The branchial arrangement consists of a series of evenly ranged branches disposed in pinnate fashion on each side of a central stalk, like the leaves of an ash tree, each lateral branch closely representing the whole plume, and increasing in size as they approach the base, the leaflets becoming changed from a cylindrical to a foliaceous condition (Pl. LIX., Br).

The several plumes fill the branchial chamber and may be formulated as in the following table:—

Pleurobranchiæ,			•	$\mathbf{r}$	r	1	1	1	1	1
Arthrobranchia,		•		<b>2</b>	2	2	2	<b>2</b>	2	
Podobranchiæ,	•:	•		1	1	1	1	1	•••	• • • •
Mastigobranchiæ,				r	r	$\mathbf{r}$	r	r	$\mathbf{r}$	
				h	i	$\mathbf{k}$	1	m	n	o

The bathymetrical range of the genus is from 300 to 3050 fathoms; it was chiefly got from the greater depths, and the animals are undoubtedly natatorial in habit and probably never rest upon the bottom of the ocean.

Gennadas is very closely allied to Benthesicymus but must, be considered a distinct genus. It may be most readily distinguished by the form of the dactylos of the second pair of gnathopoda, and by having only one tooth surmounting the crest, but most especially by the more simple character and ultimate structure of the branchial plumes, and by the rudimentary condition of the mastigobranchial plates.

Geographical Distribution.—Species of this genus appear to be very generally distributed in the ocean at an average depth of about 2000 fathoms. But two of the three instances in which they were got in comparatively shallow water were at localities near the border line to the south of Japan, where the bottom rapidly dips from 100 to 1000 fathoms, and the other, in the Chinese Sea, was under similar conditions. It may be that at certain periods the animals ascend to a warmer stratum of water to deposit their ova.

Although the specimens are far from abundant (only in two instances have more than solitary specimens been taken, and then only three and four respectively), yet they have been found in the North and South Atlantic Oceans, near both the Old and New Continents, in the middle of the North and South Pacific, as well as near the coasts of Japan and China, in the Indian Ocean, and south of Australia.

Gennadas parvus, Spence Bate (Pl. LIX.).

Gennadas parvus, Sp. B., loc. cit., p 192.

Rostrum short, laterally compressed, thin, apex pointed, crest armed with one tooth, Cervical fossa not deep. Posterior somites of the pleon laterally compressed, dorsal surface without a carina, but the posterior somite showing a median line or low ridge. Telson short, scarcely half the length of the outer branches of the rhipidura.