

segments are nearly straight. The first segment of the thorax has a compressed, forwardly directed, curved spine which arises from the middle of the ventral surface of the segments; there is a trace of a similar process on the second segment, which is, however, merely a slight elevation and not a spiny process; the point at which the thoracic limbs articulate varies in the successive segments; in the first they arise from a point close to its anterior border; in the second they arise a little further back, and in the third at about the middle; the three posterior thoracic appendages arise close to the posterior boundary of their respective segments.

The abdomen is about as long as the two last segments of the thorax taken together.

The first five segments are short and subequal; the terminal segment is longer and ends in an obtusely pointed extremity.

The *antennules* (fig. 2) are about as long as the cephalothorax; they have the normal structure, the first joint being the longest and stoutest; the second joint is very short, the third longer.

The *antennæ* are shorter than the antennules as well as more slender; the two basal joints are short and subequal, the third joint is long and curved from above downwards; the flagellum consists of two, one, the distal joint, being very rudimentary.

The *chelipedes* are chiefly remarkable for the slenderness of the hand; one of these appendages is shown in fig. 3, where this peculiarity is rendered apparent.

Of the *ambulatory limbs* the first pair are rather longer than the two following pairs; the three anterior pairs of thoracic appendages differ from the three posterior pairs in being much more slender.

The *uropoda* are biramose; the basal joint is short and stout; the outer of the two rami is more slender than the inner, and consists of only one joint, which is furnished at the free extremity with a single long seta; the inner joint is stouter than the outer, and is distinctly biarticulate; the distal joint, which is shorter than the proximal, bears a tuft of hairs at its extremity. In another specimen both branches of the uropoda are distinctly biarticulate.

A single specimen of a species of *Typhlotanais* was dredged in the North Pacific from a depth of 2050 fathoms in company with the next species *Typhlotanais brachyurus*; the specimen was mounted on a slide in Canada balsam during the Expedition. I find it impossible to distinguish this individual from those dredged at Kerguelen by any very distinctly marked characters; at the same time the condition of the specimen does not enable me to speak with great certainty, which is all the more to be regretted, as the occurrence of the same species in very deep and in shallow water is a rare occurrence.

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.

Station 149H, off Cumberland Bay, Kerguelen, January 29, 1874; lat. 48° 45' S., long. 69° 14' E.; depth, 127 fathoms; volcanic mud.