

to constitute the whole outer wall, showing the remarkable compressibility of the original cells, among which the lasso-cells are imbedded.

At this age it may be seen that the hydroid form of covered-eyed Medusæ has a horny tube (Pl. X. *Figs. 4 f* and *4^a f*), as well developed as any Hydroid of the naked-eyed families. Neither Coryne nor Tubularia can be said to have more fully developed horny tubes than this; nor is there any genus out of the families of covered-eyed Medusæ which have so thick-walled a tube. The inner surface of this tube (*f*) presses very closely to the stem (*Fig. 4^a a*) of the embryo, but does not touch it. At its lower end it spreads out into a broad base, and directly under the foot (*c*¹) of the pedicel (*a b*) it is connected with it by several—four to seven or eight—small, slender, conical props (*f*¹); passing upwards, it thins out into a mere film (*f*²), and finally comes to an edge at a short distance above the bottom of the cup-shaped head. At first sight, owing to the longitudinal wrinkling of the surface, it would appear to be composed of concentric layers, but, on account of its exceeding transparency, no such structure can be discovered; although, considering that such sheaths are formed by successive deposits, there is no doubt that the layers are present. In color the tube resembles amber, and, like that substance, it changes its intensity of coloring according to the light which shines through it. We have not seen a horny sheath around the stem of the scyphostoma of Aurelia, nor has it been observed by European naturalists in this genus.¹

This is the earliest period at which we have observed the embryo taking food. The first instance of this which we saw was a six-armed individual (Pl. X. *Fig. 30*), which had in its digestive cavity one of its own kind, in the planula state, and revolving by means of its own cilia at a very rapid rate. The planula continued to revolve for three quarters of an hour after we first saw it, and then, being ejected, it swam away. In *Fig. 35* we have an embryo in the act of casting out the rejectamenta of its food with the help of one of its tentacles.

It frequently happens that an embryo is altogether destitute of a horny sheath, and may be seen moving from place to place by walking on its tentacles. Oftentimes we have seen one of them seated upon the top of another embryo, either on the edge of the upper disk or nearer the mouth; and, in some instances, the base (Pl. X. *Fig. 12 c*¹) was embraced by the lips (*c*) of the lower individual. In the latter instance it was always very difficult to determine that the two embryos were

¹ The absence of the horny sheath in Sars's figures (Wiegmann's Archiv, 1841, Band 1, Pl. I. *Figs. 25-42*), leads us to assume, what he is in doubt about, that they represent the scyphostoma

of Aurelia. According to Dr. Wright (Edinburgh New Phil. Journ. 1859, vol. X. p. 106, Pl. VIII. *Fig. 2*), the scyphostoma of Chrysaora has a "gelatinous case, corallum, or polypidom."