

naked, being a simple perforation through the outer and inner walls, without any folds or appendages. From the mouth to the base of the body there is one uniform cavity (*d*) without fold or constriction, or any sign of a distinction between a stomach and a circulatory chamber. When the animal is in full activity and extension, the outer wall (*Fig. 10, a*) of the body is moderately thick and forms an even layer from the mouth to the base; but where it forms the outer wall of the tentacle it is very thin, and more like a delicate epidermis, excepting at the tip of these organs where it is very thick, and constitutes the bed of the lasso-cells. The inner wall (*Figs. 10 and 10<sup>b</sup>, b*) is almost three times as thick as the outer one, and, like the latter, it forms an even layer from the top to the bottom of the body, the only diversion being its lateral projections into the axis (*b<sup>1</sup>*) of the tentacles. When the body is in a swollen and partially retracted state (*Fig. 10<sup>b</sup>*) the proportionate thickness of the walls changes considerably, but the foregoing description refers to the normal, and most frequent state. In the tentacles the inner wall occupies nearly their whole bulk, and there, as in the body, is composed of only a single layer of cells. (*Figs. 10<sup>b</sup> and 10<sup>c</sup>, b<sup>1</sup>*.) We have not been so fortunate as to see the medusoid state of this animal.

*Histology.*—The cells of the outer wall have not been seen, nor does any thing in the wall indicate that it has an organic structure, except at the globular tip of the tentacles, where it is crowded with lasso-cells. The cells of the inner wall (*Fig. 10<sup>b</sup>, b*) are disposed in a single layer; they have rounded ends outwardly and inwardly, and vary in breadth according to the degree of contraction of the body. In the tentacles they are also in a single layer (*Figs. 10<sup>b</sup> and 10<sup>c</sup>, b<sup>1</sup>*) and have more or less of a truncate conical shape, the end of one serving, as it were, for the base of the next beyond. There are only three or four of these cells in each tentacle, a peculiarity not to be observed among any of the other Hydroids.