

and, finally, the contents of the cell behind correspond to the vitreous humor (v_1). As if in confirmation of all this, we find that the focus of the lens corresponds to the bottom (ζ) of the cell. What may be the office of the cylindrical cavity (l) in the lens, we have no means of ascertaining; but it looks as if it might be a means of correcting the spherical aberration; at least, it must affect the direction of the central rays more or less. Taking the lens by itself and without any reference to the other parts of the organ, we have sufficient warrant, from its form and position, in assuming that it is a true crystalline lens, and subserves the purposes of actual vision. The eye of *Cyanea* has a similar structure; and such do we think must be the structure of the eyes of many, if not of all, the covered-eyed Medusæ.

THE LASSO-CELLS. The form of these cells (Pl. XI.^b *Fig.* 16^a) is oval, and their length is about $\frac{1}{55}$ of an inch.¹ The straight, rod-like part ($b-d$) of the thread projects along the axis of the cell nearly to the opposite extreme, and then bends abruptly upon itself (d), and, returning again nearly to its base, curves (e) directly across the cell and immediately commences its coil, at the same time closely following the face of the cell-wall (a). It makes in all only seven or eight transverse, widely separate coils (f), and terminates (e) at the end opposite its base (b). From this it will be seen that the rod-like base of the thread is not excentric, as in *Coryne*, but is completely enveloped by the spiral coil.

The principal features which mark the next stage (Pl. XI.^b *Figs.* 16, 17, and 26) are, the broadening of the marginal intervals (*Fig.* 26 i''), so that they are as wide as the breadth of the oculiferous lobes (j); the appearance of two of the marginal fringes (*Fig.* 16 a') of the proboscidal prolongations, of which we had an intimation, in the previous stage (Pl. XI.^b *Fig.* 4 a'), by the truncate corners of the lips of the proboscis; and the incipient longitudinal folding of the proboscis into four distinct lobes, so characteristic in the adult.

After this stage, the breadth of the disk begins to increase rapidly, whilst the oculiferous lobes are of comparatively slower growth. Of this we have the beginning in the next phase (Pl. XI.^b *Figs.* 25, 30, and 35); and this is the principal feature which distinguishes it from the last. By the contracted state of one of the ephyræ we were able to get a very good view of the transverse outline of the radiating tubes (*Fig.* 30 e), and made out very clearly that the lower wall is concave, and the upper one like the roof of a house, excepting that the two sides are curved inwards. The cellular structure of the surface (*Fig.* 35) begins already to resemble that of the adult; and here and there we find single lasso-cells (Pl.

¹ The peculiar relations of the lasso-coil to the rod-like portion of the thread were discovered by

Prof. H. J. Clark. Compare my remarks on lasso-cells, in *Proc. Amer. Assoc.* 1849, p. 68.