

255 fathoms (*Gnathophausia longispina*), the greatest 2200 fathoms (*Gnathophausia gigas*). *Gnathophausia* has never been taken at the surface of the sea, although the surface-net was in frequent use during the Expedition, both by night and day, and in many different tracts of the ocean. It may therefore certainly be assumed that these Crustacea, notwithstanding their strongly developed natatory organs, never leave the deeper strata of the sea, and that in all probability they have their habitat on the sea-bottom itself.

To judge from the inconsiderable number of examples of each species obtained by the Expedition, notwithstanding that a large trawl-net was generally in use, it would appear that the animals of this genus lead a comparatively isolated existence, being seldom met with in shoals.

Distribution.—The genus seems to exhibit a very extensive geographical distribution, being most probably represented throughout the greater part of the ocean, excepting perhaps the Arctic and Antarctic regions. Thus, as will be shown in the sequel, species of this genus have been recorded both from the North and South Atlantic, from the Pacific, and from the seas of the Indian Archipelago. The genus may even be reckoned among the European fauna, one of its species (*Gnathophausia zoëa*) having been found by the French expedition in the Bay of Biscay.

Classification.—The species may be naturally classed within two or rather three sections or subgenera, chiefly characterised by the form of the antennal scale, the presence or absence of an exopodite on the maxillipeds, and finally by the form of the carapace.

The following synopsis of the species may be here appended:—

Synopsis of the Species of Gnathophausia.

Antennal scale	very small, not jointed, outer margin serrate. Rostrum	short, indistinctly denticulate,	<i>G. ingens</i> , Dohrn.					
			elongate. Infero-posterior corners of carapace	{ slightly produced, produced as long serrate spines,	<i>G. gigas</i> , Suhm. <i>G. calcarata</i> , G. O. Sars.			
large, of usual form, jointed, outer margin terminating in a strong spine. Inferoposterior corners of carapace	rounded off. Dorsal spine	comparatively short. Upper lateral keel			distinct. Epimera of the caudal segments	{ sharply pointed, obtuse,		<i>G. willemoesti</i> , G. O. Sars. <i>G. affinis</i> , G. O. Sars.
			greatly produced. Antennal scale with spine of the outer corner	{ obsolete,		<i>G. elegans</i> , G. O. Sars.		
				{ of moderate size, greatly produced and serrate on both margins,		<i>G. zoëa</i> , Suhm. <i>G. longispina</i> , G. O. Sars.		
			produced into two distinct spines,		<i>G. gracilis</i> , Suhm.