

the eighth of May the adult (wood-cut 30, p. 212) occurred in great numbers. On the 17th of May the males and females contained, severally, abundance of spermatozoa and eggs.

As we have said before, the outer and middle walls become widely separated, at birth, but are nearly parallel to each other at first (Pl. XVIII.

Fig. 25.

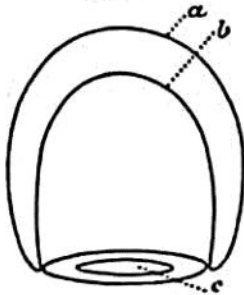


From a specimen of the same size and age as that of wood-cut 20.¹

Figs. 15^a and 17, wood-cut 25). Soon, however, they begin to assume very different outlines; the outer one becoming more rounded and expanded above, and the middle one more open below, so that the two seem to approximate near the edge of the disk, and gradually recede, going upward (wood-cut 26). This disparity increases till the outer wall becomes oval in outline, and the middle one conical (wood-cut 27). The outer wall, in this instance, is more elongate-oval than in the adult, so that the disk is much higher than it is broad.

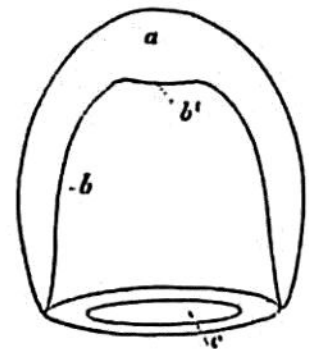
After this the disk grows proportionally broader (wood-cut 28), and the top of the

Fig. 26.



dome less pointed, till it has reached the adult state (wood-cut 30). The aperture (wood-cuts 25, 26, and 27, *c*) in the transverse partition gradually increases in diameter with the growth of the disk, till, by the time the latter is one fifth of an inch in diameter, it is as large, in proportion to the size of the animal, as in the adult.

Fig. 27.



Specimens of this Medusa which have reached two thirds of their normal size (wood-cut 28, p. 211), are capable of stretching their tentacles to as great a length as the adults. The adult is not only able to contract into a very small compass, but also to stretch longitudinally at the expense of its breadth, till it is twice as long as broad (wood-cut 31, p. 212). While doing this the transverse partition (*c*¹) is oftentimes allowed to hang down loosely, in an inverted truncate-conical shape. The extent to which the proboscis may contract and expand may be inferred from a comparison of the two figures, wood-cuts 29, *d*, and 31, *d*, p. 212; in the first, it is stretched to four times the length of the disk, and considerably expanded withal, and in the second retracted so as hardly to equal one half the height of the disk in a quiescent state. The tentacles, at times, remind one of the long cirrhat arms of Pleurobrachia, when, instead of stretching uniformly,

¹ Wood-cuts 25, 26, and 27 represent the successive changes which take place in the shape of the disk as the medusa develops after being freed, magnified 25 diameters. *a* indicates the outer

surface, and *b* the inner surface, of the disk; *a*¹ the depression in the top of the disk; *b*¹ the thickening of the centre of the disk; *c* the aperture of the veil.