

The pleon has similar spine-like teeth on each somite, both laterally and in the median line.

The telson is spinous, and has the terminal extremity beautifully fringed with hairs.

The branchiæ I have not been able to enumerate with certainty, but they exist rather in an impoverished than in a developing condition; the central stalk is long and robust, while the lateral filaments exist as globular papillæ, diminishing gradually from the base to the extremity, and are of less length than the diameter of the stalk to which they are attached.

The possibility has occurred to me of its being a young and immature form of some species allied to *Polycheles*, a hypothesis that was supported by the bottle containing it being labelled "Zoëa of *Brachyura*," but there are certain features that seem to be opposed to this supposition.

The brephalos of *Willemæsia* has not been observed, but I have been able to determine by examination of an embryo in an advanced condition (Pl. XX. fig. 2), that the ophthalmopoda at that period are well developed, and I have no doubt that when it quits the ovum the brephalos is in the megalopa stage, with the ophthalmopoda developed as in the young of *Astacus*. But the specimen that I have before me has no ophthalmopoda or trace of one. The frontal margin on each side of the median line, in the place where the ophthalmopoda are situated in the normal species of Astacidea, is slightly excavate, and this is suggestive of an orbital impression, but there is not the slightest trace of an organ of vision here, but on the outer side of the frontal margin, beyond the position of the antennæ, and corresponding with the ophthalmopoda in *Willemæsia*, is a dark circular spot that is suggestive of being such an organ, but without any structural indication of its function.

The first pair of antennæ differs from that in *Polycheles* and in *Willemæsia* in not having the inner margins, from the base to the distal extremity of the first joint, produced laterally so as to be brought into contact with each other and elevated upwards into a crest-like form, but only a large spine-like tooth at the inner distal angle.

The second pair of antennæ is peculiar, and, so far as I know, unique in character. The first or coxal joint carries a phymacerite, developed in the form of a long, straight, cylindrical tube that is obliquely truncate at the distal extremity. If we examine the same organ in *Willemæsia* we shall find it, though different in form, to be analogous in character, since it consists of a long cylindrical organ, but so curved that,

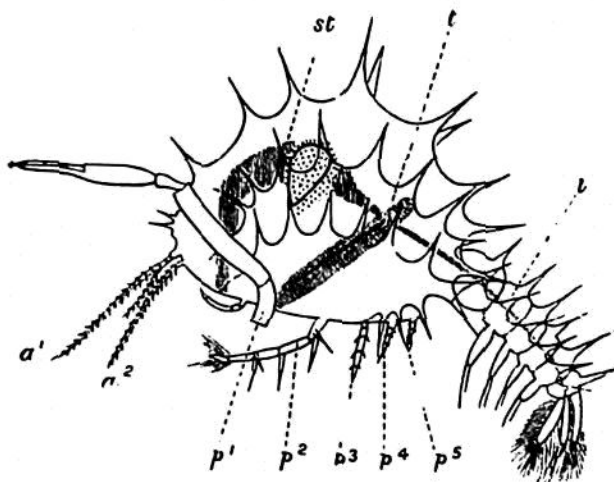


FIG. 30.—*Eryoneicus cæcus*. After a drawing by von Willemoes-Suhm. a^1 , first antenna; a^2 , second antenna; p^1 , p^2 , p^3 , p^4 , p^5 , pereopoda; st , stomach; t , testis (?); i , intestinal canal.