

glass, when the chances are frequent that the fringes will become folded directly across the main stem.

The outer wall (*Fig. 15* $\beta' \beta'' \beta'''$, p. 218) of the disk and the transversely striate wall of the socket ($j j^1 j^2$) are directly continuous the one with the other, and together constitute the lining of the cavity which they embrace. The cells ($\beta \beta'$) of the disk wall are as broad as they are long, simulating irregularly polygonal prisms, and the inner ends are flattened against the subjacent layer, whilst the outer free ends are rounded. In size they are very large, being on the average from one fifth to one fourth as long as the largest cells (*Fig. 24*) of the cellulomotor system. At the base (y) of the narrow ridge ($y y^1 y^2$) they decrease in size very rapidly, and continue to do so until we come to the base of the tentacle proper, at which point we find them diminished in diameter by nearly two thirds; but from this place to the end of the stem and its fringes, the diminution is very gradual, until at the tips (*Fig. 13 c*) of the latter they measure not more than one fourth the diameter of those in the disk. The contents of these cells are perfectly homogeneous, nor have we been able to see any mesoblast. During the contraction of the fringes the surface is ribbed lengthwise, owing to the fact that the outer wall folds upon itself (*Fig. 18 c c^1*), and the inner one ($d d^1$) projects more or less into the duplicatures. By taking advantage of the doubling of a fringe upon itself, we may get a very satisfactory sectional view (*Fig. 18*) of these walls when in this plicated condition.

The outermost, or epithelial layer (*Fig. 13 a b* and *Fig. 18 b*), of the tentacular apparatus, is described below, and therefore need only be referred to in this connection. Although the wall of the socket ($j j^1 j^2$) is a very distinct layer, yet it does not hang loosely, apart from the mass of cells which surround it, but it is more like a lining to a cavity which has been excavated in the cellulomotor system. The transition from the comparatively thick outer wall of the disk (*Fig. 15* β) to the thin wall which constitutes the cellulomotor system of the sockets is very abrupt; but yet there is not so sudden a change in the nature of the cellular constituents as would appear at first sight. The only appreciable difference is in the shape of the two kinds of cells, the form of the discal cells being adapted to a different purpose from those of the sockets.

All the extensible parts of the tentacles, as well as their lateral fringes, are covered by a layer of thick epithelial cells, every one of which is a *lasso-cell*.¹ When the tentacle is fully prolonged, these cells scarcely touch each other, and then they display a perfectly rounded contour, excepting a very narrow portion,

¹ The following investigation of the lasso-cells of Pleurobrachia is entirely the work of my friend and colleague, Professor H. J. Clark, who discovered their peculiar structure last year.