

like herrings or mackerels. They feed upon other Ctenophoræ, and are very voracious, their digestion being very rapid. They are short-lived, and appear periodically in the early part of the summer, when their dimensions are one sixth of their full size: they are at first pale, but grow deeper and deeper in color as they enlarge, and are brightest toward the end of the summer during the spawning season; after the ovaries and spermaries have been emptied, they grow paler and paler; and, finally, they are broken up into fragments by the autumnal gales. The young, hatched about this time, probably pass the winter, like most shore animals, in deeper water; and they differ from the adults chiefly in having their rows of locomotive flappers much shorter than afterwards. They are usually found associated with Pleurobrachia, Bolina, and Thaumantias near the surface of the water during the hottest hours of the day; but whenever the sea is rippled or the sky overcast, they sink out of sight below the surface.

A comparison of *Idyia roseola* with another species, *Idyia cyathina* *A. Ag.*, discovered by my son in the Gulf of Georgia, has satisfied me that such are truly the specific characters of our *Idyia*; for I find that there is not the slightest structural difference between the two, and yet there can be no doubt that they differ specifically. In *Idyia cyathina* the spherosome widens rapidly from the abactinal pole, and is widest at two thirds of the distance from the mouth, when it again tapers suddenly, and then more gradually, in the same direction; the actinal side of the spherosome being narrower and thinner than the actinal, and therefore much more flexible, and the anterior and posterior interambulacra on that account capable of more extensive contractions, in consequence of which the angles of the mouth may be drawn into very deep curves, and the lips thus formed assume the shape of more distinct lobes than is ever the case with *Idyia roseola*. It may be said, that though both have the same pattern, *Idyia roseola* has rather the form of a shuttle, and *Idyia cyathina* resembles more an Etruscan vase. The habits of *Idyia cyathina* have not been sufficiently studied to carry farther the comparison of the two species; but, as mentioned above (p. 250, note), so much is already known, that it is also found associated with a *Pleurobrachia* and a *Bolina*.

Many years ago I noticed in the harbor of Charleston, South Carolina, and in Florida, two *Acalephs* belonging to the family of the true *Beroids*, respecting which my memoranda are very scanty, and quite insufficient to describe them as they should be. And yet I am unwilling to omit them entirely, as they seem to indicate the presence, along our southern coast, of a genus intermediate between *Pandora* and *Idyia*, and thus far unknown. Their most striking peculiarity is the shortness of the vertical axis, which barely exceeds the longitudinal diameter. In this respect they resemble the genus *Pandora* *Esch.*; but they differ from it in having their ambulacra very prominent and the interambulacra concave, while in