

that some Ctenophoræ have a mantle, which is wanting in others, is incorrect. As we shall see in the sequel, the lobe-like appendages of the anterior and posterior spheromeres of some representatives of this order are direct prolongations of the spherosome, over which the rows of locomotive flappers are extended, and to which they bear the same relations as in the more spheroidal or more cylindrical forms. The chymiferous tubes also extend uninterruptedly into these lobes, in the same manner as they extend into the peripheric parts of the plainest species. So that, whatever be the general form of the spherosome, it is one and the same body in all Ctenophoræ. Again, whatever be its form and size, the Ctenophoræ have all a compressed digestive cavity, trending in the same plane as the circumscribed area of the abactinal pole, and at right angles with the intermediate chymiferous tubes; and in all, that cavity is broadest towards the mouth and tapers in the opposite direction, its lateral walls being flattened against one another when it is empty. The narrow abactinal opening of the digestive cavity opens directly into the centre of the chymiferous system, which in all Ctenophoræ has a very peculiar mode of ramification, the general outline of which agrees in all, though marked peculiarities may be noticed in its details in different families. The most striking and characteristic features of this chymiferous system, when contrasted with that of the other Acalephs, consist in its bilateral symmetry, the axial funnel-like prolongation of its central portion, into which the digestive cavity opens directly, and the presence of two asymmetrical openings at the abactinal pole, through which it discharges its contents.

Immediately beyond the abactinal opening of the digestive cavity there arise two main trunks of the chymiferous system, in opposite directions one from the other and at right angles with the plane of the digestive cavity; so that the main stems extend right and left, and almost horizontally, into the spherosome. Before dividing, each trunk sends off a vertical branch along the adjoining sides of the digestive cavity, and then divides into two nearly horizontal branches, which soon divide again; so that each trunk has four nearly horizontal or slightly inclined forks extending to the periphery, where they open into as many vertical branches, which converge in opposite directions toward the actinal and the abactinal poles. The further course of these vertical peripheric branches varies with different families; but, as far as I can ascertain, all Ctenophoræ have a chymiferous tube upon each flat side of the digestive cavity; in all, the two main trunks divide into four forks; and these eight forks open in all into eight vertical peripheric chymiferous tubes; and in addition to these, there are, in some families, other vertical and lateral chymiferous tubes arising between the lateral horizontal forks of the main trunk, which again vary in their ultimate relations in different families, lateral tentacles existing in some, and being absent in others. All these tubes, whatever be their