Observations.—This specimen appears very closely to resemble *Astacus australasiensis*, Milne-Edwards, recorded from New Holland,[1] from which it appears to differ in several details, the most distinguishable being that it has three small teeth on each side of the rostrum instead of one, that it has two teeth longitudinally situated on the carapace on each side behind the orbit instead of being smooth, and one tooth instead of three on the inner margin of the carpos of the first pair of pereiopoda, and that the inner margin of the propodos is less strongly serrate.

The inner margin of the second pair of gnathopoda is serrate, while the drawing of the part shown in Milne-Edwards' figure represents it as perfectly smooth.

Milne-Edwards' description is stated to be taken from a young animal. Ours is from a female, but whether fully grown or not there is no means of determining. The vulva appears to be imperforate, but whether this be due to the immature condition of the ovaries, or, as I am inclined to believe, from a recurring state of biannual rest, we are not at present able to determine. I have observed the calcified condition of the vulva in numerous instances where there was clear evidence of adolescence, a circumstance that induces me to believe in the probable correctness of the opinion that these animals may breed only every other year.

Tribe **Stenopidea**.

Anterior margin of the carapace produced to a laterally compressed rostrum. Anterior three pair of pereiopoda chelate, of which the posterior pair is the longest and largest.

Branchiæ filamentous.

Brephalos, a Megalopa or a Zoea.

In this tribe there is but a single family.

Family STENOPIDÆ.

Podobranchial plume absent from all excepting the first pair of gnathopoda. Posterior pleurobranchial plume the largest. Basecphysis of the second pair of gnathopoda small, slender, and almost rudimentary.

The two genera that are here grouped together in this family have by all preceding carcinologists, including Milne-Edwards, de Haan, and Dana, been placed in the family of the Penæidæ.

This was done, it appears to me, on the external evidence that *Penæus* has, in common with *Stenopus* and *Spongicola*, the anterior three pairs of pereiopoda developed in the

[1] Hist. Nat. Crust., vol. ii. p. 332, pl. xxiv. figs. 1-5.