interambulacral expansion is somewhat wider, in consequence of which the outline of the animal appears oval, the sides being more or less flattened.

The cellular structure of the spherosome is easily seen, and, by following the fibre-like outlines of their angles, the arrangement of the cells may be traced without much difficulty. It is much more simple and uniform than in either Pleurobrachia or Bolina, and, owing to the total absence of tentacles and tentacular tubes, no trace of the complicated arrangement of motory cells, which in Pleurobrachia constitute the lateral system, is visible. The radiating system is most prominent, and, in fact, forms the chief bulk of the body. Its general arrangement is that described in Pleurobrachia, with this difference however, that, owing to the much greater elongation of the vertical diameter of the body, the cells of which it is composed form long rows parallel to one another, converging only toward the abactinal pole, but remaining straight on the actinal side. The interambulacral system is the least developed, and, far from forming the doubly convex vertical bands of transverse cells which we have seen in Pleurobrachia, it consists only of a few cells extending between the ambulacra. Hence the marked difference from Pleurobrachia in the outline of the body when seen from either the actinal or abactinal side, the surface of the interambulacra appearing concave (*Fig.* 99, p. 283), unless the body be fully distended, while the ambulacra are raised above the general level of the surface. In Pleurobrachia the reverse is the case, in consequence of the great development of the interambulacral system. But this contrast between the interambulacra and the ambulacra is only striking along the sides, for toward the abactinal pole, and especially beyond the extent of the rows of locomotive flappers, the peripheric system is interwoven with the radiating system, very much as in Pleurobrachia, and the surface of that region of the body is more even. The lateral interambulacra, however, are here somewhat prominent, bulging above the level of the ambulacra about as much as in Pleurobrachia. On the actinal side and beyond the extent of the rows of locomotive flappers, the peripheric system is again interwoven with the radiating system and powerfully developed; and, as the spheromeres do not converge and are not arched on the actinal pole, but extend in a straight course to the edge of the mouth, this part of the body is capable of the most varied and extensive motions. Notwithstanding the prominence of the ambulacra, the ambulacral system of motory cells is not more developed than in Pleurobrachia.

These structural details may explain the characteristic movements of Idyia. The weakness of the interambulacral system forbids a close approximation of the ambulacra, so that the vertical diameter is not reduced by its contractions, but by the contractions of the radiating system, which may go so far as to bend the actinal side of the body inward and reduce the length of the animal in a most remarkable