Habitat.-Station 188, September 10, 1874, Arafura Sea; lat. $9^{\circ} 59^{\prime}$ S., long. $139^{\circ} 42^{\prime}$ E.; depth, 28 fathoms; bottom, green mud. A single male specimen.

Remarks.-Notwithstanding the fact that it has five teeth instead of six on the dactylus of the raptorial claw, and the very slight development of the longitudinal carinæ on the hind body, this species bears such a very close general resemblance to the well known Squilla nepa, that I was at first inclined to regard it as a smooth specimen of this species, with an accidental variation in the number of teeth on the dactylus, and the more especially as Squilla nepa is known to occur in the region where the specimen was obtained. More careful examination, however, reveals so many minute points of difference in all parts of the body that I think there can be no doubt of its distinctness. The following, which are the most conspicuous differences, will serve to distinguish it with readiness from the latter species. Squilla nepa has six and Squilla quinquedentata five spines, including the terminal one, on the dactylus of the raptorial claw. The carinæ on the anterior edge of the third joint or carpus of the raptorial claw of Squilla nepa is irregularly dentated, while it is entire and smooth in Squilla quinquedentata. The rostrum of Squilla nepa narrows slightly towards the tip, while that of Squilla quinquedentata is more nearly rectangular. The longitudinal cardiac sutures on the posterior portion of the carapace are divergent posteriorly in Squilla nepa, and convergent in Squilla quinquedentata. The submedian carinæ of the fifth abdominal somite are parallel in Squilla nepa, and divergent posteriorly in Squilla quinquedentata.

Squilla leptosquilla, n. sp. (Pl. I. figs. 1, 2).
Diagnosis.-Ocular segment in front of rostrum. Eyes broad and sub-triangular. Exposed segments of hind body with submedian carinæ. Dactylus of raptorial claw with four spines, including the terminal one. Antennulary somite very long, reaching to tip of rostrum on middle line, and with its antero-lateral angles prolonged forwards into acute spines. First thoracic somite partially exposed dorsally. Lateral margins of second, third, and fourth thoracic somites acute. Telson with a long slender median spine on dorsal surface, and three pairs of marginal spines, of which the second or intermediate pair are much the longest, and the external pair shorter than the submedians, and blunt, while the others are acute. First antennæ very long.

General Description.-Rostrum nearly twice as long as wide, subtriangular, with a rounded anterior end. Width of carapace between antero-lateral angles about ${ }_{\text {It }}$ of its greatest width, which is equal to about two-thirds $\left(\frac{1}{2} 4\right)$ of its length. The length of the carapace is ${ }_{1}^{209}$ of the total length of the body, and its antero-lateral angles are produced forwards as long acute spines, while the postero-lateral angles are prominent and broadly rounded. The gastric area of the carapace is convex and elevated, with an obscure

