to a rudimentary condition, being only a short, flat point, and beside it stands a threejointed but rather feeble synaphipod, that is fringed with a few hairs.

The first pair of siagnopoda is two-branched, one branch being broad, foliaceous, and fringed with hairs.

The first pair of gnathopoda has a long basecphysis and a mastigobranchial plate of extreme tenuity, with a small podobranchial plume attached.

The second pair of gnathopoda (fig. 4i) is long, robust and four-jointed; the first joint, which is the coxa, is short, the second is long, the third and fourth long and distally fringed with spinules. It has no basecphysis attached, but supports a rather rudimentary mastigobranchia that originates in a broad discoidal base, and has no branchial plume.

The first pair of pereiopoda is short, strong, and chelate, having the basis and ischium anteriorly produced on the lower margin to a prominent tooth; the coxa supports a rudimentary mastigobranchial appendage, as do all the other pereiopoda except the posterior pair. There is a pair of arthrobranchial plumes attached to the articulation of the second pair of gnathopoda and anterior four pairs of pereiopoda. There are six pleurobranchiæ, of which the posterior is the largest and the anterior the smallest. The second pair of pereiopoda is long, slender, and chelate, having the carpos long, flexible, and multiarticulate. The three succeeding pairs are long and moderately robust, they have the meros posteriorly fringed with spines; the propodos is longer than the carpos, and terminates in a short and slightly curved dactylos, that has the posterior margin sharply serrate.

## Merhippolyte orientalis, n. sp.

Rostrum armed on the upper surface with five or more strong teeth, of which the posterior corresponds with the gastric region, and is smaller than the others. The apex of the rostrum is broken off, and its length cannot therefore be determined.

The ophthalmopoda are pyriform, and as long as the first joint of the peduncle of the first pair of antennæ.

Length	n, entire, .		•			32 mm. (1·2 in	.).
"	of carapace,			•		8 "	
,,	of pleon,	•			•	24 "	

Habitat.—Station 191, September 23, 1874; lat. 5° 41' 0" S., long. 134° 4' 30" E; off New Guinea; depth, 800 fathoms; bottom, green mud; bottom temperature,  $39^{\circ}.5$ . One imperfect specimen. Trawled.

This specimen is much damaged, but the broken rostrum reaches beyond the extremity of the first joint of the first pair of antennæ, otherwise I should have considered it to be *Hippolyte spinifrons* of Milne-Edwards.<sup>1</sup> It is somewhat difficult to determine exactly <sup>1</sup> Loc. cit., vol. in. p. 377.