smooth, without denticles. First pair of legs scarcely longer than carapace, with the three outer joints subequal; second pair with antepenultimate joint longer than the two outer taken together. Telson rather elongate, with terminal part much longer than basal, and densely spinous at both edges; apical spines not larger than lateral. Uropoda with scape very slender, branches subequal, about half as long as scape, inner distinctly triarticulate. Length of female, 16 mm., of adult male, 21 mm.

Remarks.—The present species was briefly described by the author in the year 1873, from a single young female specimen obtained during the Swedish Spitzbergen Expedition in 1868, from the very considerable depth of 2600 fathoms. During the Challenger Expedition several specimens, both females and adult males, were procured, and I thus have had an opportunity of making a closer examination of this form, to show the very striking differences between the two sexes, as regards both the general appearance and several of the anatomical details.

Description of the Female.—The length of the adult specimens is about 16 mm., and the present form thus belongs to the larger species of the order. The form of the body (see Pl. VI. figs. 1, 2) is rather stout, with the anterior division considerably dilated, nearly ovoid in form, and sharply marked off from the slender tail.

The carapace is very large and deep, about twice as long as the exposed part of the trunk, and nearly as broad as high. The dorsal surface is strongly vaulted in its posterior part, declining anteriorly to the base of the pseudorostral projection. The latter is conical in form and of moderate length, about as long as the frontal lobe. The inferior edges of the carapace are somewhat irregularly arched, without forming any distinct antero-lateral corners; they are finely serrate in the anterior part, and join the posterior edge without being defined from it by any distinct angle. The surface of the carapace appears everywhere evenly arched, without any folds or keels, but is beset with numerous small equal-sized spinules, more densely crowded in the anterior part.

The exposed part of the trunk consists of five well-defined segments, rapidly decreasing in height posteriorly. The first segment is very narrow, almost band-like, and the three succeeding segments only slightly increase in length, all these segments being firmly connected with each other. The last segment is very small and rather movably connected with the preceding, a space covered by thin skin being interposed dorsally between the two segments. On all the segments the lateral parts form small rounded epimeral plates, slightly projecting laterally. Those of the last segment are somewhat produced posteriorly, without, however, forming acuminate projections as in the adult male. The first three segments have the anterior margin very finely denticulate, and this is also the case with the last segment, which also bears two small dorsal denticles.

The tail is scarcely longer than the anterior division of the body, but very slender and cylindrical, with the posterior margin of the segments strongly emarginate both dorsally and ventrally, and forming on each side a slight projecting angle. The three