

in a lateral direction; but in profile the upper and lower sides are only slightly convergent outward. They are not attached to the disk at right angles to its surface, but obliquely and by the upper side, so that the base of attachment is as broad centrifugally as transversely. By this mode of attachment the peduncle projects outward (*Fig. 33 h*), and not downward, and turns up at the end, so that the eyes (*Fig. 34 h*) may survey the upper surface of the disk.<sup>1</sup>

The most distinctly marked features in the next stage which we have observed are the first appearance of the tentacles (Pl. XI<sup>b</sup>. *Fig. 2 i*<sup>3</sup>), and the addition of another row of genital appendages (*Fig. 1 g*<sup>2</sup>). The manner of the development of the first tentacle is very simple: the outer and inner walls (*Fig. 2 i*<sup>2</sup> *i*<sup>4</sup>) of the marginal lobule bud out together, and form a papilla (*i*<sup>3</sup>), or hollow vesicle, with a double wall. Near the base of the tentacle, inwards, the outer (*i*<sup>2</sup>) and inner walls (*i*<sup>4</sup>) of the body are separated from each other for a considerable distance, and, just below the tentacle, the outer wall (*i*<sup>2</sup>) projects in the form of a thin, broad, hollow tongue (*i*), which extends nearly across the whole interval between the oculiferous lobes (*j*), and is about one fifth longer than the basal breadth. This constitutes the marginal veil. The second row of genital appendages (*Fig. 1 g*<sup>2</sup>), which are eight in number, are arranged in a curved line, at a short distance exterior to the first row (*g*<sup>1</sup>); they all communicate with a narrow, curved furrow, (*g*<sup>3</sup>) which runs parallel to the broad furrow (*g*<sup>1</sup>) of the first row (*g*). The wall of each appendage varies in thickness to a considerable extent, according to the state of expansion or contraction of this organ. On account of the superior length of the appendages of the first row, they at times appear as if they were situated exterior to those of the second row; but they may very easily be traced to their origin nearest to the proboscis. Finally, the chymiferous canals (*Fig. 2 c*) have united with each other at their peripheric ends by means of lateral passages (*c*<sup>1</sup>), and thus the marginal chymiferous canal is formed. But we will give more details of this system in the description of the following stage.

In the next phase (Pl. XI<sup>b</sup>. *Figs. 3, 4, 4<sup>a</sup>, 7, 8, 9, 11, 12, 14, 15, 16, and 16<sup>a</sup>*), a more decided advance in development than in the last has been made, the most striking feature of which is the appearance of a broad, concentrically folded band (*Fig. 4 m m*<sup>1</sup>), which corresponds to the circular muscular band of *Cyanea* (Pl. IV. *Figs. 1 and 2 d d*<sup>1</sup>). The general outlines and proportions of the disk have not materially changed since the last two phases, excepting that the marginal veil (Pl. XI<sup>b</sup>. *Fig. 4 i*) has become very prominent as a portion of the periphery, and occupies the whole breadth of the interval between the oculiferous lobes (*j*). The

<sup>1</sup> The peculiar position, mode of attachment, and structure, of these organs, will be described with

fuller illustrations when we come to a little older phase.