on every marginal segment; the oculiferous lobes are as broad as they are long; the plicated concentric folds cover fully one half of the diameter of the disk, and extend very closely to the borders of the digestive cavity; the space occupied by the branches of the forked radiating canals extends as far along the circular canal as the length of the branches themselves, and therefore has the form of a triangle with a broad base; the ponch beneath the sexual organs is proportionately twice as broad as in the last stage, and projects much farther upwards and toward the centre of the disk; and, finally, the lips of the proboscis are very deeply fringed, and the furrows in the prolongations of the corners are very deep.

Such, in general terms, are the characteristics of this phase, which we now proceed to describe in detail. The lips of the proboscis (Pl. XI', Fig. 5 at) are not only very thin and flexible, but they also begin to show the tortuous plications so characteristic in the adult. The fringes (Figs. 5  $\alpha$  and 6  $\alpha$ ) stretch in one unbroken line, gradually diminishing in length from the ends of the prolongations half way to the base of the same; they are mere digitate diverticles of the outer wall, and have the form of hollow tubes (Pl. XP. Fig. 19); and in the wall, especially at the tip, are imbedded numerous groups of lasso-cells  $(a \ b \ c)$ . inner surface of the proboscis is lined by exceedingly minute vibratile cilia (Pl. XII. Fig. 6 c), which are very difficult to detect even with a power of five hundred diameters; they are as long as the thickness of the two walls (Fig. 6 a b) which underlie them. No new branches have been added to the forking canals; but the three branches on each side of the main channel have begun to anastomoze among themselves, and a few anastomozing channels have developed at the base of the oculiferous lobes, and extend a short distance toward the centre of the disk. have more the character of lacuna (Pl. XP. Fig. 29 c1) than canals, and are so intimately interwoven with the marginal canal, or that part of it (Pl. XI'. Fig. 5 c4) which diverts into the oculiferous lobes, that they may be said to form, at least in a certain degree, a part of the circular chymiferous system. Beside these, we may see also, between the forks and the simple canals (Pl. XI'. Fig. 5 c), several centripetal prolongations from the marginal canal (me), which, in time connecting with the forked tubes, will increase their peripheric branches. In the specimen used for this illustration there was an abnormal development of a canal  $(e^i)$ , which ran from near the outer end of the simple canal (c), obliquely outward and across to the exterior branch of the next forked radiating tube. That the tentacles are not always strictly in a single row, may be clearly shown by an illustration of one of their phases of development. The view (Pl. XI. Fig. 13) which we present for this purpose is partly sectional; that is, the upper edge of the interlobular sockets is left out, and the bases of the tentacles are exposed, in order to exhibit the connection of the walls of one of them with those of the others. Nearest the eye