Uroptychus gracilimanus, Henderson (Pl. XXI. fig. 5).

Diptychus gracilimanus, Henderson, Ann. and Mag. Nat. Hist., ser. 5, vol. xvi. p. 420, 1885.

Characters.—The carapace is smooth and glabrous as in the last two species, and armed only with a single small tooth at each antero-lateral angle. The gastric area is slightly raised above the level of the rostrum, but is without any definite anterior margin. The rostrum is horizontal, and extends for about one-third of its length beyond the ends of the eye-stalks; it is rather narrow at the base, and tapers gradually towards the acute apex. The pterygostomial region presents a slight depression towards its centre.

The chelipedes are remarkably long and slender, and there is no trace of armature, the joints being everywhere smooth and glabrous. The palm is only about three-fourths the length of the carpus and but slightly dilated; the fingers are pubescent, slightly curved, and rather deeply excavated below, while a compound tooth of considerable size exists on the proximal and inner margin of the dactylus. The ambulatory limbs are slender and elongated, with a few horny spines on the posterior margin of the propodi; the dactyli are strongly curved and scarcely half the length of the penultimate joint, while a series of short horny spinules occurs on their posterior margin.

The eyes are of rather small size, and the corneæ are deep brown in colour. The antennal acicle is acuminate, and scarcely reaches the end of the peduncle; the flagellum is but slightly longer than the peduncle. The external maxillipedes are unarmed.

The abdominal segments are smooth and glabrous externally, and their pleura are subobtuse.

This species is distinguished from *Uroptychus australis* by the great length and tenuity of its chelipedes, and the absence of minute tubercles from their basal joints. It may possibly be only a variety of the last species, but in none of the female specimens of the latter do the chelipedes assume so slender a form, and the material at my disposal therefore makes me inclined to regard it as distinct.

Breadth of carapace 8 mm., length of body (including rostrum) 22 mm., of carapace (including rostrum) 10.5 mm., of chelipede 50 mm., of chela 19.5 mm., of first ambulatory leg 19 mm., diameter of ova about 1 mm.

Habitat.—Station 164B, off Port Jackson; depth, 410 fathoms; bottom, green mud. A female with ova.

Uroptychus tridentatus, Henderson (Pl. VI. fig. 1).

Diptychus tridentatus, Henderson, Ann. and Mag. Nat. Hist., ser. 5, vol. xvi. p. 421, 1885.

Characters.—The carapace is smooth and glabrous, and its surface is unarmed. The rostrum is about one and a half times the length of the eye-stalk, and slightly depressed, with its apex tridentate, and the upper surface hollowed out from side to side. The