

pair, which goes to form the outer plates of the tail-fan; this is biramose and supported by strong longitudinal ridges, the outer marginal one is very strong and terminates in a sharp tooth, short of the terminal extremity, in connection with a well-defined diæresis.

*Observation.*—The specimen supposed to be the type of *Palæmon carinatus*, from which M. Olivier drew his description, was found in the Museum of the Jardin des Plantes without any indication of the locality where it was obtained, but if it be the same as that author described, it was brought from New Holland by Péron, but that which Milne-Edwards gives in his *Histoire naturelle des Crustacés* came from Rio Janeiro, where Dana also procured some specimens and says that it is common.

*Sicyonia lancifer* (Olivier) (Pl. XLIII. fig. 4).

*Palæmon lancifer*, Olivier, *Encyclop.*, t. vi. p. 664, pl. cccxvii. fig. 2.

*Sicyonia lancifer*, de Haan, *Siebold's Fauna Japonica*, p. 194.

*Hippolyte cristata*, de Haan, *loc. cit.*, Tab. xlv. fig. 10.

*Sicyonia lancifer*, Milne-Edwards, *Ann. d. Sci. Nat.*, ser. 1, t. xix. p. 341, note, 1830; *Hist. Nat. Crust.*, vol. ii. p. 410.

*Sicyonia cristata*, Stimpson, *Prodromus descrip. Crust. mac.*; *Proc. Acad. Nat. Sci. Philad.*, p. 112, 1860.

The rostrum is obliquely elevated; armed with a single tooth on the lower surface at the extremity; crested on the dorsal median line of the carapace, and armed with four small teeth on the rostrum, four larger ones posteriorly, and one large sharp tooth on the hepatic region.

The pleon is carinated and but slightly compressed laterally. The carina on the first somite is produced anteriorly to a small tooth, and on the last to a large one directed posteriorly; the carina on each somite is double-ridged longitudinally, and cleft posteriorly to receive that of the next succeeding somite. The last three somites have the coxal plates posteriorly produced to sharp teeth. The telson is tapering and terminally flanked by a sharp tooth on either side, and with a fringe of strong hairs.

Length (female), 50 mm. (2 in.).

*Habitat.*—Station 188, September 10, 1874; lat. 9° 59' S., long. 139° 42' E.; Arafura Sea, south of Papua; depth, 28 fathoms; bottom, green mud. One specimen; female.

This specimen appears to me to coincide with Milne-Edwards' description of *Sicyonia lancifer* (Olivier). De Haan's figure of *Sicyonia (Hippolyte) cristata* also corresponds with the Challenger specimen, and the descriptions of the two agree with that given by Olivier under the name of *Palæmon lancifer*. There is but one specimen in the collection, and that a female. It is less compressed laterally, both anteriorly and posteriorly, than *Sicyonia carinata*; the teeth are more numerous on the median dorsal ridge, and