

- leaves only tubes for the peripheric circulation of the fluid contained in it. The vertical prolongation f of this main cavity extends in the direction of the circumscribed area, and branches into two forks f^1, f^2 , at its termination. The other tubes arising from it are the two main chymiferous horizontal tubes e, e , with their branches g, g^1 , and their eight ambulacral tubes i^1 to i^8 , which open into the vertical tubes l^1 to l^8 . The tubes r, r^1 , which follow the walls of the digestive cavity, arise also from it near the main horizontal trunks; and from these latter arise the tubes of the tentacular apparatus a, a .
- e, e , the main horizontal trunks of the chymiferous tubes, from which arise the eight radiating branches opening into the ambulacral tubes.
- f , the vertical or axial funnel-like prolongation of the main cavity of the body. f^1, f^2 the two forks of that funnel. It should be remarked, that the direction of that fork is in the plane of the longest diameter of the circumscribed area, which is also the direction of the longitudinal diameter of the mouth.
- g , the roots of the tentacle; g^1 the edge of the ridge of the tentacular base; g^2 the side of the ridge.
- h, h^1, h^2 .— h designates the whole tentacular apparatus with all its complicated parts, h^1 being the tentacular apparatus of one side, and h^2 the tentacular apparatus of the other side. These numbers are appropriated to the same apparatus in every figure, whatever may be the position in which the animal is observed. It will be noticed, that these tentacles are placed at right angles with the plane of the mouth and of the circumscribed area.
- i , the eight horizontal tubes of the chymiferous apparatus which reach the vertical tubes, following the vertical rows of locomotive flappers. In all the figures the horizontal tubes are numbered in the same way, beginning with No. 1 and ending with No. 8. No. 1 is assigned to that tube which extends to the vertical row in sight on the left hand when the mouth is turned upward and the tentacular apparatus appears symmetrically on the right and on the left; so that i^1, i^2, i^3, i^4 are the four horizontal tubes of one half of the body, and i^5, i^6, i^7, i^8 are the four horizontal tubes of the opposite half. And if the view I have taken of the diameters of these animals is correct, that the longitudinal diameter of the mouth divides the body into symmetrical halves, one to the right and the other to the left, the tubes i^1 to i^4 are the tubes of the anterior half, and the tubes i^5 to i^8 are the tubes of the posterior half, and the tubes i^1, i^2, i^3, i^4 are the tubes of the left side, and the tubes i^5, i^6, i^7, i^8 are those of the right side, or *vice versa*, as we can only establish these general relations between the different diameters without determining strictly which is the anterior and which is the posterior edge of the mouth. It is probable, however, that no distinction is intended in the structure of these animals, as they are capable of assuming inverse positions, mouth upward and mouth downward, in which case the edges of the mouth appear in an inverse position.
- j , the tentacular socket or cavity in which the tentacular apparatus is suspended, and to the inner wall of which it is attached. This cavity opens at j' , and through this opening the tentacle may be extended; but it is also capable of such contraction as to be entirely withdrawn within the cavity j .
- j' , opening of the tentacular cavity, through which the tentacle is protruded.
- k , the main stem of the tentacle from which the fringes arise.
- k^1 , fringes of the tentacles which arise uniformly upon the same side, the outside, of the tentacle, so that they are stretched in opposite directions from the two sides. But this direction is constantly modified in the various attitudes and the various degrees of elongation of the tentacles, as these are capable of being twisted upon themselves; so that the fringes may appear as forming a spiral upon the main stem, or may be stretched in all possible directions, in their more or less extensive elongations. However, at the base they arise strictly in opposite directions.
- l, l , the vertical rows of locomotive flappers, of which there are eight of uniform length in Pleurobrachia. These vertical rows are numbered in the same manner as the horizontal tubes which open into the vertical chymiferous tubes accompanying the flappers, and these numbers correspond in the different figures, in the same manner as in the tubes; l^1 to l^4 being the rows of one extremity, and l^5 to l^8 those of the other extremity, and l^1, l^2, l^3, l^4 being the rows of one side, and l^5, l^6, l^7, l^8 the rows of the other side.
- m , the radial cellulo-motor system around the corners of the mouth.
- m^1 , the oral motor system.
- m^2 , the radial system in the tentacular plane.
- m^3 , the lateral system where it passes from the actinal end of the tentacular sockets to the periphery of the body.
- n , the interambulacral motor bands in the plane of the digestive cavity.
- n^1 , the same as n , but in the tentacular plane.