the soft parts, I have been unable to ascertain by dissection whether there exists any corresponding deficiency as regards the right ovary. The previously known species of this characteristically deep-water genus are $Parapagurus\ pilosimanus$, S. I. Smith (= $Eupagurus\ jacobii$, A. Milne-Edwards), which has been taken in abundance off the east coast of the United States, by the Fish Commission and Coast Survey vessels, and $Parapagurus\ dimorphus$ (Studer) recorded below.

Parapagurus dimorphus (Studer) (Pl. X. fig. 1).

Eupagurus dimorphus, Studer, "Gazelle" Crust., Abhandl. d. k. Akad. d. Wiss. Berlin, p. 24, taf. ii. figs. 11-12, 1883.

Habitat.—Station 135c, off Nightingale Island, Tristan da Cunha; depth, 110 fathoms. Several specimens of small size, in shells of Murex (Pseudomurex) aëdonius, Watson, taken along with Eupagurus tristanensis.

Station 142, off the Agulhas Bank; depth, 150 fathoms; bottom, sand. A large number of specimens (including several females with ova), inhabiting shells which have become almost completely absorbed by an investing *Epizoanthus*.

Station 145 or 145A, off Marion Island; depth, 140 or 310 fathoms; bottom, volcanic sand. A single specimen in a very imperfect state of preservation.

Station 311, off Port Churruca, Patagonia; depth, 245 fathoms; bottom, blue mud. A female with ova, in a shell of *Pleurotoma acanthodes*, Watson.

In this species the eye-stalks are of considerable size and the corneæ dilated, although these organs are slender in all other known members of the genus. The sexual dimorphism chiefly manifests itself in the form of the right chelipede, which in the female has the hand short and broad, with the dactylus (when closed) bent almost at a right angle to the upper border, whereas in the male the hand is proportionately narrower and the fingers are elongated and oblique. Dr. Studer has figured what is evidently an old male, for the fingers of the right chela are represented as meeting only at the tip, leaving a considerable intervening hiatus; in none of the Challenger specimens is this condition observable. The right chelipede has a prominent and acute dentate lobe on its lower and distal margin, and a similar less extensive, though more pronounced, lobe occurs in the same position on the carpus; the lateral margins of the hand are sharp and The ophthalmic scales are poorly represented, and a reddish band is still dentate. visible on each lateral surface of the eye-stalk. The antennal peduncle extends to the end of the eye-stalk, the external prolongation of the second joint is moderately long and acute, and the third joint bears a prominent spinule on its inner surface; the inner margin of the acicle is distinctly spinose, and the flagellum is faintly ciliated. terminal joint of the antennular peduncle is considerably shorter than the antennal