and the rhipidura much resembles that in Benthesicymus altus, except that the telson is scarcely as long in proportion.

The larger specimens of this species were taken off Brazil. Some were taken at the western side of Torres Strait, but these were all smaller, and close examination shows that they differ in the unimportant character of having no tooth on the posterior margin of the third somite of the pleon, and the thelycum on the ventral surface of the pereion is rather more conspicuous. These were taken at a depth of rather more than two miles and a half, where the temperature was 4° above freezing point; the bottom where specimens were taken was unlike in character; in two localities it was blue mud, in one it was red clay, in one it was coral mud, and in one Globigerina ooze.

Benthesicymus pleocanthus, n. sp. (Pl. LVII. fig. 2).

Surface membranous. Rostrum short, pointed, crest armed with two teeth, the anterior of which is the smaller. Cervical fossa clearly defined, but not deep. Pleon with the posterior somites laterally compressed, and the dorsal surface of the fifth somite posteriorly produced in the median line to a laterally compressed tooth, which nearly equals the somite in length. The sixth somite is deep, and carries a distinct but not high ridge in the median dorsal line. The telson tapers to a point, is smooth at the sides, and quite half the length of the outer branch of the rhipidura.

Length, 76 mm. (3 in.).

Station 23, March 15, 1873; lat. 18° 24′ N., long. 63° 28′ W.; off Sombrero Island; depth, 450 fathoms; bottom, Pteropod ooze. One specimen, female; evidently that from which Suhm's figure was taken. Dredged.

Habitat.—Station 205, November 13, 1874; lat. 16° 42′ N., long. 119° 22′ E; Philippine Islands; depth, 1050 fathoms; bottom, blue mud; bottom temperature, 37°. Two specimens, one male and one female. Trawled.

Station 250, July 9, 1875; lat. 37° 49′ N., long. 166° 47′ W.; North Pacific Ocean; depth, 3050 fathoms; bottom, red clay; bottom temperature, 35°. Two specimens, both males. Trawled.

The specimens taken at both Stations differ in the position of the large dorsal tooth on the fifth somite of the pleon. In the males, of which there are three, it stands near the middle of the somite, in the fourth, which is a female, it stands on the posterior margin, but this variation in position appears to depend more upon the recession of the dorsal portion of the posterior division of the somite than upon any alteration in the dorsal tooth. In the males also the small patch of black pigment is situated as a spot near the middle of the ophthalmopod and distant from the base of the ophthalmus, while in the female it traverses the ophthalmopod from the eye to the base in an undefined mass.