in those medusoids which have set free nearly all their young (Fig. 14), removes all possibility of mistake.

At birth, and for a short time before that period, the tentacles of the lower row are very differently proportioned from those of the adult, both in regard to the general contour, and in the relative thickness of their walls. In the adult stage, as we have shown on a former page (p. 251), the tentacles gradually taper to a rounded or slightly swollen tip, and are four-sided, but at birth they are round, and although they taper like those of the adult, yet, at the end, they terminate in a large globular expansion (Fig. 26, c), which is densely crowded with lasso-cells. This globular tip has nearly twice the diameter of that portion of the tentacle which is immediately below it. The outer wall (a) of the tentacles has about one sixth the thickness of the inner one (b), and is exceedingly transparent, so that it has not been possible, with the microscopic powers which we had at hand when these observations were made, to see the nature of its cellular structure.

Proles medusoidea. - The peduncle, which forms the basis of each group of medusoids, has hardly begun to bud from the convex upper walls of the stomach, before the young medusoids appear. At first, each medusa-bud is a low projection (Figs. 3 and 3") of the double wall (a b) of the peduncle, and embraces a broad cavity (c) which is in direct communication with the chymiferous channel of the latter. This prominence increases in height, until it is considerably higher than broad, before any change takes place in the relation of the outer and inner walls Then the outer wall grows faster than the inner one, and the (Figs. 4 and 4a). two consequently become separated and leave, between them, a space (Pl. XXII. Fig. 1, e) which is filled by a substance which, in the female, we have called the germ-basis,2 and, in the male, the spermatic mass. The inner wall, in the meanwhile, becomes cup-shaped at the end, next the germ-basis, by rising in the form of a rim (Fig. 1, b) closely pressed against the outer wall (a). The edge of the cup rises very rapidly, so that its edge (Pl. XXIII. Figs. 5 and 5°, b2) nearly reaches the end of the medusoid before any other change occurs in the development of the embryo. this way the germ-basis becomes almost completely enclosed in double walls (Fig. 5. This new inner wall (b) is nearly twice as thick as the outer one (a), and comes to a sharp edge (62) at its outer end, where it forms the rim of the Immediately after this the bottom  $(d^1)$  of the cup rises gradually, as if

<sup>&</sup>lt;sup>1</sup> There are certain phases in the development of the medusoids of Thanmoenidia spectabilis which resemble those of Parypha crocca, and on this account the figures of the former may be used to illustrate the latter.

<sup>&</sup>lt;sup>2</sup> We have already described, on a previous page (p. 254), the nature of the substance which fills this space, and, subsequently (p. 255), shown why we have given it the name of the germbasis.