

ramifications. But while the peripheric part of the chymiferous system is thus limited, its central part is more fully developed than in any other Ctenophoræ; the main trunks and their eight forks are very large, and the axial funnel is equally wide. The most conspicuous structural feature of the Cydippidæ consists in the presence of *two extensive tentacular organs, one on each side*, attached at the bottom of a deep sack, along the proximal surface of which extend *two large parallel chymiferous tubes*, homologous to the one simple interambulacral tube of *Bolina*, already mentioned above. The chief differences in the distribution of the chymiferous system of the Beroidæ and Cydippidæ consist, therefore, not only in the limitation of its peripheric branches, the absence of an oral tube, and the broad development of its centre, but also in the presence of a double interambulacral or tentacular tube on each side. The ovaries and spermaries are very small in comparison to those of the Beroidæ, and the circumscribed area of the abactinal pole, covered with vibratile cilia, is simply limited by a narrow ridge. The deep and wide sac containing the tentacular apparatus, and the bilateral disposition of the main trunks of the chymiferous tubes, combined with their ample dimensions, have a powerful influence in controlling the form of these animals. But we shall consider this point more fully when discussing the characters of the different families of Cydippidæ.

The sub-order of the Mnemiidæ is at once distinguished by the *unequal development of the ambulacral tubes* and of the *locomotive flappers*, and by the *presence of two more or less extensive lobes*, formed by a peculiar expansion of the spherosome. Of the eight ambulacral tubes there are four, the two lateral pairs, which are antitropically symmetrical to one another and identical in form and extent with one another, but differ greatly from the four others, the anterior and the posterior pairs, though these are also symmetrical and identical among themselves. When contrasted with one another, these two sets of tubes present very peculiar combinations. In the first place, the anterior pair, which faces the posterior pair, or vice versa, is separated from the latter by two pairs of lateral tubes, so arranged, however, that one tube of each pair is on one side, and the other tube of each pair on the other side, of the coeliac diameter or plane, which may divide the anterior as well as the posterior pair of tubes into equal halves; and not so placed that one pair would be on one side and the other pair on the other side, though at first sight it would seem as if four pairs of tubes were placed crosswise to one another. A correct appreciation of the peculiar symmetry of the Ctenophoræ is so difficult, that, even at the risk of being tedious, I must try to make clear the arrangement of these tubes by another explanation. Calling one side the right, the other the left side, and one of the connecting surfaces the anterior and the other the posterior, we find that one of the tubes of the anterior pair