

do not differ materially from those of *Cypridina*; each is provided with a large oval branchial plate, and the spines of the various segments have strongly-toothed margins; the third maxilla (fig. 9) is composed of three or four short digitiform segments, which are densely clothed with short, stout setæ, and attached to these is a large subtriangular lamina, which bears along its outer margin several rows of plumose setæ; these are separated by a short interval from another series of about six branchial filaments which are attached to an apical process of the plate. The postabdominal laminæ (fig. 11) are beset with numerous strong curved marginal claws, which appear to be arranged in several series of two or three claws each, those of each set being graduated as to size and strength. Some of these claws are drawn *in situ* in figure 11, while the scars showing the points of attachment of the others show a gradation of size like that here described. The copulative organs of the male (fig. 10) consist of a right and left limb, one of which is hamate, the other obtuse, and beset at the apex with numerous spine-like setæ; both are attached to a large basal segment, from which springs also a stout process bearing on its expanded apex a series of nine curved setæ arranged in a somewhat fan-like manner and regularly graduated in length from one end of the series to the other. Some other points of structure in the organs I have not been able clearly to make out. Oviparous foot, almost exactly like that of *Cypridina*.

1. *Crossophorus imperator*, n. sp. (Pl. XXXVIII. figs. 1-11).

Shell dense, porcellaneous and polished; seen from the side, broadly and regularly oval; height equal to three-fourths of the length, notch of moderate size, and expanded laterally so as to produce two obliquely-placed depressed areas on the anterior face of the shell; beak curved and sharp; posterior extremity broadly rounded, dorsal and ventral margins equally convex; seen from above, the shell is oblong ovate, widest in the middle, subacuminate in front, and rounded behind, width equal to more than half the length; end view ovate. Length,  $\frac{1}{3}$ d of an inch (8.4 mm.).

Of this noble species, certainly the largest of the known Cypridinidæ, one specimen was dredged in a depth of 1100 fathoms, in lat. 40° 28' S., long. 177° 43' E., the bottom temperature being 2.0 C.

The possibility should be borne in mind, however, of the creature having been captured in the upward passage of the dredge through the water. The characters of the genus are very like those of *Bradycinetus*, Sars, but the secondary branch of the posterior antennæ in the latter genus does not end in a claw, while the structure of the third pair of maxillæ, and the general style of setose and spinous armature seem to be so abnormal as to require the establishment of a new genus for their due expression.

[Pl. XXXVIII. figs. 1-11. 1 Carapace of the male seen from right side, 2 from above, 3 from front (magnified 6 diameters), 4 anterior antenna, 5 posterior antenna with (a)