

fringed with short hairs, amongst which are three small sharp teeth on each side, of which the anterior is the most important. Behind the orbits are two sharp teeth one before the other, and more laterally is a third much smaller one. Two small teeth are also situated on the posterior margin of the lateral extension of the cervical depression.

The somites of the pleon are dorsally smooth, and have the lateral margins rounded, with but a slight tendency to come to a point infero-posteriorly.

The telson has the lateral margins parallel, and the terminal semicircular margin is defined by a strong tooth on each side and fringed with a copious brush of plumose hairs. The dorsal surface supports on each side of the median line a small fasciculus of hairs and two small sharp teeth, posterior to which the plate is submembranous and rugose.

The first pair of antennæ has the peduncle shorter than the rostrum, not reaching beyond the anterior teeth. The outer branch is longer but not stouter than the inner, which may be due to our specimen being a female.

The second pair of antennæ carries a strong sharp tooth, on the outer side of the joint that supports the squamous appendage, the value of which may be appreciated from the description of the same under *Astacopsis spinifer* (erroneously figured on Pl. XXVII. as being part of the anterior margin of the carapace); the latter reaches rather beyond the apex of the rostrum, while the extremity of the peduncle scarcely reaches the same point. The flagellum is about two-thirds the length of the animal.

The appendages of the mouth vary but little from those of other species of the genus.

The first pair of gnathopoda is a little slighter than those in *Astacopsis paramattensis*. But there is very little variation in the second pair, while it differs from that of *Astacopsis spinifer* in having the basephysis or outer branch longer than the ischium.

The first pair of pereiopoda has the right hand larger than the left, but otherwise they resemble each other; the surface is smooth, the inner and outer margins of the propodos are crested and slightly denticulate; the carpos is armed with a single sharp tooth on the inner margin and one on the inferior margin of the propodal articulation; the meros is armed with three sharp teeth on the superior margin and three on the inferior on the right side, on the left there are three teeth on the superior and only one on the inferior, the two posterior being rudimentary.

The second and third pairs are slender and chelate, the fourth and fifth simple, and have the distal extremity of the propodos fringed with a brush of hairs, but no polliciform process.

The first pair of pleopoda is absent; the four succeeding pairs are similar to each other, having the two rami subequally long, narrow, and fringed with plumose hairs.

The sixth pair which, with the telson, goes to form the caudal fan or rhipidura, has each branch or plate, the inner as well as the outer, armed on the outer side by a strong and sharp tooth, and the posterior margins fringed with plumose hairs.