

longitudinally, and project anteriorly so that their extremity reaches as far forwards as the base of the penultimate pair of pereopoda.

In the male specimen from Fiji the petasma corresponds precisely with that of the male taken at the Mauritius, and now in the Museum of the Jardín des Plantes.

*Penæus canaliculatus*, var. *japonicus* (Pls. XXXI., XXXII. fig. 4, XXXVII. fig. 2).

*Penæus canaliculatus*, de Haan, Crust. in v. Siebold, Fauna Japonica, p. 190.

This variety differs from Milne-Edwards's typical specimen and description of *Penæus canaliculatus* in having the telson terminating more acutely, and in having three small spines on each lateral margin, but more especially in the peculiar formation of the complementary external female apparatus which I propose to call thelycum.

Length (female), 175 mm. (7 in.). There is no male of this variety in the collection.

*Habitat.*—Japan.

The carapace has a central, narrow, longitudinal groove extending from the posterior extremity of the rostral carina to near the posterior margin of the carapace, and on each side another that extends from the anterior extremity of the rostrum to the posterior margin of the carapace. The rostrum is about half the length of the carapace, the dorsal crest, reaching posteriorly to nearly the middle of the carapace, is armed with nine teeth interspersed with fine hairs, and with one tooth on the under surface, situated immediately beneath the anterior rostral tooth. The two posterior somites of the pleon are laterally compressed, forming an acute dorsal angle that is produced to a small tooth at the posterior extremity of the sixth somite. The telson is centrally grooved with a longitudinal furrow that reaches from the anterior margin to the posterior extremity, and is armed with three small spines on the lateral margin.

The eyes (Pl. XXXI. *a*) are large and ovate, with the inner side flattened and the outer rounded, projecting on a biarticulate peduncle, and reaching as far anteriorly as the tooth on the inferior margin of the rostrum.

The first pair of antennæ (*b*) has the peduncle reaching as far as the apex of the rostrum; the first joint is long, wide, and scale-like; the inner margin is longitudinally straight, deepest posteriorly, where it is furnished on the inner side, near the base, with a long slender prosartema copiously fringed with hairs, and thinning anteriorly; on the outer side it is armed at the extremity with a sharp-pointed tooth, and a stylocerite lying closely against the side and directed forwards (not shown in the figure); the upper margin is longitudinally curved, and fringed with a linear row of delicate cilia, the lower is nearly straight; the outer and inner margins of the joint are subparallel, slightly approximating at their anterior extremity; the surface between the two lateral margins is deeply excavate, especially towards the base, where the auditory apparatus