From the Proceedings of the Zoological Society of LONDON, January 19, 1886.7

A communication was read from the Rev. T. R. R. Stebbing, containing descriptions of some new Amphipodous Crustaceans from Singapore and New Zealand. The species were shortly described as follows :-

1. Byblis kallarthrus, sp. nov.

This new Amphipod was brought from Singapore by Brigade-

Surgeon S. Archer.

The most striking peculiarities are the doubly sinuate lower margins on their of the fourth pair of side-plates, the branchiæ carrying on their surfaces rows of overlapping secondary vesicles, and the third uropods, in which the inner margin of the outer branch and the outer margin of the inner branch are much ornamented. The head in this species is long, very much narrowed distally; the telson is

divided beyond the centre.

The following accounts of Talorchestia tumida and Amphithopsis cærulea, from New Zealand, were sent along with the specimens by Mr. G. M. Thomson, their discoverer. His remark that in Amphithopsis (Pherusa?) cærulea the 4th coxa is broader than the preceding three together, applies to the appearance in the undissected specimen, not to the coxæ or side-plates when drawn apart.

"2. TALORCHESTIA TUMIDA, n. sp.

General form of body, when seen from above, much inflated. Eyes

large (in living specimen of a turquoise-blue colour).

Anterior antennæ very short, reaching a little past the extremity of the penultimate joint of the peduncle of the posterior pair; flagellum 7-8-jointed, subequal with peduncle. Posterior antennæ as long as cephalon and first two segments of pereion, last joint of peduncle much the longest; flagellum 12-14-jointed, slightly shorter than peduncle.

Males apparently of two forms:—

First Form.—First gnathopod with the propodos somewhat curved, its inferior margin distally produced and rounded; dactylos curved and much longer than the palm; carpus and propodos with numerous spines. Second gnathopod with the carpus small and triangular; propodos ovoid and smooth, palm very oblique and furnished with two rows of minute teeth; dactylos two thirds as long as propodos, with its point lying over the edge of the palm. Third pereiopod short, fourth and fifth very long, former with the bases not dilated.

Se ond Form.—Second gnathopod with the propodos broadening towards the distal margin, palm nearly transverse with a blunt tooth between the middle and hinge of the dactylos; latter furnished with a large tooth impinging outside of the tooth of the palm. Third and fifth pereiopoda normal: fourth with the the carpus nearly quadrate and broadly dilated.

Telson nearly as broad as long, quite round at the apex and fringed above with a submarginal row of minute spines. Colour,

when alive, ivory-white.

Hab. In sandbanks, Purakanui near Dunedin, among roots of littoral plants, many yards from high-water mark. Each specimen inhabiting a hole of its own. When taken out they leap with great vigour.

"3. Pherusa (?) cærulea, n. sp.

Colour of body a deep indigo-blue, appearing black when alive. Length about 5 mm. Superior antennæ about 4 mm. long, and considerably longer than the inferior; last joint of the peduncle with a secondary appendage consisting of a single joint and a terminal seta; flagellum about three times as long as peduncle and very-many-jointed. Inferior antennæ about two thirds as long as superior, and with the peduncle reaching slightly beyond the extremity of peduncle

of the first pair. The mandibles have an appendage. The gnathopoda are small and subchelate; the dactylos of the second pair is quite peculiar; it does not end in a claw, but in a finger-like setiform process. Pereiopoda very similar in form, the basa being progressively dilated; fourth pair the longest. Telson entire. Coxæ of the first four segments very deep, the 4th broader than the preceding

three together.

Hab. Several specimens of this species were taken in a runnel of water on the Obelisk (or Old Man) Range in the interior of Otago, at a height of about 3000 feet. The stream was a little thing that one could have dammed with the hand, and running at such a slope that I can hardly imagine how the crustacea are not washed away by every shower of rain. The Old Man range is about 80 miles from the sea. The only other fresh-water amphipod found in New Zealand (excluding the subterranean forms found by Chilton) is Calliope fluviatilis, mihi, which is very common."

This paper will be published entire, with illustrations, in the

Society's Transactions.