

appendages. Synnhipod reaching beyond the extremity of the peduncle of the second pair of antennæ.

The rest of the animal is so damaged that it is difficult to give a specific description.

*Habitat*.—Station 146, December 29, 1873; lat.  $46^{\circ} 46'$  S., long.  $45^{\circ} 31'$  E.; near Marion Island; depth, 1375 fathoms; bottom, Globigerina ooze; bottom temperature,  $35^{\circ} \cdot 6$ . Four specimens, females. Trawled.

Station 159, March 10, 1874; lat.  $47^{\circ} 25'$  S., long.  $130^{\circ} 22'$  E.; south of Australia; depth, 2150 fathoms; bottom, Globigerina ooze; bottom temperature,  $34^{\circ} \cdot 5$ . One specimen, female. Trawled.

This species, so far as it can be determined from the damaged specimens in the Challenger collection, is very like *Sergestes japonicus*, but it may be very readily discriminated by the dark brown colour of the hairs attached to the margins of the synnhipod and other oral appendages.

The nervous system in one specimen being in a tolerably good state of preservation, I was enabled to lay it bare in its entire length from the cephalon to the extremity of the pereion.

The cephalic lobes are very large and apparently divided into lobules, corresponding to the branches that are given off. The ophthalmic branch is very small and thread-like, while that which supplies the first pair of antennæ is very large, strong, and originates in a special ganglion in front of, but belonging to, the cerebral mass, while behind, from the largest mass, two stout nerves, independent of each other, lead to the second pair of antennæ, one apparently going to the green gland, and the other to the antennæ or antennal muscles, which are exceptionally strong. The oral branches of the nerves are small and arise from the œsophageal loop, while all the limbs attached to the pereion are supplied from the ganglionic masses on the ventral surface in the following manner. The anterior two ganglia supply the gnathopoda. The three next supply the corresponding pairs of pereiopoda, of which the posterior is connected with, and supports, the oviducts, and is a slightly larger ganglion than the preceding; the central cord at this point divides into two, and reunites at the next ganglion, which sends off two branches to the penultimate and two to the ultimate pairs of pereiopoda, after which the central cord becomes single as it traverses the median ventral line of the pleon; consequently there is no ganglion corresponding with the posterior pair of pereiopoda.

### *Sergestes*, Milne-Edwards.

*Sergestes*, Milne Edwards, Ann. d. Sci. Nat., ser. 2, vol. xix. p. 346, 1830.

Body long and slender. Structure submembranous. Carapace scarcely produced to a rostrum anteriorly. Ophthalmopod single-jointed.