The eye-stalks are slightly elongated, while the corneæ are terminal in position, globular in shape, and deeply pigmented. The basal joint of the antennular peduncle is of small size, but the two succeeding joints are elongated and subcylindrical. A small spine is present on the outer margin of the first free joint of the antennal peduncle, and the ultimate joint is nearly twice the length of the penultimate; the flagellum is scarcely equal in length to the carapace. A few spinules are met with on the outer surface of the carpus and propodus of the external maxillipedes, and a single minute spinule occurs at the distal end of the merus; the terminal joints are densely pubescent below.

The abdominal segments are uniformly covered with short stout spines arranged in transverse rows on the dorsal surface, which show a tendency to decrease in size towards the lateral margins; part of the first segment is uncovered by the carapace, forming a transverse carina which bears a single row of spines. The telson and last pair of appendages are smooth, and provided with long fringing hairs.

This fine species is distinguished at once from *Ptychogaster spinifer* by the armature of its abdomen, for in the latter all the segments are smooth; it bears a greater resemblance to *Ptychogaster formosus*, in which, however, the third, fourth, and fifth segments are devoid of spines. I have pleasure in dedicating it to Professor Alphonse Milne-Edwards, in recognition of his courteous assistance in connection with the identification of the deep-sea forms in the present collection.

Greatest breadth of carapace (of an adult male) 15.5 mm., breadth at antero-lateral angles 8 mm., length of body (including rostrum) 55 mm., of carapace (including rostrum) 22.5 mm., of left chelipede 118 mm., of chela 43.5 mm., of right chelipede 90 mm., of first ambulatory leg 90 mm.

Habitat.—Station 310, Sarmiento Channel, Patagonia; depth, 400 fathoms; bottom, blue mud. A single specimen.

Ptychogaster lævis, Henderson (Pl. XX. fig. 3).

Ptychogaster lævis, Henderson, Ann. and Mag. Nat. Hist., ser. 5, vol. xvi. p. 418, 1885.

Characters.—The carapace narrows very slightly in front, and its surface is uneven and glabrous, with only a few minute spinules present on the anterior half. The gastric area is scarcely elevated, and bears two pairs of spinules behind the base of the rostrum, (of which the external are slightly larger) as well as a spinule of very small size near the posterior limit of the area; a single minute spinule is also present on each midbranchial region behind the cervical groove. The rostrum is narrow, spinulous, and almost horizontal in direction, with a faint upward inclination. The lateral margin of the carapace is armed with five slender spines, situated on the anterior two-thirds of the border, and gradually decreasing in size from before backwards; the posterior margin is unarmed.