portion denticulate; the peduncles of the third pair much shorter than the rami, apically acute below, with a spine and some spinules on the upper margin; the rami lanceolate, subequal, reaching much beyond the preceding pair, carrying marginal spines of various kinds, some being slender and setiform.

Telson subequal in length to the peduncles of the third uropods, cleft for three-quarters of its length, the cleft nowhere dehiscent; the outer margins converging little for the first two-thirds of the telson's length, then rapidly; a feathered cilium and lower down an apically plumose spine or seta are inserted on the margin just before the apex is reached; the surface on either side has five spines or setules.

Length.—The specimen, in the position figured, measured, in a straight line from the front of the head to the apex of the third unopods, seventeen-twentieths of an inch.

Locality.—Station 163B, Port Jackson, June 3, 1874; depth, 35 fathoms; bottom, hard ground; bottom temperature, 63°.0. One specimen, female.

Remark.—The specific name, derived from the Latin word acinaces, a Persian sabre, refers to the sharp curved dorsal outline of the animal.

Ampelisca chiltoni, n. sp. (Pl. CIII.).

The acuteness of the dorsal compression seems to be limited to the head, which is truncate in front; the posterior lateral angles of the third pleon-segment produced in a small acute point; the fourth segment having a small transverse dorsal depression, beyond which the dorsal line is rather sinuous, ending in an angular apex; the dorsal division between the fifth and sixth segments is very slightly marked; the dorsal line of the sixth segment divides at about the centre, forming two small wings, the median line convex, the wings straight at the top, ending angularly on each side of the telson, the postero-lateral angles sharply produced at the base of the uropods, and furnished with spines, the lower margins carrying plumose setæ.

Eyes and Antennæ nearly as in Ampelisca acinaces. In one specimen examined there were twenty-eight joints on the flagellum of the lower antennæ; the first two joints of the peduncle appeared rather more dilated than in the compared species, the flagellum also being shorter.

Upper Lip.—The distal margin of the inner plate flatly convex, ciliated, with a faint emargination not central; the outer plate broader, with an almost semicircular outline, and a faint distal central emargination.

Mandibles similar to those of Ampelisca acinaces; but the spine-row consists of ten spines; the molar tubercle has a tooth on the forward side; the margin of the crown is set with strong denticles in the left mandible on the inner side only, the opposite side