(Pl. X<sup>\*</sup>. Fig. 6, a a<sup>1</sup>) of the body, exclusive of the tentacles, is composed of a single layer of cells, which cannot be distinguished from those of the earlier stages. excepting that they are a little larger than the latter. It is in the tentacles, however, that we find the most palpable changes : here the cells are so transparent that we can get only faint glimpses of their outlines, and on this account the outer wall (Fig. 2  $a^1$ ) appears to be a structureless layer in which the lasso-cells  $(a^2)$  are imbedded. The lasso-cells are crowded at the tips of the tentacles; but elsewhere they are scattered singly over the whole body. That they are fully developed we may judge from the fact, that the lassos are thrown out at times in such numbers as to give the tentacles a ciliated appearance. The cells of the inner wall (Pl. Xª. Fig. 6 b) have passed through far more extensive changes than those of the outer wall. What was once a thick layer (Pl. X. Fig. 14 b) of irregularly polyhedral cells, packed together without order (Pl. Xª. Fig. 8), is now a single stratum of large prismatic cells (Pl. Xª. Fig. 6 b). Each cell is about three times longer than broad, the ends are truncated (b), and in an end view  $(b^1)$  appear polyhedral, and seem to overlap each other; but this is owing to the fact, that the sides of a cell are not parallel, but more or less convergent either toward the outer wall or in the opposite direction. The contents of these cells are perfectly homogeneous and transparent. In the tentacles (Pl. Xª. Fig. 2) the inner wall or axis  $(b^1)$  consists of a single row of large cells, which are placed end to end, and completely occupy the space embraced by the outer wall  $(a^{1})$ . In a transverse section of the tentacle the cells would appear circular; in profile they resemble short superposed cylinders with truncate ends. Like those in the inner wall of the body, they have homogeneous contents. The figure which we have given represents a tentacle in a partially contracted state, so that the cells of the axis appear broader than long; whereas, when the tentacle is fully extended, they are much longer than broad, as in the next stage (Pl. X<sup>a</sup>. Fig. 1 b<sup>1</sup>), to which we will now proceed.

By the time that the four tentacles of the second set have become as fully developed as the four of the first set (Pl. X. Figs. 33-37), not much change has gone on in the outer wall (Pl. X<sup>a</sup>. Figs. 1 a, 4<sup>a</sup> a, and 5 a), except that the cells have grown more transparent; but the lasso-cells have greatly increased in number. Around the mouth (Fig. 1 c) they seem to constitute the only cells of the outer wall of the lips; but from this point they thin out toward the base of the tentacles. On the tentacles they are crowded in groups ( $a^2$ ), each group containing from ten to twelve lasso-cells. The groups are arranged in a spiral around the tentacle, and there are usually two groups opposite to each cell of the inner wall or axis ( $b^1 b^3$ ). Such is the contractility of the cells of the outer wall, that, when the tentacle is retracted (Fig. 3), the lasso-cells ( $a^1 a^2$ ) seem to constitute the whole