

of this genus rather than with *Aristeus*, especially in the rudimentary condition of the pleurobranchiæ, and in having no mastigobranchia attached to the fourth pair of pereopoda.

The outer branch of the tail-fan is long and narrow, about one-half longer than the inner, which is about one-fourth longer than the telson. The outer margin is strengthened by two parallel ridges that meet in a sharp tooth some distance from the distal extremity. From near this tooth a rigid diæresis obliquely traverses the plate.

A fine specimen of a female, about 150 mm. long, measured from the frontal margin to the extremity of the telson, was taken by the trawl about 130 miles north-east of the Kermadec Islands, and three others were also trawled at a depth of nearly three-quarters of a mile close to the same islands; these were one adult female and two young animals, one of which carries an antenna that is more than three times its length, and the smallest specimen appears to be an immature male.

*Hemipenæus tomentosus*, Spence Bate (Pl. XLIX. figs. 2, 3; Pl. L.).

*Aristeus tomentosus*, Sp. B., *loc. cit.*, p. 189.

Body smooth, covered with a very short velvety pile. Rostrum equal in length to the extremity of the shorter flagellum of the first pair of antennæ; armed with three teeth, of which the posterior is just behind the orbital margin of the carapace, the second in advance of it, and the third near the middle of the rostrum. The dorsal carina is only just indicated in the median line behind the posterior tooth, feebly repeated on the posterior portion of the third somite of the pleon, and increases on each of the three posterior somites, where it is produced to a small pointed tooth.

The telson is pointed, dorsally flattened, with indications of a groove, and armed on each side with three small spines.

*Habitat.*—Station 177, August 18, 1874; lat. 16° 45' S., long. 168° 7' E., the New Hebrides; depth, 130 fathoms; bottom, volcanic sand. One specimen; female.

Station 200, October 23, 1874; lat. 6° 47' N., long. 122° 28' E.; the Philippine Islands; depth, 250 fathoms; bottom, green mud. Two females.

Length (female), 125 mm. (5 in.).

This species bears a general close resemblance to *Hemipenæus semidentatus*, but is easily distinguished by the slightly pilose character of the external surface, and by the shortness of the rostrum, which is only half the length of the carapace. The teeth on the rostral crest are further apart and not so large. There is not a very distinct ridge traversing the upper margin of the branchial chamber, and the mid-branchial rib is but feebly marked. The teeth on the frontal margin of the carapace correspond with those of the typical species.