

is excavated for the reception of the large visual organs, and centrally the structure of the integument is reduced to considerable tenuity, through which a longitudinal fissure, like a closed aperture, exists. At the base of the joint on the inner side there is a considerable hollow enlargement with a narrow aperture on the inferior surface, which is protected by a strong but not very prominent ridge. At the opposite extremity of the same joint there is a thin semi-membranous spot that is also probably associated with the acoustic apparatus.

The second pair of antennæ appears to spring from the metope or facial wall, which in both sexes is membranous. The phymacerite exists in the form of a conspicuous tubercle, flattened transversely, the opening of which is on the posterior surface close to and at the end of a long groove in the lateral wall, which is larger and more conspicuous in the female than in the male.

The cheiloglossa is continuous with the epistoma, which in the male is membranous and perpendicular. The metastoma consists of two plates separate from each other longitudinally and obliquely, and produced anteriorly and laterally in the form of large fleshy plates, that cover not only the oral opening but overlap to a considerable extent the posterior lateral margin of the cheiloglossa, so as to cover up and entirely hide the mandibles in the male. In the female the mandibles are seen at the side apparently thrown very far back. In the two sexes the conditions are different, the epistoma in the female is strong and calcified, and the cheiloglossa projects conspicuously beyond its margin, and anteriorly presses between the mandibles. Hence these latter organs appear to have no external biting power. They lie protected between the lateral margins of the anterior and posterior labra, where apparently they have no power to act until the projecting cheiloglossa, which intrudes itself between them, moves from its position, and acting as a tongue, guides the food to its place both for mastication and deglutition.

The third or middle pair of pereopoda in the female carries the oviduct, which is surrounded by a fringe of hairs. The fifth or posterior pair in the male carries the penis, the passage of which is by a large round foramen. Behind this last pair of legs a prominent projection like a broad flat tooth, more decided in the male than in the female, rises from the posterior angle of the ultimate somite of the pereion and rests against the inflected margin of the carapace.

The anterior pair of pleopoda differs in the two sexes. In both they are large, foliaceous, and unequal. In the female there is nothing but their size to distinguish them, while in the male the internal branch is more delicate in structure, broader, and carries a short, obtuse stylamblys armed with a few cincinnuli. The four following pairs of pleopoda are alike in size and general form, each branch being equally important. In the female the inner one carries a single stylamblys fringed on one side with long hairs, and the male carries two, one fringed with hairs the other tipped with cincinnuli. On all the pleopoda the hairs are abundant, and thickly fringed with long cilia.