Amphithyrus sp.

Length.—One-tenth of an inch.

Locality.—September 13, 1874, Arafura Sea; lat. 8° 18′ S., long. 135° 7′ E.; surface; surface temperature, 79°. One specimen, male.

Remark.—I forbear to give a name to this interesting little species, as there is not time at my disposal to give an adequate description of it.

Amphithyrus bispinosus, Claus.

1879. *Amphithyrus bispinosus*, Claus, Die Gattungen und Arten der Platysceliden, p. 15.
1887. „ „ Bovallius, Systematical List of Amph. Hyper., Bihang till K. Svensk. Vetensk.-Akad. Handl., Bd. 11, No. 16, p. 48.
1887. „ „ Claus, Die Platysceliden, p. 41, Taf. vi. figs. 4–16.

The Challenger specimen clearly and closely agrees with the description and figures of the species given by Claus. The species is well marked by the large laterally projecting spine-like process of the side-plates of the third peræopods. The side-plates, with the exception of those of the fifth peræopods, have their upper boundary distinct; the lower front angle in the first pair is directed a little forwards, and is almost acute; the postero-lateral angles of the first three pleon-segments are rounded. The sculpture of the integument, though in many parts showing hexagonal markings, in others takes the form of more or less parallel wavy lines.

The Eyes are separated by a central space which is broad over the acute point separating the upper antennæ.

The Lower Antennæ in this specimen are not tightly folded as in the fully adult male; the third (first free) joint of the peduncle is more or less pear-shaped; the next or fourth joint is more than twice as long, sinuous; the fifth is straighter and rather longer than the fourth, each having a subapical spinule, but being otherwise smooth-edged; the flagellum consists of one serpentine joint, longer than the last joint of the peduncle.

The Mouth Organs so far as observed were in agreement with Claus' figures; seen from below they exhibit a small *Epistome* occupying the space between the bases of the two mandibular palps; the upper margin is flat, the lateral margins convex, while the lower border shows a curved emargination, overarched by a much larger triangular depression of the surface. The mandibular palps in our specimen are sinuous, the joints undeveloped.

First Gnathopods.—First joint straight, widening a little distally, rather longer than the remainder of the limb; second joint with a spinule at the hinder apex; the three following joints subequal in length to one another, the wrist rather the longest by reason