wall from which it arises, and the space below it and the base of the calycle is about one third broader than deep. The reproductive calycles (*Fig.* 6, *d e*) usually arise from the stolons (*g*), but occasionally from the pedicels (E). They are twice as long as the sterile calycles, and one third wider, and present an elliptical outline; the mouth is slightly narrowed, and smooth; the contour is varied by six or seven equidistant transverse ridges, with broad furrows between them; and the pedicel is very short, consisting of only three or four rings.

The sterile hydræ have twenty-four tentacles, and, in all respects, resemble those of C. poterium (Pl. XXVIII. *Fig.* 2, *a b c*), excepting that in this species the diaphragm (Pl. XXIX. *Fig.* 7, *c*) is very different. As for the reproductive hydræ (*Fig.* 6, *d e*), they are remarkable for their parallel constrictions, giving them a ringed appearance; but we have never been so fortunate as to see them alive, although this species has been collected by us in September, December, January, March, and April, during which months it was found to be destitute of these parts. We are obliged, therefore, to limit our remarks to a few observations made upon alcoholic specimens, collected incidentally in August, 1849, in Vineyard Sound, south of Cape Cod, and in August, 1857, at Grand Manan Island, off the most eastern shore of Maine. We cannot say positively whether these calycles produce free medusæ or medusæ-buds bearing planulæ, but are inclined to believe, from appearances, that they produce medusæ. At any rate, the breeding season is during the summer, certainly in August, and, probably, also in May, June, and July.

Proles hydroidea. Embryology.—The hydra of this species follows the same mode of development as C. poterium (Pl. XXVIII. *Figs.* 4–10); but the calycle is a simple, thin-walled case, until at least two thirds grown, when the diaphragm begins to develop, in the form of a thin, sharp ridge (Pl. XXIX. *Fig.* 8, *c*), which eventually projects straight across the lower part of the calycle, without increasing its thickness beyond that of the wall from which it arises. When the hydra is fully developed, and ready to escape from its embryonic confinement, we find that the calycle, along the elevations of the teeth (*Fig.* 9, c^6), and the depressions of the sinuses (c^7), suddenly thins, from within outwardly, to an oblique obtuse edge, which, consequently, corresponds to the outer surface of the calycle (see c^4 and c^7). At this border the cap (d d^1) is attached, and follows all the sinuosities; but it is, unlike the calycle, a very thin, filmy body, and divided into two regions, one of which, just above the edge of the calycle, is puffed outwardly, at regular intervals (d^2 d^3), which correspond to the sinuses (c^7) between the teeth; and the other portion is a smooth arch (d), like a watch-glass, which joins the first along a straight line (d^1), trending exactly transversely to the axis of the calycle.

CLYTIA INTERMEDIA *Ag. Adult.*—As we have not seen the reproductive calycles of this species, we can characterize it only by the sterile hydra. The stolonic