

the ambulatory limbs are less strongly curved, and without black horny tips, while the apex of the telson is rounded.

Habitat.—Station 163A, off Twofold Bay, Australia; depth, 120 fathoms; bottom, green mud.

FIBRIBRANCHIATA.

Family PARAPAGURIDÆ.

Parapaguridæ, S. I. Smith, "Blake" Crust., Bull. Mus. Comp. Zool., vol. x. p. 20, 1883.

Antennular peduncle elongated or of moderate size, the first joint short and stout, the second and third joints slender and cylindrical; both flagella of small size. Antennal peduncle subcylindrical. Species marine and confined to deep water.

With the exception of the important difference in the structure of the branchiæ,¹ and the fact that the species appear to occur only in deep water, the general characters of this family are those of the Paguridæ.

Genus *Parapagurus*, S. I. Smith.

Parapagurus, S. I. Smith, Trans. Connect. Acad., vol. v. p. 50, 1879; "Blake" Crust., Bull. Mus. Comp. Zool., vol. x. p. 20, 1883.

Front with the rostral projection but slightly marked. Ocular peduncles usually slender; the ophthalmic scales spinular and of small size, separated by a considerable interval. Antennules long. Antennal acicle well developed; the flagellum longer than the body, and usually naked. Chelipedes markedly unequal, the right larger; fingers moving in an oblique plane and calcareous or but slightly corneous at the tips. Ambulatory limbs with long and slightly tortuous dactyli; the penultimate pair of legs subchelate. Abdominal segments with fairly well developed terga; the male with the first two segments bearing each a pair of appendages, in the female the second is biramous and represented only on the left side, while the first pair are absent; in both sexes the third, fourth, and fifth segments are provided with a biramous appendage on the left side, one of the rami being rudimentary in all the male appendages, and in that of the fifth segment in the female.

All the females of this genus which I have had the opportunity of examining, possess the remarkable peculiarity of having an external genital opening present only on the coxa of the third left leg; but owing to the very imperfect state of preservation of

¹ In all, the gills are modified trichobranchiæ, each consisting of a central stem which gives rise to two collateral rows of rounded filaments, gradually decreasing in size towards the apex, whereas in the Paguridæ the stem gives rise to two rows of flattened leaflets.