

which the tentacles may be withdrawn, but simply two narrow tubes arising close together from the main chymiferous cavity, a little outside of the tubes of the digestive cavity, and following the course of the latter to the tentacular bulb. As, on account of the lateral compression of the body, the tubes of the digestive cavity and those of the tentacular bulb are brought into close proximity, they appear, at first sight, to constitute a single cord on each side; but in reality that cord consists of three tubes running in the same direction, which, being close together, are very easily mistaken one for the other, and whose natural connections are still more difficult to ascertain, as the bulb of the tentacle exactly covers the termination of the tube resting immediately upon the digestive cavity and extending to the margin of the mouth. But whenever, by an oblique movement of the margins of the mouth, or by the dilatation of the digestive sac one way or the other, the coeliac tube is moved out of its vertical course, the relative position of the bulb of the tentacular tube with reference to the coeliac tube is changed, it may be seen how the tube following the walls of the digestive cavity divides into two horizontal branches, extending in opposite directions along the lateral margins of the mouth, forward and backward, at right angles with the tube from which they arise. As these branches meet the actinal prolongations of the lateral ambulacra, a direct communication is established between the peripheric course of the ambulacral tubes and the main chymiferous cavity, and this anastomosis very likely gives passage to so much of the circulating fluid as does not return through the same tubes through which it is propelled from the main trunks of the chymiferous system. As for the two small tubes which extend to the bulb of the tentacles, they arise from the same lateral bulging of the main chymiferous cavity from which the lateral tube of the stomach originates, but they arise more vertically.

The greater simplicity of the tentacular bulb of *Bolina*, when compared to the large socket and complicated tentacular apparatus of *Pleurobrachia*, has reference, no doubt, to the shortness of the tentacles, and to the circumstance that they are not protruded to any length beyond the margin of the mouth, but simply extend in a winding course forward and backward along that margin, forming, when contracted, a compact bunch, and appearing, when expanded, like a disorderly brush of irregularly curled threads tied together on one side.

The best attitude in which to study the ramifications of the coeliac tubes on the side of the digestive cavity, or rather along the outer margin of the mouth, and to ascertain their position with reference to the tentacular bulb, which lies farther outward, is when the animal is turned mouth upward with its large lobes fully expanded. The mouth then appears like a narrow rim in the centre of the prominent gelatinous mass, encircled by large lobes, which constitutes a sort of compressed isthmus trending backward and forward on the actinal side of the body,