

of the flagellum is a tuft of exceedingly long slender hairs which are quite twice the length of the whole appendage; as in other Tanaids there appear to be no auditory hairs upon the last joint of the antennule, and perhaps this fact is in favour of regarding the last joint as belonging to the peduncle and not representing the flagellum, which in that case would be absent.

The *antennæ* (fig. 12) are rather shorter than the antennules, but like them appear to consist of only four joints, five being the usual number found in this appendage in other Tanaids. The first joint is wide and flattened, and is prolonged on the inferior surface for some way beyond the articulation of the second joint, in fact, as far as its distal extremity; the second joint is altogether smaller than the first joint but has the same general form; it is widened and flattened and projects on the ventral side for a short distance beyond the third joint; the latter is of about the same length as the preceding joint, but narrow and cylindrical; the distal joint of the appendage is short and narrows towards its termination.

A large number (fourteen) of individuals dredged in 2 to 10 fathoms, in Port Jackson, appear to me to be hardly distinguishable from this species, which thus is an example of the very unusual occurrence of a species which is common to very shallow water and to the great abysses; such instances in the Isopoda are so extremely rare that I am inclined to doubt whether there has not been some mistake made with reference to the specimen alleged to be from Station 246, 2050 fathoms; at any rate, for the present, it appears necessary to regard the fact of its occurrence in very deep water with a certain reserve.¹

Among the specimens dredged in shallow water at Sydney there are two series of individuals which I imagine to be males and females respectively; in certain individuals the abdomen is distinctly longer than in others, and as this sexual difference occurs in *Leptognathia* it is probably a mark of sexual distinction in the present species; it is the only one, at any rate, that I could detect. There is absolutely no difference in the structure of the antennules; they are perfectly similar in all the fourteen individuals.

Station 246, Mid North Pacific, July 2, 1875; lat. 36° 10' N., long. 178° 0' E.; depth, 2050 fathoms; bottom temperature, 35°·1 F.; Globigerina ooze.

Port Jackson, 2 to 10 fathoms.

¹ It must be remembered, however, that a species of *Typhlotanais*, labelled on a slide during the Expedition from Station 246, is apparently identical with *Typhlotanais kerguelenensis*; hence there is some independent evidence from analogy, in favour of supposing that no mistake has been made with respect to the occurrence of *Bathytanais bathybrotus* in deep water as well as shallow.