

SECTION VII.

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Proles hydroidea. *Adult.*—The habitat of this Hydroid is either below low-water mark, or else in deep pools which are not left more than an hour or two uncovered by the sea. It evidently needs all the advantages of the open ocean in order to thrive, and we find it very difficult to keep it alive, unless the water in the jar is made icy cold. It is most frequently attached to the fronds of *Laminaria*, but may be found on other sea-weeds. Its true characteristics are very much disguised unless it has a broad surface like that of *Laminaria* to creep over, when its stolons pursue nearly straight courses, giving off, occasionally, a branch to the right or left (Pl. XXXIV. *Fig.* 9), and, at regular intervals, an upright stem. A colony of such Hydroids resembles a long row of trees vanishing in the distance. Fronds of *Laminaria*, thrown up from deep water, frequently bear the most perfect examples of this peculiar mode of branching. It is a remarkable fact, that the upright stems lean toward the direction of the growth of the stolon, so that between each upright stem and the stolon from which it springs, there is an acute angle (Pl. XXXIV. *Fig.* 9) of about sixty-five or seventy degrees. The upright stem is not more strongly zigzag than that of *Obelia commissuralis*, or related species, but by reason of the great thickening of the horny sheath (Pl. XXXIV. *Fig.* 5, *c*¹) on alternate sides of the successive joints, the appearance of a zigzag is produced, whereas the course of the chymiferous cavity of the hydrarium is only slightly sinuous. In dried specimens, the zigzag appearance becomes exaggerated by the unequal contraction of the corneous tube. Each internode (*Fig.* 5, *c*¹) is twice as long as its greatest breadth, and the point of its greatest thickening is always in the same plane, and corresponds to the direction of the stolon. In this plane, also, the pedicels which bear the calyces have a general trend, and, therefore, have a distichous arrangement, but lean a little to either one or the other side of it, all having the same direction, in this respect, on the same stem (*Fig.* 8); but whether the pedicels of every stem, of any one stolon, all lean to the right or all to the left, we are not certain, although it seems to be so. The lowest pedicel of every stem, arising from any one stolon, originates on the same side; either all are on the side toward which the stems lean, and, consequently, in the acute angle, or all are on the opposite side, and in the obtuse angle. From the thickest side of an internode, the tube of the main stem