seven-articulate. The third, fourth, and fifth pairs are subequal in length, and resemble each other in form, they are moderately robust and terminate in a dactylos that is serrate on the inner margin and terminates in a double unguis.

The posterior pair of pleopoda is subequal in length with the telson, the outer ramus being furnished with a diæresis that is armed with a tooth at the outer margin, and the telson is dorsally smooth and dorso-laterally furnished with short spines on each side, and spines and hairs at the extremity.

The preceding description is taken from Cancer spinus, Sowerby, which is synonymous with Hippolyte spinus, Leach, and which the latter made the type of his second division of Hippolyte. But since Leach's definition was chiefly based on the variable feature of there being four instead of two spines on each side of the dorso-lateral surface of the telson, its position in the genus with Hippolyte varians cannot be maintained in the face of more important structural differences.

The branchiæ consist of six pairs arranged as in the annexed table :-

| Pleurobranchiæ, | . | . | . | $\ldots$ | $\ldots$ | 1 | 1 | 1 | 1 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arthrobranchix, | . |  | . | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Podobranchiæ, |  | . | . | r | .. | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ |
| Mastigobranchiæ, | . | . |  | 1 | r | r | r | r | $\ldots$ | $\ldots$ |
|  |  |  |  | h | i | k | 1 | m | n | 0 |

Geographical Distribution.-North Atlantic Ocean and Arctic Seas.
Spirontocaris spinus (Sowerby) (Pls. CVI., CVII.).
Cancer spinus, Sowerby, Brit. Misc., 1806, pl. xxi.
Alpheus spinus, Leach, Trans. Linn. Soc. Lond., vol. xi. p. 244 ; Edin. Encyclop. Sup., vol. vii. p. 421.

Hippolyte soverbæi, Leach, Malacos. Podophth. Brit., pl. xxxix. figs. 1, 10.
" sowerboi, Desmarest, Consid. sur les Crust., p. 223, pl. xxxix. fig. 1.
" sowerbyi, Milne-Edwards, Hist. Nat. Crust., tom. ii. p. 380.
Hippolyte spinus, Owen, Ross's Second Voyago for the Discovery of a North-West Passage, Append., p. lxxxiii., pl. iii. fig. 2.
" $" \quad$ Bell, Brit. Stalk-eyed Crust., p. 284.
" " White, A., Pop. Hist. Brit. Crust., p. 118, pl. ix. fig. 1.
" securifrons, Norman, Brit. Assoc. Rep., 1861 ; Trans. Tyneside Field Club, p. 267, pl. xii. figs. 1, 7, 1862.
Hippolyte spina, Stimpson, Proc. Acad. Nat. Sci. Philad., 1869, p. 106.
$" \quad "$ Kingsley, Proc. Acad. Nat. Sci. Philad., 1879, p. 418.
Leach's definition is as follows:-"H. rostro alto obtuso supra multi-serrato apice emarginato serrulato; subtus unisonato."

Carapace dorsally carinated and armed with five large teeth, commencing close to the posterior margin. Rostrum armed with one or two large teeth and a serrature of several minute ones, terminating more or less abruptly posterior to a sharp apical point; lower margin deep anteriorly and armed with two large teeth, and a serrature of several

