the basal portion being of considerable breadth. The pterygostomial region is smooth but bears a slight depression near its centre.

The chelipedes are of moderate length, and the joints are everywhere perfectly smooth and glabrous, with the exception of a small spine at the upper and distal end of the ischium. The palm is slightly dilated, and equal in length to the carpus; the fingers are somewhat curved, and in male specimens a distinct hiatus exists between the two, a pair of conical teeth, the second of which is the larger, occur on the inner and proximal margin of the dactylus, with corresponding depressions on the inner margin of the immobile finger. The ambulatory limbs are slender and smooth, with the exception of the usual horny spinules on the posterior margin of the propodi; the dactyli are strongly curved, and more than half the length of the penultimate joints, with a series of short horny spines on their posterior margin.

The eyes are of moderate size, with the corneæ slightly dilated and of a light brown colour. The antennal acicle is not more than half the length of the peduncle, and narrows rather abruptly towards the apex; the flagellum is about twice the length of the peduncle. The external maxillipedes are perfectly smooth and glabrous, with the exception of the usual hairs.

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

This species is distinguished by its almost complete smoothness, and by the form of the fingers, more especially in male specimens.

Breadth of carapace (of a female with ova) 5.5 mm., length of body (including rostrum) 18 mm., of carapace (including rostrum) 8 mm., of chelipede 24 mm., of chela 9.5 mm., of ambulatory leg (detached) 12 mm., diameter of ova about 1.2 mm. In the male specimen (which is of slightly smaller size), the chelipedes are proportionately longer and stouter, and a hiatus exists between the fingers.

Habitat.—Station 171, near the Kermadec Islands; depth, 600 fathoms; bottom, hard ground. A female with ova, and a male.

Uroptychus australis, Henderson (Pl. XXI. fig. 4).

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

Characters.—The carapace is everywhere smooth and glabrous, only a single small tooth being present at each antero-lateral angle. The gastric area is slightly swollen and raised above the level of the rostrum, with in some cases two very minute denticles present on its anterior margin. The rostrum is horizontal in direction, and extends for about one-fourth of its length beyond the apices of the eye-stalks; it is of considerable breadth towards the base, but gradually narrows towards the acute apex. The