Lower Antennæ much stouter and longer than the upper; a small gland-cone on the second joint just below the slightly expanded portion of the first joint; the third joint about equal in length to the coalesced first and second, carrying numerous setæ; the fourth joint longer than the preceding three united, not much shorter than the flagellum of the upper antennæ, with two very long spines on the side, one below the centre, the other almost distal, also a short spine on the upper margin near the distal end, and all along this margin spinules or setules which like the spines are hairy; the fifth joint as long as the first three united, armed with some large spines, two of them very long, and with numerous setules and long feathered cilia; the flagellum of about sixty-five joints, thick at its base and tapering slowly, in every joint except the first two or three and the last dozen showing a small calceolus standing stiffly out on the upper distal end; the above description applies to the specimen figured on Pl. LX.; in another specimen the long spines are altogether absent, the fifth joint is only very little shorter than the fourth, both are fringed all along beside the upper margin with small rows of setules scarcely projecting beyond the edge; the flagellum, not as in the other specimen shorter, but longer than the peduncle, slender throughout, of seventy-four joints, armed only with short cilia; to this specimen, a very large one, belonged the upper antennæ with the bearded flagella.

Upper Lip very broad, the rounded distal margin projecting at the centre in a little point, the central space almost naked, but the tracts on either side of it strongly furred.

Mandibles.—Cutting plate with two or three large teeth at one end and a small tooth at the other, the intermediate space smooth or slightly denticulate; the secondary plate in the left mandible with its edge divided into six strong teeth, in the right mandible of much slighter structure with the edge divided into four slender teeth; the spine-row of six, seven, or eight slender, hairy, or denticulate spines; the molar tubercle large and prominent, with a small hairy tubercle at the upper corner in front, one side of the more or less oval crown smooth-edged, the other finely dentate, the appearance varying considerably according as the smooth or the dentate edge is shown outermost; a conical process stands between the molar tubercle and the palp. The first joint of the palp short, the second long, stouter at the base than above, its hinder margin concave, some long thin setæ on the lower part of the front margin, along which are spines of various lengths; the third joint is not shorter than the second, bordered with short spines along more than the upper two-thirds of the front margin, with long spines at the apex, and a long spine near the base behind, or with two such spines.

Lower Lip broad; the principal lobes broad, the forward margins broad, slightly curved, densely furred; the inner margins with their anterior portions nearly straight, standing widely apart, the interval being partly filled by the front margins of the inner lobes; the mandibular processes bluntly pointed.