The first pair of antennæ terminates in two long, slender subequal flagella.

The second pair of antennæ has a short and stiff scaphocerite, and terminates in a long slender flagellum.

The siagon or mandible is strong, and carries a three-jointed synaphipod.

The posterior siagnopod has the distal extremity of the outer branch formed into an operculum, and the mastigobranchia is broad and well developed.

The first pair of gnathopoda has neither branchial plume nor mastigobranchia, but a rudimentary stump alone represents the latter.

The second pair of gnathopoda supports a basecphysis, a well-formed podobranchial plume and well-developed mastigobranchia.

The three anterior pairs of pereiopoda are chelate, the first pair being much larger than the others, the pollex and dactylos being longer than the propodos, although unequal in proportion on each side. The fourth pair is monodactyle, the dactylos short and hairy. The fifth or posterior pair is minutely chelate, the dactylos being very small and lost amongst a brush of hairs in the only specimen procured. But as this description is taken from a female, it is not improbable that this may be a sexual rather than a generic character.

The form of the rhipidura, the length and increasing width of each posterior somite of the pleon, and the form and character of the perciopoda approximate the character of this genus to *Axius* and others of the Thalassinidæ.

Thaumastocheles zaleuca (v. Willemoes-Suhm) (Pl. VI. b-q; Pl. VII. fig. 1, e-h).

Astacus zaleucus, Willemoes-Suhm, Trans. Linn. Soc. Lond., ser. 2, vol. i. p. 49, pl. x. fig. 1. Thaumastocheles zaleuca, Wood-Mason, Proc. Asiat. Soc. Bengal, p. 181, 1874.

Animal long and slender, sides subparallel and compressed, dorsal surface smooth except on the antennal and post-ocular regions of the carapace, on each side of the rostrum, and the third and fourth somites of the pleon, where there are numerous short, thick tufts of hair.

Rostrum dorsally flat. Ophthalmopoda absent. First pair of antennæ subequally biramose. Second about as long as the animal and carrying a strongly serrated scaphocerite, first pair of pereiopoda asymmetrical. The right being the larger and furnished with a pollex and dactylos, nearly as long as the animal, slender and rod-like, curving towards each other at the extremity, and armed on the inner surface from base to apex with long spine-like teeth that interlock with each other when closed.

Rhipidura having the outer plate large and strong and the inner small. Telson quadrate.

Length, 100 mm. (4 inches).

Habitat.—Station 23, off Sombrero Island, West Indies, March 15, 1873; lat. 18° 24' N., long. 63° 28' W.; depth, 450 fathoms; bottom, Pteropod ooze.