

shall find that in the last figure (34^a) the corners of the mouth are doubled in number, and each one of them is opposite an interval of the tentacles, instead of being opposite a tentacle, as in the first figures; and so we must finally come to the conclusion, that the normal position of the corners of the mouth is undeterminable, if indeed there is any strict relation between them and the tentacles. At other times all traces of the corners of the mouth are obliterated, and a simple round opening (*Figs.* 25 and 32 *c*) leads to the digestive cavity. This is especially observable when the mouth is thrown wide open (Pl. X^a. *Fig.* 4 *c*), which may be done to an extent so great that the aperture has a diameter equal to the breadth of the body. Again, the mouth contracts in the form of a circle (Pl. X. *Fig.* 36 *c*), and, gradually lessening the aperture, it finally disappears (*Fig.* 30) without leaving a trace of its position, just as the vacuoles in Infusoria.

As in the previous stage, so in this, there are occasional anomalies in the regularity of the development of the tentacles. Sometimes one of the second set of four becomes far advanced in growth before the other three have scarcely begun to bud (*Fig.* 27); in others, two tentacles precede the others (*Figs.* 29, 30, and 31). In a seven-armed embryo (*Fig.* 32) which originally appears to have been five-armed, two tentacles, one on each side of the forked one (*c*), precede the others. A nine-armed specimen has one of the first four tentacles (Pl. X^a. *Fig.* 11 *c*¹) double from the very base. We have also figured a ten-armed specimen (Pl. X^a. *Fig.* 14), which no doubt originally had five tentacles; here every thing is in fives, or multiples of five. There are five larger (1) and five smaller (2) tentacles, one of which is contracted down to a mere papilla (*c*), and the lips (*c*) are five in number. These variations recall the variations in the number of segments of the Medusæ. The contractility of the tentacles is almost as unlimited as in the youngest stages, as we have seen a well-developed, eight-armed embryo (Pl. X. *Fig.* 34) withdraw its tentacles so completely within itself that they could be recognized only as slight protuberances (*Fig.* 34^a *c*). The manner of doing this would seem to be by lateral spreading and diffusion of the mass of the tentacle as it sinks down into the disk, rather than by a condensation of the cells into a smaller compass; for in the latter case the protuberances would be much darker than the rest of the body, and the lasso-cells would be crowded together in a bristling mass, which is not the fact. Sometimes, the tentacles being partially contracted, they are curved inwardly toward the mouth (*Fig.* 36), or they may be still more contracted, and the disk narrowed to such a degree that it is less in diameter than the body below it (*Fig.* 34^b).

Here and there we find forked tentacles; some forking at the base (Pl. X. *Fig.* 28 *c*), some near the tip (Pl. X. *Fig.* 32 *c*; Pl. X^a. *Fig.* 14 *c*¹), and others midway between these points (Pl. X. *Fig.* 38; Pl. X^a. *Fig.* 11 *c*). In Pl. X. *Fig.* 28, the forked