Lætmatophilus purus, n. sp. (Pl. CXXXII.).

The front of the head somewhat produced, with a small pointed process in advance of the eyes on each side; the lower part emarginate for the insertion of the lower antennæ to the rear of the upper; the head with a small dorsal depression to the rear; the first five segments of the peræon each with a dorsal depression, giving the back a corrugated appearance; the third segment has a small ventral process at about the middle, and the second segment is a little produced ventrally, but not into a definite process; the fourth segment of the pleon is a little longer than any of the preceding segments, narrow, cylindrical; the following segment is very short, None of the side-plates are deep; the branchial vesicles on the second to the sixth peræon-segments are strongly bent forward, the pair attached to the second gnathopods being much smaller than the following pairs.

Eyes round, prominent on special lobes; retaining a dark colour in the specimen mounted in Canada balsam; the outer ring of ocelli contained thirty.

Upper Antennæ.—The first joint shorter than the head; the second thinner but much longer, the under margin fringed with long setiform spines; the third joint a little shorter and thinner, similarly furnished; the flagellum of three joints, together not quite so long as the third joint of the peduncle, similarly armed, the first joint much longer than the other two united, the second twice as long as the third.

Lower Antennæ stouter and much longer than the upper; the first two joints short, the gland-cone small; the third joint not long, rather thick; the fourth joint thinner than the preceding, as long as the second joint of the upper antennæ, with slender spines on the lower margin, some shorter and stronger spines on the upper, and some lateral groups; the fifth joint considerably longer than the fourth, with many spines on the lower margin; the flagellum practically of one thick joint, narrowing only near the apex, a little more than half the length of the fifth joint of the peduncle, with short spines of various thicknesses distributed about it, including two curved ones on the apex; the apex under a high power appearing to consist of two minute joints scarcely distinct from the large one.

Upper Lip.—The distal margin is here, if I am not mistaken, rather deeply but not broadly emarginate; but in Lætmatophilus tuberculatus Boeck says that the upper lip is distally rounded (paa Enden afrundet).

Mandibles not well observed; molar tubercle prominent, palp nearly as in Platophium danæ.

Lower Lip.—Principal lobes broad, the convex distal and sinuous inner margins meeting in a small projecting lobe; the mandibular processes rather long, divergent, apically narrowed.

First Maxillæ.-Inner plate inconspicuous; outer plate apparently with nine spines