

The first pair of antennæ carries two flagella.

The second pair of antennæ has a round, pointed scaphocerite armed with a tooth on the outer margin and carries a long flagellum.

The mandibles have a small psalistoma and a three-jointed synnaphipod, distinct from the molar process.

The first pair of pereopoda is chelate and has the carpos continuous with the propodos. The second pair of pereopoda is long, slender, minutely chelate, and has the carpos multiarticulate. The three posterior pairs of pereopoda are simple and well developed.

The pleon has the third somite dorsally arcuate and slightly produced posteriorly.

The telson is tapering and dorsally furnished with two or three lateral pairs of solitary spinules.

The branchial plumes are more numerous in this genus than in *Spirontocaris*, there being five pairs of arthrobranchiæ in addition to the pleurobranchiæ, as shown in the annexed table, which represents the condition in *Merhippolyte agulhasensis*.

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

It is an interesting and instructive feature in this genus that so great a variation in the character of the branchiæ exists with such small external change.

*Geographical Distribution.*—The typical species *Merhippolyte agulhasensis* was first taken on the Agulhas Bank, which lies between the Southern Indian and Atlantic Oceans, about 100 miles south of the Cape of Good Hope. A second species, *Merhippolyte orientalis*, was found near the Arrou Islands, south of New Guinea.

*Merhippolyte agulhasensis*, n. sp. (Pl. CX. fig. 4).

Carapace having the dorsal surface anteriorly projected to a slender rostrum, that is nearly as long as the carapace; armed on the upper margin with five teeth, the most posterior standing on the gastric region and the anterior near the middle of the rostrum, and on the lower margin with five smaller teeth, remote from one another.

Pleon smooth. Telson tapering.

Ophthalmopoda pyriform.

First pair of antennæ with both flagella about as long as the animal.

Second pair of antennæ with flagellum longer than the animal, having the scaphocerite as long as the rostrum.