of each oral appendage are brought together very closely and soldered along the edges, for nearly their whole extent, leaving, however, at short distances, small openings between the marginal lobules, which arise from the circumstance, that the junction of the edges is not continuous for the whole length of the margin, but remains gaping at intervals. In Aurelia, the margins of the oral appendages are also brought into close proximity as it grows older, each appendage folding along its middle line, and thus inclosing a continuous channel for its whole length, but the edges are not soldered. In many other Discophoræ, the oral appendages resemble those of Aurelia, with this difference only, that the appendages are not so closely folded, and in others they remain broadly open, as, for instance, in Cyanea and allied genera. This latter structure recalls an earlier condition of the young Aurelia, as represented in Pl. X^a. *Figs.* 39, 40, and 41, at which time the whole proboscis resembles more a loose curtain surrounding the mouth, as in Cyanea, than a specialized, quadripartite, oral apparatus, as exists in the higher Semæostomeæ and in the Rhizostomeæ. Another point of resemblance between Aurelia and some of the Rhizostomeæ, may be traced in the mode of ramification of the chymiferous system, which in Rhizostoma and Polyclonia consists, also, of straight, simple tubes, alternating with more or less complicated anastomoses, while in the others it forms broad pouches. Thus Aurelia appears as a standard, for the appreciation of the relative rank of all the principal representatives of the order of Discophoræ, to which it belongs, so far as their natural affinities and their respective standing, in their adult state, can be determined by a comparison with the successive stages of growth of one of their highest types.

SECTION VI.

HABITS OF AURELIA.

After this digression, let us now return to the special history of the Aurelia. The appearance of these medusæ along our coast is as regular as the return of the seasons, and as they live only during one summer, they may truly be said to be annual animals, in the same sense as we distinguish between annual and perennial plants. They make their appearance, as free swimming Medusæ, towards the latter part of April, when they are not yet an inch in diameter; they grow rapidly during the months of May and June, when they have acquired their average size, from eight to ten inches in diameter, though they are then much thinner and more transparent, and their genital organs are less conspicuous, owing to their