

extensive use of the surface-net on the Expedition proved highly successful. In regard to the capture of Euphausidians this may pre-eminently be said to be the case, scarcely a single haul failing to yield some of the forms comprised in this group, either adult or larval. I have carefully gone over a vast number of surface gatherings, kindly sent me by Dr. John Murray, and from these have selected every form that belongs to the Euphausiidae. A large proportion of the specimens thus brought together represent various stages of development; and it has therefore been a matter of no slight difficulty to determine in each case with full certainty whether the specimens should be regarded as adults, or whether merely as younger animals. I have been equally perplexed in attempting to refer the larval forms accurately to the several species. Meanwhile, a careful study of numerous specimens has finally enabled me to trace the development of at least three different forms belonging to as many genera, and I shall give a detailed account of these researches when treating of the development of the Euphausiidae.

The total number of species represented in the collection amounts to no less than twenty-seven, comprising seven distinct genera, of which four are new.

I give below a synopsis of the genera, worked out from the structure of the legs.

Legs	{ nearly uniform in structure, and similar in appearance to the maxillipeds.	{	Both the two posterior pairs quite rudimentary,	<i>Euphausia</i> , Dana.		
			Last pair only rudimentary; penultimate pair	{	of same appearance as preceding,	<i>Thysanopoda</i> , M.-Edw.
					with outer joints of stem confluent,	<i>Nyctiphanes</i> , G. O. Sars.
	All the legs distinctly developed,		<i>Bentheuphausia</i> , n. gen.			
	{ somewhat unequally developed, one of the anterior pairs being greatly elongate.	{	First pair of legs greatly produced and	{	rather strong, the two last joints armed with spiniform bristles on both margins,	<i>Thysanoëssa</i> , Brandt.
					very slender, filiform, naked, with only a tuft of apical bristles,	<i>Nematoscelis</i> , G. O. Sars.
Second pair of legs greatly produced; penultimate joint dilated, and forming, together with the last one, a kind of prehensile hand,				<i>Stylocheiron</i> , G. O. Sars.		

Genus 1. *Euphausia*, Dana, 1852.

Euphausia, Dana, United States Exploring Expedition, vol. xiii., Crustacea, part i. p. 639.

Generic Characters.—Carapace with antero-lateral angles but slightly produced, rostral projection, as a rule, small. Tail powerfully developed. Eyes of normal structure. Antennular peduncle alike in both sexes, cylindrical, basal joint sometimes provided at the end superiorly, with a small lappet; both flagella elongate, and consisting of numerous joints.