Nothocaris binoculus (Pl. CXIV. fig. 2).

Carapace smooth and free from a dorsal carina posterior to the frontal crest, which is slightly elevated and laterally compressed, and anteriorly produced to a long rostrum extending beyond the orbital margin more than the length of the carapace. The frontal crest is armed with five movable spines and the rostrum on the upper surface with six or seven teeth distantly situated from each other, two being close together near the apex, and the lower margin with ten or more and a fringe of hairs near the base.

The sixth somite of the pleon is but a little longer than the fifth, and the telson is not so long as the lateral plates of the rhipidura.

The above description is from a female specimen. The male is considerably smaller than the female, more slender in appearance, and has comparatively a longer rostrum, but in detail the features correspond.

					Female.	Male.
Length,	entire,	•	•		39 mm. (1.5 in.).	21 mm. (0.8 in.).
,,	of carapace,		•		12 "	6 "
,,	of rostrum,			33 . 'n	15 "	12 "
"	of pleon,	•			27 "	15 "

Habitat.—Station 190, September 12, 1874; lat. 8° 56' S., long. 136° 5' E.; Arafura Sea, south of New Guinea; depth, 49 fathoms; bottom, green mud. Four specimens; one male, and three females bearing ova. Trawled.

This species is smaller than either of the preceding, but corresponds in all the generic features. The dorsal surface is smooth and rather conspicuously elevated at the third somite of the pleon and somewhat compressed posteriorly. The sixth somite is short, not being quite so long as the telson, which is a little shorter than the lateral branches of the rhipidura.

The carapace has a dorsal crest over the frontal region, but not extending to the gastric; it is armed with four or five spines and two teeth (fig. 2, r.c.), tolerably close together, of which the posterior is the smallest and stands just anterior to the gastric region, and the anterior the largest, standing on the rostrum at a level corresponding with the distal extremity of the ophthalmopod. Beyond this point the rostrum gradually rises anteriorly with a slight curve, and is furnished with five small teeth, of which three are subequally distant from each other, whilst the fourth and fifth near the apex are close together. The lower margin is furnished with ten or more teeth that lie nearly horizontal with the surface and therefore less conspicuous.

The ophthalmopoda (fig. 2a) are short and pyriform, furnished posteriorly with an ocellus, the distal margin of which is in contact with the pigment of the ophthalmus for a minute extent.

The first pair of antennæ has the first joint deeply excavate and furnished with a