

tail (T) is as yet only represented by a slight rounded prominence limiting the above mentioned sinus posteriorly, and not yet exhibiting any trace of appendages. The anterior extremity of the embryo is considerably broader and more evenly rounded than the posterior, and exhibits most anteriorly two rounded areas (*o*), which, from analogy with the embryos of the Podophthalmia, may be regarded as the ocular plates, as yet wholly separated, but afterwards becoming confluent and at last quite obliterated. Behind these plates the anterior lip (L) can be distinctly traced, and further back the bipartite posterior lip or metastoma (*l*). On each side of the anterior lip two transverse prominences occur, representing the antennulæ (a^1) and antennæ (a^2), the first of which are the larger, and on each side of the posterior lip the mandibles (M) may be traced as two rounded knobs. Further back two pairs of prominences, somewhat different both from the preceding and succeeding ones, are seen, the anterior (m^1) being unequally bipartite, the posterior (m^2) slightly tripartite at the free edge. These prominences represent the two pairs of maxillæ. Then follows a regular double series of posteriorly pointing prominences, all of a quite similar appearance and unequally bilobed at the end. The number of these prominences is seven pairs,¹ of which the first (*mp*) represent the maxillipeds, the two succeeding the two pairs of gnathopoda (gn^1 , gn^2), and the four posterior (p^1 – p^4) the four anterior pairs of legs, the last pair not being formed until very late, even a considerable time after the young have left the marsupial pouch. The two rounded lobes which all of these pairs of limbs exhibit, may undoubtedly be regarded as the first indication of the two principal parts, the endopodite and exopodite, and it is rather striking that even the first pair of gnathopoda, which never exhibit any trace of exopodites in the adult animal, do not differ in this respect from the following limbs, and that, moreover, in all the embryos the two posterior pairs (third and fourth pairs of legs) have also a similar bilobed form, although these limbs in the female are quite simple. Immediately above the oral region on each side a curved ridge or slight fold (C) may be traced, representing the first indication of the carapace, and within the area limited below by this fold a rounded cellular body (λ) occurs, which ultimately becomes the liver, or cæca of the stomach.

As may be seen from the above description of the embryo, the development of the Cumacea differs materially from that of the Mysidæ and other Podophthalmia in two very important points; firstly, by the embryo exhibiting, while still enclosed within the egg-membrane, a well-marked dorsal curvature, and secondly, by the last pair of legs not being formed until a considerable time after the young have escaped from the marsupial pouch. In both these respects the Cumacea agree, on the other hand, very closely with the Isopoda.

Habitat.—Eight more or less perfect specimens of this species were taken by the dredge in the North Atlantic, off Nova Scotia, from a very considerable depth.

¹ In fig. 14, by a mistake, eight such pairs have been indicated instead of seven.