

According to Roesel and Huxley the young in *Astacus* are attached by means of the first pair of pereopoda, but according to Mr. Wood-Mason,¹ in the New Zealand species of *Paranephrops* the young are attached by the strong hooked claws of the two hindermost pairs of feet to the swimmerets beneath the pleon.

Astacopsis, Huxley.

Astacopsis, Huxley, Proc. Zool. Soc. Lond., 1878, p. 764.

This genus resembles *Astacoides* of Guérin² externally, but differs in having a second joint to the outer branch of the first pair of siagnopoda, in having a larger median ramus, and a longer second joint to the outer branch of the third pair of siagnopoda; in having a basephysis that reaches to the extremity of the dactylos in the first pair of gnathopoda; in having a two-jointed basephysis that reaches to the extremity of the ischium in the second pair of gnathopoda, and in having on each side four well-developed pleurobranchiæ, eleven arthrobranchiæ, besides six podobranchiæ, and four movable plates, one of which is attached to the podarthrodial membrane of each of the pereopoda except the posterior pair.

In *Astacopsis* there are four pleurobranchiæ, eleven arthrobranchiæ, and six podobranchiæ, while in *Astacoides* there are, besides the six podobranchiæ that are common to all the genera of the Astacidæ, ten arthrobranchiæ, five of which are rudimentary, and one pleurobranchiæ. Moreover, the basephysis of the second pair of gnathopoda is unbranched, and approximating to a rudimentary condition, and that of the first pair is shorter than the limb to which it is attached. The second or terminal joint of the outer branch of the third siagnopoda is short and in a rudimentary condition, and the outer branch of the first siagnopoda has no second joint. The metabranchial plate attached to the fourth pair of pereopoda is rudimentary instead of being large as in *Astacopsis*.

Geographical Distribution.—Specimens of this genus have been taken in several of the rivers of the southern divisions of the Australian continent, whereas *Astacoides* is confined to Madagascar.

Astacopsis spinifer (Heller) (Pl. XXVIII.).

Astacoides spinifer, Heller, "Novara" Reise, Crustaceen, p. 102, tab. ix., 1865.

Astacus armatus, von Martens, Ann. and Mag. Nat. Hist., ser. 3, vol. xvii. p. 359, 1866.

Australian Crayfish, unnamed, Huxley, The Crayfish, p. 307, fig. 76.

Australian Crayfish, J. E. Gray, Eyre's Journ., Exped. Cent. Aust., vol. i. p. 407.

Rostrum sharp pointed and armed on either side with three sharp teeth near the anterior extremity. Dorsal surface of the carapace smooth and divided by a deep

¹ Ann. and Mag. Nat. Hist., ser. 4, vol. xviii. p. 307.

² Revus Zoologique, vol. ii. p. 109.