

that in the other forms, and also in the Branchiura the nervous cord is constructed upon a quite different type.

The intestine in *Nebalia* is markedly distinguished by the presence of a chitinous visceral skeleton never found in any Branchiopoda; but this skeleton does not show any resemblance to that found in the Podophthalmia, whereas its similarity to that found in the Amphipoda is unmistakable. With the latter Crustacea *Nebalia* also apparently agrees in the two pairs of elongate cæca arising from the gastric part and accompanying the intestine in the greater part of its length, and more especially in the presence of another pair of elongate cæcal appendages originating from the terminal part of the intestine and running anteriorly along its dorsal side. On the other hand, the occurrence of two short curved cæca, projecting forwards within the head, is a character pointing rather more to the Branchiopoda, in some of which, as in the genus *Daphnia*, we find two quite similar curved cæca arising from the anterior part of the intestine.

As to the structure of the heart the genus *Nebalia* may equally well be compared with the Branchiopoda as with other Crustacea, since the structure of this organ in the former is very variable, being in some forms quite short and sac-like with only a single pair of lateral venous fissures, in other forms more or less elongate with a varying number of such fissures. As in the Branchiopoda the vascular system is imperfectly developed, though a pair of short arteries may be traced at each end of the heart.

The generative organs in both sexes, as in most of the Branchiopoda, are rather similar and very little complicated in structure, forming merely a pair of simple cylindrical tubes extending along the sides of the intestine, and opening by a short excretory duct on the ventral surface of the last segment of the trunk. In the Podophthalmia these organs are, as is well known, much more complicated, and, moreover, always exhibit a very marked difference in their structure in the two sexes.

*Development.*—The development of *Nebalia* cannot in my judgment be adduced as showing any close affinity between this form and the Decapoda, as suggested by Metschnikoff; and this has partly also been admitted by Professor Claus, in so far, at least, that he has pointed out that the stage of the *Nebalia*-embryo, termed by Metschnikoff the Zœa-stage, and on which this author chiefly bases his suggestion of the decapodous nature of *Nebalia*, does not in reality correspond to that stage in the Podophthalmia, but more properly to the earliest stage of the *Cyclops*-form in the Copepoda. Neither can I find that the supposed agreement between the development of *Nebalia* and that of *Mysis* points to any true consanguinity between these genera. As is well known, we find a very similar direct development also in a great number of other Crustacea not at all belonging to the Podophthalmia, as in the Cumacea and Isopoda, and even in the Phyllopoda I have recently had an opportunity of stating an instance of a quite direct development, without any metamorphosis, and agreeing, more-