the whole family, and also upon the natural relations which exist between its different genera. I saw this new animal for the first time with Mrs. Arnold, of New Bedford, who had preserved it alive for my examination, in December, 1848. I myself afterwards found large numbers of specimens during the months of March and April, and even as late as June, in various parts of Boston Bay. I now know that it may be found through the whole summer, not only along the coast of Massachusetts and Maine, but even as far north as Labrador. Dr. A. A. Gould, however, had already noticed this species as an inhabitant of the shores of Massa-

¹ This genus is characterized in a remarkable paper by Mertens on Beroid Medusæ, published in the Transactions of the Imperial Academy of Sciences, VOL. III.

ences, in St. Petersburg, in the second volume of the sixth series, 1833. The species described are chiefly from the Pacific.