for instance, the inner wall (*Fig.* 33 *b*) expands inward until the digestive cavity (*d*) is nearly or entirely obliterated for the time being.

In the next phase the body assumes an ovate form (*Fig.* 34), with the mouth (*c*) at the broader end. From this it soon passes into an elongate pyriform or broadly cylindric shape (*Fig.* 35), at the same time increasing to nearly double the size, but the different regions of the body retaining the same relative proportions. Soon, however, more decided changes occur, and the embryo pursues a more varied and active life. In the first place the body becomes slightly flattened, or four-sided, at the upper half next the mouth (*Fig.* 36 *c*), and the four corners (*c*) project slightly, whilst at the opposite end (c^1) the body assumes a narrower and truncate form; so that, on the whole, the body appears wedge-shaped in outline. The outer wall (*a*) retains the same thickness as in the last phases, but the inner wall (*b*) grows thin at the four corners (*c*) of the actinal end, and the digestive cavity (*d*) embraces twofold the extent that it did in the last stage, and in some cases, when the embryo is unusually large (*Fig.* 36), fourfold. The average length of the body at this time is $\frac{1}{120}$ of an inch, but there are here and there some embryos which measure $\frac{1}{80}$ of an inch long (*Fig.* 36). In the latter case it is probable that the embryo is very much expanded. The vibratile cilia are no longer than at the earliest periods; and, as a natural consequence, the movements of the embryo are heavy and slow to vary, and the onward motion is very tardy in comparison with that of the embryo of Cyanea (Pl. X. *Figs.* 10 and 10^a). The rosy hue of the former phases has deepened to a brownish pink color, which lines the whole digestive cavity and renders it very conspicuous. This phase is the last one in the free life of the scyphostoma of Aurelia, and in the next we find the embryo settling down upon the narrower end of the body and attaching itself to its foundation by a horny secretion.

After this phase the mode of development, and the proportions and size, of the scyphostoma of Aurelia and Cyanea, are to all appearance identical; and we shall therefore describe them together, as if they were one, after having described the earlier stages of Cyanea, corresponding to those of Aurelia already considered.

THE EGG OF CYANEA ARCTICA. We have observed only two stages in the development of the egg of Cyanea; one at quite an early period, and the other at maturity. It is proper to state here, that the eggs may not have been in a perfectly natural condition, as the animal from which they were taken was in a dying state. The first (Pl. X. *Fig.* 1) of these two stages corresponds in size to *Fig.* 19, Pl. X^a.; but the latter is in a much earlier state of development. The magnifying power used here was about four hundred diameters. The yolk sac is very thin, and appears like a mere film around the yolk. The yolk is very transparent and colorless, and consists of rather coarse granules, not very closely crowded except