might have been present originally; the remaining joints short, successively diminishing in length and thickness, many of them carrying long filamentary cylinders; the secondary flagellum of three slender joints, two long and one very short, the three together not equal in length to the first of the primary.

Lower Antennæ.—The gland-cone prominent, the third joint not much shorter than the composite first and second, the fourth and fifth long, straight, parallel-sided, the fourth rather wider than the fifth, equal to it in length, and also equal in length to the first four joints of the seven-jointed flagellum.

Triturating Organ.—In the Lysianassidæ this organ differs much from the form presented in the Orchestidæ. In the present species the oval organ exhibits round one margin a row of some two dozen spines, of which the basal half is thick, the other half becoming abruptly thinner and curved; round the opposite margin is a still more closely set row of some twenty-eight longer spines, nearly straight, pretty evenly thick all along to the end, which is cut into a short fork; where the two rows meet at the outer extremity of the organ there are some ciliated spines.

Mandibles.—Cutting edge smoothly convex, with an upper tooth turned a little downwards and a lower one turned a little upwards; secondary plate on the left mandible small, strap-shaped, its edge cut into four or five teeth; spine-row consisting of three slightly curved spines (only two present on the right mandible); molar tubercle prominent, its oval crown somewhat ciliated on the edges, carrying four or five teeth down the centre, the remainder divided into rows of very minute denticles; the palp set far forward just over the molar tubercle, the first joint short, the next rather long, with eight or nine spines near the apex; the third joint shorter than the second by about the length of the first. The pectinate spines on the inner margin of the third joint, beginning below the middle, increase in length to the apex; they numbered seventeen on the left, fourteen on the right mandible.

Lower Lip.—With the forward lobes broad, pretty strongly ciliated.

First Maxillæ.—Inner plate small, oval, with two plumose setæ at the apex, the inner being the smaller; outer plate large, the apical margin with six strong dentate spines, below which are five others, the outermost strong, little dentate, the others a little more slender, not much curved, each with four or five lateral teeth; the palp reaching beyond the outer plate, its second joint nearly parallel-sided, the apical margin carrying from nine (on the right maxilla) to twelve teeth (on the left maxilla), the outermost longest, and one pectinate seta on the surface not far from the outer tooth.

Second Maxillæ.—The outer plate broader than the inner and prolonged a little beyond it; on the apex and a short way down the inner margin of the inner plate

¹ The true shape of this part of the mandibles was not clearly made out till after the figures, Pl. XII. m. m., had been lithographed.