

the fourth and fifth are entirely respiratory, as in the genus *Amphoroidea*. This is the case with both sexes.

The *uropoda* in the male (fig. 12) consist of a short fixed endopodite and a long curved exopodite, which is very considerably longer than the caudal shield; in the female (fig. 11) the *uropoda* are of a different shape; the two rami are subequal; the outer movable ramus is narrower than the inner ramus, which is flattened out and pointed at its extremity.

Station 218, off New Guinea, March 1, 1875; lat. $2^{\circ} 33' S.$, long. $144^{\circ} 4' E.$; depth, 1070 fathoms; bottom temperature $36^{\circ} \cdot 4 F.$; blue mud.

Family CYMOTHOIDÆ.

Anuropus, F. E. Beddard.

Anuropus, F. E. Beddard, Proc. Zool. Soc. Lond., 1886, pt. i. p. 112.

Definition.—Body very convex, smooth, without any hairs or spines. Head small, without any trace of eyes. Thoracic segments subequal, furnished with well-developed epimera except on the first segment, where they are fused with the tergum. Abdomen narrower than thorax; abdominal segments short and subequal, sixth segment larger and rounded, flattened. Antennules very short, consisting of a basal joint and a swollen, elongated, curved, distal joint; antennæ slender and well developed, with a four-jointed peduncle and a flagellum of equal length. Thoracic appendages subsimilar, short and stout, with a powerful terminal claw. Abdominal appendages all similar, consisting of a short basal joint and two expanded foliaceous rami.

Remarks.—This genus is quite the most remarkable that was obtained during the voyage; it is represented only by a single individual from deep water (1070 fathoms) in the Western Pacific, off New Guinea. In its general form there is no marked discrepancy from other genera of Cymothoidæ, to which family the present species is evidently to be referred. The most remarkable divergence in structure, and one which is clearly correlated with its habitat, is the modification of the abdominal appendages of the last pair. One of the principal characteristics of the group Isopoda is the metamorphosis of one or more pairs of the abdominal appendages into respiratory organs; the number of pairs of limbs which are thus modified, and their form, is typical of different families. But in no one genus or family do all the abdominal limbs serve the function of respiratory organs; at least the terminal pair are modified into the rudimentary, styliform or flattened appendages, which latter form together with the extremity of the abdomen a powerful "caudal fin" the principal agent of progression. The present genus, therefore, in that the terminal pair of abdominal appendages are precisely similar to the foregoing limbs, evidently subserving like them the function of respiration, is quite unique not only in the