Habitat.—The above described specimen was obtained by the Challenger Expedition, in the vicinity of the Arrou Islands, in the Arafura Sea, lying between New Guinea and Australia.

Station 191, September 23, 1874; lat. 5° 41′ S., long. 134° 4′ 30″ E.; depth, 800 fathoms; green mud; bottom temperature, 39°·5.

The specimen examined by Professor Dohrn, according to the label on the bottle containing it, was procured off the coast of Africa ("Laos"); depth not recorded.

4. *Gnathophausia gigas*, Willemoes-Suhm (Pl. III.).

Gnathophausia gigas, Suhm, Trans. Linn. Soc. Lond. (Zool.), ser. 2, vol. i. p. 28, pl. ix. figs. 16, 17; pl. x. figs. 2, 3, 1875.
Gnathophausia gigas, G. O. Sars, Preliminary Notices on the Challenger Schizopoda, No. 4.

Specific Characters.—Form of body (in male) rather more slender than in the last species. Carapace less tumid, having the infero-posterior corners more produced and jutting out into short mucroniform spines, reaching to the end of the second caudal segment. Dorsal spine almost obsolete. Rostrum rather produced and slender, distinctly denticulate. Supra-orbital, antennal, and branchiostegal spines all distinct but small. Caudal segments less distinctly sculptured, the anterior lappet of the epimera small and rounded. Epimeral plate of last segment less produced. Eyes narrow, with cornea very small. Antennal scale much larger than in *Gnathophausia ingens*, and somewhat tapering toward the apex, outer edge divided into four strong teeth, inner corner produced into a rather prominent sharp point. Telson very large, with the lateral margins bulging out in the middle and densely spinulose, terminal spines widely diverging. Length, 142 mm.

Remarks.—The present species has already been briefly described and figured by the late Dr. v. Willemoes-Suhm in the above quoted treatise, and designated by the specific name of "*gigas*," the preceding still larger form not being known to him at that date. From this latter species it differs, among other characteristics, by the comparatively more slender form of the body, the much more produced rostrum, the larger and differently formed antennal scale, and the less completely developed eyes. Moreover, the spines, issuing from the infero-posterior corners of the carapace, are somewhat different in shape, and the sculpturing of the tail is by no means equally conspicuous.

Description.—Of this species, also, only a solitary specimen in an excellent state of preservation was obtained, viz., a full-grown male, measuring in length 142 mm. As the males of this genus differ but very slightly from the females, it may not unreasonably be inferred that the characters adduced above as specific marks would, on the whole, be no less applicable to the females of this species.

The form of the body (see figs. 1, 2) is rather more slender than in *Gnathophausia ingens*, but in this respect, probably some regard should be paid to the circumstance