

The first pair of antennæ has the peduncle rather longer than the rostrum, having the first joint long and the two following short, terminating in two flagella, of which the inner is short and uniaarticulate, and the outer stout, but in the specimen it is broken at the first articulus. The base of the first joint of the peduncle is broad and flat, furnished on the outer margin with a strongly projecting point; within this space is an otocyst containing a spherical otolith.

The second pair of antennæ is broken off at the extremity of the peduncle, which is short, stout, and carries a scaphocerite that is long, narrow at the base, and increasing in width towards the extremity, armed with a tooth on the outer side and foliaceous on the inner, which is furnished with cilia.

The mandibles are not furnished with a synnhipod.

The first pair of gnathopoda is like that of *Sergestes*, but the terminal joint is rather cylindrical than spatuliform, but this may be the result of its immature condition.

The other appendages of the pereion are broken off, so that I cannot determine their form, nor can I determine the presence of the last two pairs of pereopoda. The first somite of the pleon is furnished on each side with a projecting process that is homologous to the pleocleis of larger species.

The pleopoda are all long and single-branched, all but the first pair having a small bud-like process, which is the rudiment of the inner ramus, at the distal extremity of the basal joint; these are small on the second pair, and gradually increase in size posteriorly. The sixth or terminal pair, which forms the outer plates of the rhipidura, has the basal joint armed on the outer distal angle with a short robust tooth. The outer plate is a little longer than the telson, and is armed on the outer margin with a long tooth about one-third distant from the apical extremity; the inner branch is narrow and tapering, about the length of the telson, and fringed on both sides with long delicate hairs.

Length, 4 mm. (0·17 in.).

*Habitat.*—North of New Guinea.

*Observations.*—The absence of the posterior two pairs of pereopoda is suggestive of its relation to the genus *Acetes*; but the specimen is undoubtedly that of an animal not fully grown. The ocellus is still visible as a small longitudinal black streak. The rostrum is slender, and has a deciduous appearance from its delicate, thin, dermal covering. This is also the condition of the terminal appendages of the telson, and the general structure is that of an animal that has not arrived at its mature condition, but is approaching it, although its dimensions are still small.

The second stage represented on Pl. LXXVIII. fig. 2, is in the *Mastigopus* condition, and is more perfectly preserved than the preceding.

The carapace is nearly as long as the pleon, excluding the telson. Rostrum broken. Dorsal surface armed with a tooth on each side corresponding with the extremity of the