

*Habitat*.—April, 1873, Atlantic Ocean; on Gulf-weed. Two specimens; one male, one female.

June 18, 19, 1873; between Stations 62 and 63. One specimen, female, laden with ova. Taken at the surface.

This species bears some resemblance to *Hippolyte varians*, Leach, of which Professor Kinahan in his observations above quoted says "A volume might be written on the forms of the beak of this species," and he figures six of the best marked varieties. In every variety, however, the two teeth on the upper line of the rostrum are constant, one near the base, the other subapical, while those on the lower margin are as frequently two as three, two being the typical number.

Dr. Leach figures his specimen as having three teeth on the upper surface of the rostrum, but the posterior of these I believe to be the supraorbital tooth on the distant side, brought into view, as is not uncommonly the case, in the examination of the animal under compression or by the strain induced by using a too low magnifying power. If this view be correct, as I think it is, then Milne-Edwards' species of *Hippolyte tenuirostris* approximates closely in form to the variety of *Hippolyte varians*, which Kinahan describes as varying remarkably in the form of the rostrum (see p. 590).

Our present species, *Hippolyte bidentatus*, has the rostrum about two-thirds the length of the carapace, and in the same line with its dorsal surface. It is not elevated anteriorly, but comes to a point of lanceolate form at the apex (fig. 2c'); it is armed on the upper surface near the centre with a single tooth, and on the lower with one also, which is a little in advance of that on the upper margin. A well-developed supraorbital tooth flanks the rostrum at the base, posterior to which the carapace is smooth. The first antennal tooth is small and not conspicuous, but the second is more distinct. The third somite of the pleon is slightly arcuate towards the posterior extremity, and projects in the median line over the dorsal surface of the fourth. The fourth somite is smooth, and so is the fifth in the median line, but on each side a slender tooth projects from the posterior margin. The sixth somite is smooth and cylindrical, about one and a half times longer than the fifth, and a little shorter than the telson, which is long, narrow, and tapering.

The ophthalmopoda are small, pyriform, without any appearance of an ocellus.

The first pair of antennæ (fig. 1b) has the first joint broad and stout, excavate on the upper surface to afford room for the ophthalmopod, distally armed on the outer side with a stout tooth, and carrying a strong stylocerite that is about half the length of the joint. The second and third joints are short, cylindrical, and subequal in length, the third is distally divided and supports on each lobe a short flagellum. The flagellum on the outer and upper lobe is the more robust, it is shorter than the peduncle, and is divided into about ten or twelve articuli. The lower distal margin of each