

The first pair of antennæ (fig. 1*b*) has the peduncle about two-thirds the length of the carapace, and its three joints subequal. The longer flagellum is broken off in all our specimens, but Kröyer states that it is about two-thirds the length of the animal, and is furnished with a small, rudimentary, secondary branch.

The second pair of antennæ is broken off in our specimen at the extremity of the peduncle, and Kröyer gives it as deficient also; it carries a long, narrow scaphocerite, about as long as the peduncle of the first pair of antennæ, and has the margins nearly parallel, the inner being fringed with ciliated hairs and the outer smooth and armed at the distal extremity with a small tooth.

The oral appendages were not specially examined.

The first pair of gnathopoda does not differ from the typical form.

The second pair is long and slender, being about three-fourths the length of the body of the animal; all the joints except the coxa are subequally long and slender, the two distal joints being fringed with long hairs.

The first pair of pereopoda is short, being scarcely more than half the length of the second pair of gnathopoda, and is furnished with a brush of short spine-like hairs on each of the adjacent surfaces of the carpo-propodal or ultimate articulation, which gives the appendage a feeble prehensile power. The dactylos of this pair of appendages is absent. The second and third pairs of pereopoda are slender, about as long as the first pair of gnathopoda, fringed with tolerably long hairs, and terminate in small chelæ. The fourth and fifth pairs are more rudimentary in the Challenger specimens than in Kröyer's figure, the animal probably being younger.

The pleopoda in the female specimen are moderately long and slender, except the sixth pair, which forms the outer plates of the rhipidura; the outer branch is rather more than twice the length of the telson, and is armed with a small tooth on the outer side about one-third from the base; from the tooth the margins gradually taper to the apex, and are fringed with long ciliated hairs.

*Observations.*—The dorsal surface of the carapace appears to be broader than is generally the case in this genus, but our specimen, from its small size, is probably not a full-grown animal. A specimen that appears to be a younger or *Mastigopus* form of this species was taken about 60° of west longitude of Station 256, but approximately in the same latitude. It is about 4 mm. in length, and differs chiefly in those features that are characteristic of a younger animal. The scaphocerite is longer and has the margins more nearly parallel than in Kröyer's figure, though not more so than in the animal represented in our figure. The telson and the plates of the rhipidura are narrower than in Kröyer's figure or in our type specimen. The dorsal surface of the pleon is armed with only three teeth, one on each of the three posterior somites, whereas *Sergestes armatus* is armed with four, one on the second, third, fourth, and fifth respectively, but none on the sixth. This difference in the dorsal armature is the