

When Milne-Edwards published his *Histoire Naturelle des Crustacés* in 1837, there were twenty-two species of *Hippolyte* known, and these he classified under three distinct divisions, dependent upon the extent to which the dorsal carina extends posteriorly. To these Dana added five, arranged in two divisions, corresponding with the first and third divisions of Milne-Edwards, and classified on the same character, and many others have since been added by Stimpson, Heller, Kröyer, Sars, and other carcinologists. To these may be added the specimens in this collection which differ from the typical *Hippolyte* of Leach in more or less important anatomical features, but all of which have certain external characters in common that are visible on superficial examination.

The form and disposition of the branchiæ are shown in the following table—

Pleurobranchiæ,	.	.	.	...	...	...	1	1	1	1
Arthrobranchiæ,	.	.	.	...	...	...	...	...	...	...
Podobranchiæ,	.	.	.	...	...	...	...	...	...	...
Mastigobranchiæ,	.	.	.	1	...	...	...	...	...	...
				h	i	k	l	m	n	o

Observations.—The late Professor Kinahan in a paper on this genus,¹ says of *Hippolyte varians*:—"This species occurs in great numbers in the sand-pools among the *Zostera* banks at Sandycove, near Kingstown; spawns in May. The specimens vary remarkably and beautifully in colour; pink, red, salmon, emerald-green, cobalt-blue, gray, chocolate-brown, opal white, are among the prevailing tints; the ova of a chocolate-brown.

"It is remarkably sensitive of handling; in no case could I succeed in keeping it for over forty-eight hours in a tank, although specimens of *Crangon fasciatus* and *Mysis chameleon*, from the same locality, lived with me for days. A volume might be written on the forms of the beak of this species. I have figured (pl. x.) the best marked varieties, which occurred in the following proportions:—

"Plate x. fig 1.—*a*. Normal type; rostrum nearly straight; apex bidentate, directed upwards, upper tooth shortest; below, two teeth, the anterior much posterior to the upper tooth of apex; proportional frequency of occurrence, 63 per cent.

"Fig. 2.—*b*. Rostrum straight; apex tri-dentate, teeth directed forwards, upper and lower teeth nearly equal in length; below one tooth only; proportional frequency, 25 per cent.

"Fig. 3.—*c*. Rostrum strongly curved upwards, scimitar-shaped; apex tridentate, upper tooth slightly longer than the lower; below a single tooth; proportion, 8 per cent. *N.B.*—The whole animal is much slenderer than the normal type; query a *species*?

¹ *Proc. Nat. Hist. Soc. Dublin*, 1857, p. 48.