male (Pl. XLI. fig. 3) an angularly-curved hook and five setæ, two long and three short. In other respects the animal does not appear to present any special differentiations of structure. Its length is 1-16th to 1-11th of an inch (1.55 mm. to 2.3 mm.).

Only three or four examples have been found, and I am by no means sure that the forms which I here refer to the male and female of the same species may not prove to be specifically distinct. The following are the localities in which the species was taken:—lat. 35° 11′ N., long. 137° 8′ E; lat. 35° 41′ N., long. 167° 42′ E.; lat. 36° 44′ S., long. 46° 16′ W., tow-net at trawl; depth 2650 fathoms.

[Pl. XLI. figs. 1-10. 1 Anterior antenna and tentacle of female, 2 anterior antenna of male, 2a portion of central seta more highly magnified, 3 secondary branch of posterior antenna of male, 4 mandible and palp, 5 first maxilla, 6 second maxilla, 7 first foot of male, 8 postabdomen, 9 dorsal angle and spine of male, 10 anterior ventral angle of male. Pl. XLII. figs. 1-8. 1 Female with valves laid open and seen from below, 2 the same seen from side (magnified 20 diameters), 3 portion of anterior margin of shell, 4 posterior angle and spine more highly magnified, 5 secondary branch of posterior female antenna, 6 second maxilla, 7 first foot of female, 8 branchial appendage of first foot.

Section CLADOCOPA.

Family Polycopide, G. O. Sars.

Valves subequal, thin, not notched in front. Anterior and posterior antennæ both natatory, terminated by long setæ, and having the basal portion large, stout, and muscular; the anterior pair simple, not geniculate; posterior two-branched, both branches natatory. Mandibles distinct, strongly toothed below; palp short, neither pediform nor clawed. Two pairs only of posterior limbs, scarcely pediform, the first natatory, the second branchial. Abdomen terminated by two short numerously-clawed laminæ. Eyes wanting. No heart. Intestine forming a simple sac.

Polycope, G. O. Sars.

Valves rounded, ventricose, corneo-calcareous. Forehead having no tentacle, but in its place two ciliated setæ. Anterior antennæ three-jointed, last joint short, terminal setæ long and slender; terminal rami of posterior antennæ unequal, one branch many-jointed and similar in structure to that of *Cypridina*, the other shorter and three-jointed. Lower extremity of mandibles strongly inflexed, armed with a few small acute teeth; palp biarticulate, first joint stout, bearing externally a short, bisetose branchial appendage, last joint narrow, beset with long plumose setæ. Incisive portion of the first pair of jaws small, forming a simple setiferous lobe; palp very large, four-jointed, two-branched, second joint bearing a long, narrow, and obsoletely-biarticulate branch, which is ter-