

to the full understanding of the internal structure of this animal and the correct appreciation of all its organs to form a correct idea of their respective position, I feel compelled to enter into some tedious details respecting this slight variation from the spherical form; for, though scarcely appreciable, it has a direct bearing upon the connection of all the organs, which, upon close examination, are found to preserve, throughout the order of Ctenophoræ, a constant relation to this apparently insignificant difference between the three diameters of the body,—so much so that these globular animals are as truly bilateral in the arrangement of all their parts, as any other species of the whole group.

The mouth opens transversely; and there is upon the opposite pole of the sphere an oblong, narrow, circumscribed area, placed also in the same direction, transversely to the greater diameter. The two tentacles with their fusiform sockets are placed at right angles with the transverse split of the mouth and the opposite oblong area, the tentacles being in the diacœlia diameter, the mouth and the area in the cœlia diameter, and the main axis of the digestive cavity trending vertically between them. The rows of locomotive flappers alternate, two and two, with these four radiating directions. So that there are four rows on one side of the plane passing through the tentacles, and four on the other; and also four on one side of the plane passing through the mouth and the opposite area, and four on the other,—no one being placed either in the prolongation of the mouth or in that of the bases of the tentacles (*Pl. II<sup>a</sup>. Figs. 20, 21, 22, and 23*).

Owing to the compression of the body, and the difference in the curvature of its actinal and abactinal sides, the eight rows of locomotive flappers have their upper and lower halves bending in a somewhat different manner. Again, two pairs, perfectly equal, inclosing the base of the tentacles, stand in antitropic relation to one another along the prominent side; while two other pairs, inclosing the prolongation of the angles of the mouth and the circumscribed area at the opposite pole, extend in a similar manner along the flattened side. The consequence of this arrangement is, that each side of the body has two equal rows of locomotive fringes placed in a symmetrical manner opposite each other from side to side and crosswise, those of opposite sides being identical, but differing from those which stand at right angles with them.

Having thus ascertained that the body of this animal is neither vertically nor transversely circular, and that there is a medial axis with reference to which the arrangement of all the parts is regulated, the question at once arises how we should consider these diameters: whether the mouth should be placed upward or downward, or whether it should be considered as the anterior extremity, and what are the relations of the sides. As with the other Medusæ, whatever view we take of the subject, when we compare these animals with either Polypi or