## SECTION IV.

## GROWTH OF CYANEA.

There must be something peculiar in the habits of the young Cyanea to render them, apparently, so rare, when, in the adult state, they are so common along our I suppose that during the early stages of their existence they remain near the bottom of the water, as they are very seldom seen floating near the surface. During the many years I have been watching for our Acalephs, I have only on three occasions seen specimens measuring less than an inch in diameter; though, as stated in a former chapter, I have had ample opportunities of tracing some of the first stages of their development, in the egg and in the scyphostoma state. The youngest free Cyanea arctica seen along our shore was observed by my son in Buzzard's Bay; it measured about half an inch in diameter, and the outline of the disk was very similar to that of a common ephyra of Aurelia, as represented in Pl. XIa. Fig. 28; but the actinostome was already very large in proportion to the diameter of the animal. Its four lobes hung like waving curtains, but were still quite distinct one from the other, their lobes being but imperfectly When extended, they reached to twice the length of the diameter. developed. The tentacular pouches were still comparatively small, and from each of their crescent-shaped folds hung only six tentacles, two of which were already very long, extending to double the length of the actinostome, or about four times the diameter of the disk. The other four were still very short, extending but slightly beyond the outlines of the disk. No trace of the sexual organs was yet visible, but the color of the disk was already similar to that of the adult, only lighter. In other species of the genus, which I had an opportunity of observing in a somewhat more advanced state, the tentacles appeared more numerous, though only a few had grown large: for instance, in specimens of Cyanea versicolor, of South Carolina, measuring an inch and a half in diameter, three tentacles appeared larger than all the others, and the genital pouches, though circumscribed between the pillars of the actinostome and the concentric folds of the lower floor, did not yet hang down as pendant pouches. In specimens of a third species, Cyanea fulva, from Long Island Sound, measuring already over two inches in diameter, the genital pouches were still stretched in the same plane as the lower floor, and, though the tentacles projecting from the broad pouches were already numerous, and began to appear in several rows, there were only four in each bunch which hung beyond the actinostome, as in the adult.