

Locality.—The specimens were all obtained at Kerguelen Island, the larger from a depth of 25 fathoms, the small ones, which were numerous, from the surface.

Remarks.—I was at first disposed to consider the small specimens a distinct species from the larger; the integument does not show the covering of spiny hairs which are conspicuous on parts of the large specimens, the proportions of the peduncular joints of the antennæ are not the same, the number of joints in the flagella are very different; on the inner plate and palp of the first maxillæ, on the inner plate of the second maxillæ, on the outer plate of the maxillipeds, there are differences in the number of teeth or of setæ; on gnathopods, peræopods, and uropods there are similar differences of proportion or of number of spines and spine-groups; but all these distinctions explain themselves very naturally and consistently on the hypothesis that the small specimens are the young and the large full-grown.

The species has a considerable resemblance to *Atylus austrinus*, Spence Bate, from Sydney, but in that the "dorsal surface is not denticulated," though the specimen was large, " $\frac{1}{2}$ ths of an inch," and notably it differs from the present in having "posterior pair of pleopoda naked, and considerably longer than the two preceding pairs."

That the present species is the same as *Atylus australis*, Miers, cannot, I think, be doubted, although Mr. Miers did not find the accessory appendage of the upper antennæ in any of his four specimens, and though he speaks of the maxillipeds as being *five-jointed*, a description possibly suggested by the groove which runs across the base of the outer plate of the maxillipeds.

So far as I can judge from Mr. Haswell's description and figure of his *Atylus megalophthalmus*, from Clark Island, Port Jackson, that is synonymous with the present species. Mr. Haswell speaks of it as very variable, "the size of the eyes and their degree of approximation above, the length of the antennæ, and the form of the gnathopoda being all subject to considerable variations," remarks which would well apply to *Atyloides australis*.

Atyloides assimilis, n. sp. (Pl. LXXVII.).

Rostrum minute, lateral lobes of the head rounded, not very prominent; third pleon-segment having the postero-lateral angles produced, but only minutely. Animal closely resembling *Atyloides australis*, Miers.

Eyes situated close to the lateral lobes of the head, large, reniform, retaining their dark colour in spirits.

Upper Antennæ.—First joint thicker and a little longer than the second, second thicker and a little longer than the third, all three with groups of setæ on the lower margin, one at the apex being long and spiniform; flagellum of sixteen joints, several of