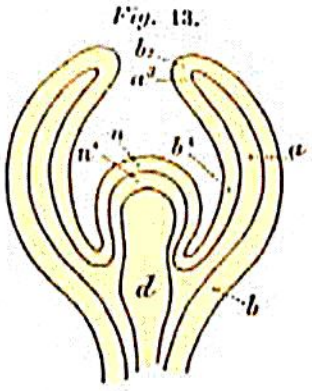
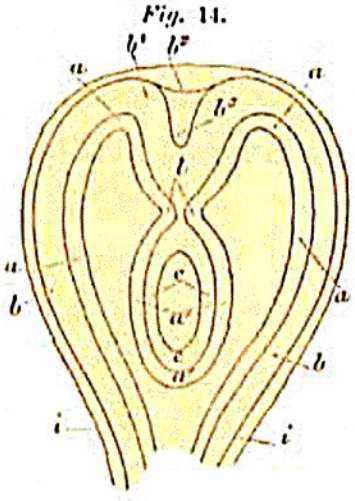
of its component layers (wood-cut 13). The outer wall (b), embracing the whole medusa-bud, bends upon itself (b^2), at the edge (a^3) of the cup of the inner wall (a), and, following the inner surface of the latter, there becoming the innermost of the three walls of which the umbrella is composed in the newly freed medusa, passes to and over the proboscis (n^1), where it constitutes the outer wall. In this way, the cup-like disk of the medusa becomes triple-walled (b a b^1), and the proboscis double-walled (n n^1). If we include the radiating tubes in a section, the inner wall being doubled by having a channel hollowed in its thickness, then the disk appears quadruple-walled (Pl. XVIII. *Fig.* 9, b a a^1 c), and may be mistaken as having really four walls, unless carefully examined in all its relations.

Fig. 13.



Other parts of the organism have also developed new features; the radiating tubes have broadened considerably, especially at two points (Pl. XVIII. *Fig.* 9, l) of each, half way between the base and extremity, so that the channels of neighboring tubes are diverted laterally into broad sinuses. Of course this will be understood to be a hollowing in the thickness of the middle wall. As the medusa grows larger and older, these sinuses become narrower and deeper (Pl. XVIII. *Fig.* 10, and wood-cut 14, l), and consequently each one approaches its neighbor. What appear to be intervening walls, both in the last stage (Pl. XVIII. *Figs.* 9, b^1 l c) and in this (*Fig.* 10 and wood-cut 14, b^1 l c), through which the approximating sinuses would appear to be forcing their way, are profiles of an oblique view of the innermost wall, seen at a deeper focus.[1] That portion beyond the approximating sinuses, and the outer end of the disk (Pl. XVIII. *Fig.* 10, and wood-cut 14, b^1), is deeply four-lobed on the inner surface, each lobe (b^1) being separated from its neighbor by a deep sinus (b^3). This sinus extends so far, outwardly, that the edge of the disk is reduced to a quite thin stratum (b^2). These four lobes are the incipient hollow tentacles, which, as they grow older and longer, are gradually bent inward, as may be seen Pl. XVIII. *Fig.* 14, and wood-cut 17, f.

Fig. 14.



In a little older stage, we find that the lateral sinuses, of the last phase, have come together and formed a continuous channel (Pl. XVIII. *Fig.* 11, and wood-cut

[1] In order to avoid confusion, only two of the radiating tubes, nearest to the eye, are shown in *Figs.* 9 and 10. Being very broad, those portions of the tubes which are next the centre of the figure, are seen facing the observer, and those at the periphery nearly in perfect profile.