

and along the margin of which the horizontal tubes from the stomachal tube are seen to extend as far as the outer margin of the lateral auricles, without entering into direct communication with the tubes of the tentacular bulb. (See Plate VIII. *Fig. 6* of my paper in the *Memoirs of the American Academy.*)

Parts of the walls of the cells surrounding the central chymiferous cavity, and the main trunks which arise from it, are readily distinguished as fibres, which may be seen to shorten or elongate, and enlarge or contract their cavity. The funnel enlarges on the abactinal side of the body into two distinct branches, forming two bulbs, as in *Pleurobrachia*, with oblique openings forward and backward, on the sides of the circumscribed area, and with the black speck in the centre. This black speck is covered by a transparent cap, like that of *Pleurobrachia*. What I have formerly described as a ring, extending in the form of narrow tubes along the margin of the circumscribed area, is nothing but the optical effect of the thickening of the rising edge which encircles the abactinal area. As to the eight narrow bands converging from the summit of the ambulacral combs and supposed to be tubes emptying into this ring, I have ascertained that they are not hollow, but, like similar bands in *Pleurobrachia*, the direct prolongation of the locomotive flappers fading away as they converge toward the abactinal pole. Their relative position, when converging toward the abactinal pole, differs considerably in the different pairs, the two anterior and the two posterior ones being very near together, almost in the longitudinal axis of the body, while the two lateral pairs are at least as far apart from each other as they are from the anterior and the posterior pairs. The ambulacral tubes are not continuous under these eight bands, and do not communicate here with the central chymiferous cavity; but they communicate with it on the actinal side of the body through the tube encircling the mouth, which directly anastomoses with the lateral ambulacral tubes and indirectly with the anterior and the posterior ambulacral tubes, through the marginal recurrent tube of the large lobes. The currents arising from the main chymiferous cavity run therefore chiefly through the ambulacral tubes, from the abactinal toward the actinal side of the spherosome, with a small eddy toward the circumscribed area. In the prolongations of the anterior and posterior ambulacral tubes the currents may run to and fro from the tube of one of the spheromeres to that of the other, or directly back to the central cavity, or pass through the recurrent marginal tubes of the lobes into the lateral tubes. In the prolongation of the lateral ambulacral tubes the current may pass into the oral tube through the oral anastomoses, or into the large lobes through their marginal tubes; but the current of the coeliac tubes may also run from the main cavity to the sides of the mouth, and thence through the oral anastomoses into the ambulacral tubes. In the tentacular tubes