

anteriorly-directed tooth: the third, fourth, and fifth somites are similar, except that posteriorly they become narrower, carry a smaller coxal plate, and have the dorsal median tooth diminishing gradually to a cusp: the telson is long and tapering, armed on the median line near the base with a small posteriorly-directed cusp.

The ophthalmopod is situated in a wedge-shaped cleft, which is narrower at the base than at the anterior margin, where it is armed with a sharp and rigid tooth, and projects downwards and outwards, being compressed between the upper surface of the second pair of antennæ and the extension of the latero-anterior angle of the carapace.

The first pair of antennæ has the anterior extremity of the inner squamiform process produced to a sharp tooth, and armed along the inner margin, which is curved upwards, with two or three small teeth and a few hairs, and carries one sharp tooth on the outer anterior angle above the auditory slit; the two succeeding joints of the peduncle are short, not reaching so far as the apex of the inner tooth of the first joint; the outer flagellum is about one-fourth the length of the inner, and more slender.

The second pair of antennæ has the phymacerite long, and compressed closely against the inferior surface of the first joint of the first pair of antennæ; the extremity of the peduncle reaches beyond that of the first pair; the flagellum is as long as the inner branch of the first pair; and the scaphocerite, which is long, narrow, and pointed, does not extend beyond the extremity of the last joint of the peduncle, although so figured in the plate (fig. 1c. c). The surface of the peduncle is covered with hairs, and so is the margin of the scaphocerite.

I have not disturbed the oral appendages, as the specimen is unique, and the general similarity of the external parts is suggestive of no great variation in hidden structure.

The second pair of gnathopoda carries a small and slender mastigobranchia, but has no podobranchial plume attached. It corresponds closely with the same organ in *Pentacheles lævis*.

The first pair of pereopoda is long and slender. The meros is smooth upon the outer margin, except that it is armed with a single tooth on the distal or carpal extremity; the inner margin is furnished with a row of small teeth, the three or four nearer the ischium being sharp and well defined; the carpos is long, slender, and smooth, except for one small tooth at the external distal angle; the propodos is fringed with fine teeth on the external margin and a few rudimentary ones on the inner; the dactylos is parallel with the pollex, excepting that both are curved laterally inwards and overlap each other when closed. The coxa carries a long and broad mastigobranchia, with a podobranchial plume attached to it. At the articulation are two arthrobranchiæ, a large posterior and a small anterior, but no pleurobranchia.

The second pair of pereopoda is tolerably robust. It is short and carries two arthrobranchiæ, a podobranchia, and a mastigobranchia.

The two following pairs are more slender, and possess a similar branchial arrangement.