equal in length with the preceding, but more slender, and terminates in a long, sharp, straight, unguiculate dactylos; the basecphysis is broken off, but the process on which it stands is large and prominent, and suggestive of supporting a large appendage. The two succeeding pairs of pereiopoda are broken off at the distal extremity of the basisal joints, which are long and robust, the penultimate being bilobed like that of the third pair.

The first pair of pleopoda is single-branched, the others are biramose. The sixth pair is subequal in length with the telson; the outer branch is furnished with a small denticle on the outer distal angle, and is fringed with hairs on the inner margin, as are also both margins of the inner ramus.

Hectarthropus compressus, n. sp. (Pl. CXLIV. fig. 3).

Carapace about one-fifth the length of the animal, anteriorly produced to a straight slender rostrum that is nearly half the dorsal length of the former; armed on the frontal crest with a strong tooth in the median line, and another small anteriorly directed tooth on the post-cardiac region, with a long supraorbital tooth on each side of the base of the rostrum, and one post-marginal corresponding with the second pair of antennæ. The fronto-lateral margin is slightly serrate.

The fifth somite of the pleon is posteriorly bidentate, a small tooth standing on the posterior margin, one on each side of the median line. The sixth somite is longer than the carapace, and much compressed laterally.

The telson is about two-thirds the length of the carapace.

| entire, . | × | | • | | | 11 | mm. (0.4 in.). |
|--------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| of carapace, | | • | • | • | | 2 | 33 |
| of carapace, | | | | • | | 1.2 | ,, |
| of rostrum, | • | • | | | | 0.8 | ** |
| of pleon, . | | • | ti.€3 | | • | 9 | " |
| of sixth somite of | pleon, | . . | • | • | | 3 | >> |
| of telson, . | | • | • | | • | 2 | ** |
| | of carapace, of carapace, of rostrum, of pleon, . of sixth somite of | of carapace, . of carapace, . of rostrum, . of pleon, of sixth somite of pleon, | of carapace, of carapace, of rostrum, of pleon, of sixth somite of pleon, . | of carapace, of carapace, of rostrum, of pleon, of sixth somite of pleon, | of carapace, <t< td=""><td>of carapace,of carapace,of rostrum,of pleon,of sixth somite of pleon,</td><td>of carapace, 2 of carapace, 1.5 of rostrum, 0.8 of pleon, 9 of sixth somite of pleon, 3</td></t<> | of carapace,of carapace,of rostrum,of pleon,of sixth somite of pleon, | of carapace, 2 of carapace, 1.5 of rostrum, 0.8 of pleon, 9 of sixth somite of pleon, 3 |

Habitat.—Pacific; between Api and Cape York; surface. One specimen. Associated with Sergestes and Oodeopus.

This specimen corresponds with *Hectarthropus exilis*, which was taken at the Philippines, and I should have considered them as being one species but for important variations in the measurement of certain parts. The animals are of about the same length, being 9 mm. and 11 mm. respectively, but the difference may be even less, since *Hectarthropus compressus* is much more stretched, the pleon being considerably curved. A reference to the tables of measurements will show the relative differences in the lengths of corresponding parts.