

its upper margin bears two irregular compound teeth, in addition to some small tufts of setæ; the dactylus has its upper surface granular, and like the immobile finger is slightly incurved, its lower margin bears two compound teeth and numerous tufts of setæ. The left chelipede is slender and the joints are comparatively smooth, though the inner border of the carpus is raised and tubercular, and its lower surface is densely pubescent; the dactylus is equal to more than half the total length of the propodus, whereas that of the right chelipede is less than half the length. The ambulatory limbs are remarkably long and slender, the extreme tenuity of the dactyli being a special feature; the second exceeds the first by about half the length of its dactylus; the meral, carpal, and propodal joints have their anterior, and to a certain extent their lateral surfaces granular; the dactyli are comparatively smooth and slightly tortuous, with the apex acute, they are also obscurely canaliculate, their length appears to vary considerably in different specimens, and in certain adult males may equal that of the body. The ultimate and penultimate pairs of legs have their borders fringed with delicate hairs.

The penultimate abdominal segment bears a cruciform impression; the terminal segment is composed of a single lobe with a sinuous margin.

The above description is furnished by an adult male taken at Station 300, which gives the following measurements:—Length of body 50 mm., of right chelipede 73 mm., of left chelipede 55 mm., of third right leg 140 mm., of dactylus of same leg 49 mm., of ocular peduncle 6 mm.

A certain amount of variation is noticeable in specimens from different localities, more especially as regards the amount of pubescence and granulation on the chelipedes and ambulatory limbs. In a specimen from Station 133, the ophthalmic scales are bidentate, and the external prolongation of the second antennal peduncular joint is dentate. In spite of these apparent incongruities, an examination of the numerous specimens taken by the Challenger has convinced me that they all belong to a single species. Females are of much smaller size than males, indeed one with ova from Station 300 (where the largest males occurred) measures only 29 mm. in length; in females also, the immobile finger of the right chela is bent at a more obtuse angle to the hand than in males.

*Parapagurus abyssorum* is of special interest on account of its very extended distribution and deep-water habitat. It was taken by the Challenger in all the great ocean beds explored (with the exception of the Southern Ocean between the Cape and Australia), and nowhere in less than 1000 fathoms of water. It appears to be invariably associated with an Anemone which exerts a solvent action on the Gastropod shell originally selected as a dwelling-place by the Hermit; in many cases the shell has entirely disappeared, and in others it is greatly reduced, while the Anemone forms a soft and saccular covering on the exterior. The "Talisman" collection at Paris contains examples of this species, named *Pagurus abyssorum* by Professor A. Milne-Edwards; I have therefore in the above description adopted his specific name. In *Parapagurus pilosi-*