

obsolete organs, there is no anatomical reason why they may not be present in the males as well as the rudimentary mammæ in the males of the Mammalia.

The second pair of pereopoda is shorter and much more slender than the first, it is chelate, the propodos not being larger than the carpos; the fingers are slender and correspondingly curved and adorned with a series of distantly planted fasciculi of hairs, and the meros is armed with a few teeth on the outer margin, and two or three on the inner near the carpal articulation.

The third pair of pereopoda resembles the second but is more slender and less strongly armed.

The posterior two pairs of pereopoda are a little shorter than the preceding, they are more conspicuously armed on the outer side of the meros and carpos and on the upper side of the propodos, which is more slender, than in the preceding two pairs, and the inner distal angle is produced to a short pollex that is about one-third the length of the dactylos and therefore is only sub- or imperfectly chelate. The last four pairs of pereopoda, like the first, articulate with a process on each side of the median ventral carina, and these processes increase in size and importance, and separate slightly, as they proceed posteriorly.

The first pair of pleopoda is wanting; the second and succeeding resemble each other; they consist of a basal joint and two compressed branches, having parallel margins thickly fringed with hairs.

The posterior pair, which helps to form the rhipidura, is broad and corresponds in length with the telson. The inner branch is armed with three or four teeth longitudinally placed in the median line and corresponding with a slight elevation; the outer plate is ribbed in the median line and armed with a few teeth near the outer margin. A diæresis divides the plate one-third from the distal margin, and is fringed with a regular series of small sharp-pointed teeth, of which the largest exists on the outer margin, and one corresponds with the extremity of the median rib, whence they gradually diminish and disappear on the inner side. The distal portion of all the plates of the rhipidura is submembranous, finely corrugated, and fringed with hairs.

*Astacopsis paramattensis*, n. sp. (Pl. XXVII. fig. 1).

Carapace dorsally broad and smooth. Anterior division laterally dentate, posterior division laterally tuberculate.

Pleon dorsally smooth, laterally tuberculate. Telson denticulate, and posteriorly minutely corrugated.

First pair of pereopoda subequal; surface smooth, margin denticulate; carpos with two teeth on the inner margin; meros longitudinally denticulate on the upper and lower margin.

Length (female), 94 mm. (3.75 in.).

*Habitat*.—One specimen taken in the Paramatta River, Sydney, Australia.