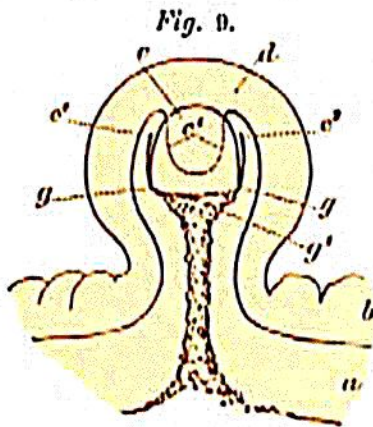
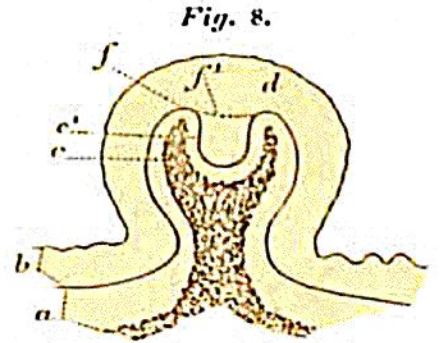
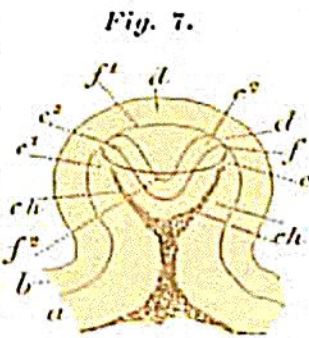


diverts its course, forming there a narrow cavity (*Fig. 2, c c<sup>1</sup>*). At this early period the medusa-bud has the power of extending and distending itself, to a great length and breadth, so as to be at one time twice (*Pl. XVIII. Fig. 3*) or thrice as large as at other times. The simple hernia-like state is soon superseded by one which offers unmistakable evidences of the medusoid nature of these buds (*Pl. XVIII. Figs. 4, 5, 6, and 7, and wood-cuts 7, 8, and 9*). Taking the simplest view of this stage, at the plane of the axis, as if the bud were split longitudinally into halves, we may see that the inner wall (*Pl. XVIII. Fig. 7, c*) has reverted



upon itself, and assumed a cup-shaped form, the hollow of which forms a close-fitting receptacle, or mould, as it were, for the thickening (*d<sup>1</sup>*) of the under side of the outer wall. By receding from this point of view, toward the surface of the bud (*Pl. XVIII. Fig. 5, and wood-cut 8*), the rim (*f<sup>1</sup>*) of the cup comes into sight. In consequence of the reversion of the inner wall upon itself, the cup naturally is formed of a double layer (*Fig. 6, wood-cut 9, c<sup>1</sup> c<sup>2</sup>, and Fig. 7*). In doubling upon itself, the retreating fold (*c<sup>1</sup>*) does not press closely, at all points, upon the stationary one (*c*), but leaves four equidistant spaces, into which the chymiferous fluid penetrates. This gives the cup a four-lobed appearance, each lobe (*Fig. 4 and wood-cuts 7, c c<sup>1</sup> c<sup>2</sup> c<sup>3</sup>, and 8, c c<sup>1</sup>*) containing a chymiferous channel (*ch*). When seen from a point opposite the end of the bud, all four channelled lobes (*wood-cut 10, c c<sup>1</sup> c<sup>2</sup> c<sup>3</sup>*) come into view at once, standing at four equidistant points, ninety degrees from each other, around the cup. Between the lobes, the wall (*iw*) is single, and, on account of the thickness and dark color of the lobes, not easily recognized in profile, but, as we have pointed out before, that part of it which helps to form the edge (*Fig. 5 and wood-cut 8, f<sup>1</sup>*) of the cup is readily detected. In a view obliquely from the end, the rim (*Fig. 4 and wood-cut 7, f f<sup>1</sup> f<sup>2</sup>*) of the cup, whether composed of a single or double wall, is distinctly recognizable. Looking at the side of the bud, in a line perpendicular to the outer surface of one of the lobes (*Fig. 6 and wood-cut 9, c*), two others (*c<sup>2</sup>*) appear in profile, at a distance of ninety degrees from the first, and the fourth one, on the distal side, at the same distance from the two in profile. Advancing a little further, we find the channelled lobes (*Pl. XVIII. Fig. 8,*

