## BRITISH ENTOMOLOGY;

BEING

## ILLUSTRATIONS AND DESCRIPTIONS

OF

## THE GENERA OF INSECTS

FOUND IN

## GREAT BRITAIN AND IRELAND:

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CONTAINING
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## COLOURED FIGURES FROM NATURE

of The most rare and beautiful species,
and in many instances
OF THE PLANTS UPON WHICH THEY ARE FOUND.

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## LOPHYRUS PINI.

## Order Hymenoptera. Fam. Tenthredinidæ Lat., Leach.

Type of the Genus Tenthredo Pini Linn.
Lopiryrus Lat., Leach. Tenthredo Linn., Fab. Hylotoma Fab. Pteronus Jur.
Antenne inserted near the middle of the face, somewhat approximating, not longer than the thorax, pubescent; male with about 22 joints, all of which are bipectinated, except the first 2 and terminal joints (f. 1.) ; female thickest in the middle, slightly serrated internally, having from 16 to 18 joints (1. a).
Labrum nearly quadrate narrowed anteriorly, ciliated (2.)
Mandibles, one tridentate (3.), the other with a small tooth only.
Maxille with 2 long lobes, the inferior one somewhat acuminate, membranaceous, as long as the external one, which is rounded and hairy : Palpi long slightly hairy 6-jointed, 1st and 2nd joints short, the following long, the 2 last being more slender (4.)
Mentum quadrate, slightly dilated anteriorly (5. a.) : Palpi hairy, 4 -jointed, of nearly equal length, gradually increasing in breadth to the last which is somewhat ovate acuminate (b.): Lip tripartite, the lobes of nearly equal size (c.)
Head in the males very broad. Ocelli nearly in a transserse line. Thorax in the males large. Abdomen sessile, somewhat cylindric in the males, depressed and ovate in the females. Oviduct not exserted, composed of 2 lamelle which are serrated. Superior wings with 1 marginal and 4 sub-marginal cells, the nerve dividing the 1 st and 2 nd cells being imperfect. Tibiæ with spurs. Tarsi 5 -jointed, first 4 joints wilh membranaceous appendages, lst joint very robust, the following gradually decreasing in size to the apex, which is terminated by claws slightly unidentate (8. a fore leg).
Larva with 6 pectoral and 16 membranaceous feet.

Pini mas. Linn. Syst. Nat. 2. 922. 14.-Fab. Ent. Syst. v. 2. p. 112. n. 28.-fem. T. dorsata Fab. v. 2. p. 111. n. 26.

Male black, head and thorax minutely punctured. Palpi, tibiæ and tarsi pale ochraceous. Stigma large, furruginous. Wings slightly discoloured with fuscous. Antennæ with 22 joints. Female larger than the male, pale ochraceous. Head, antennæ (excepting the 1 st joint) a spot before the centre and a lunulated mark on each side the thorax black, margin to lst segment 4 th and 3 following segments, excepting the sides, a mark on the centre of the 8th and the apex of the abdomen also black. Legs pale varied with ${ }^{*}$ fuscous. Wings pale ochraceous, stigma large ferruginous. Antcunæ with 18 joints: Some specimens have more and others less black.

In the Cabinet of the Brilish Maseum.

We have only three British species of this pretty genus of Latreille's, which rival even the Lepidoptera in the beauty of their antennæ; and uature, guided by the same principle, has bestowed this ornament alike in both orders upon the males, which still further involves in mystery their use and quality; since, if form were material, the power of one sex would either be very different or very superior to that of the other;-if the sense of feeling indeed be the only faculty they possess, their form is not of so much importance ; and like Lehmann we shall be inclined to adopt this opinion, if we consider their general situation, their porrected attitude when in action, and still more the uses to which they are applied.

Lophyrus Pini is a rare insect in Britain: the female has been taken in Derbyshire, but the pine forests of Scotland are the most productive places for them: L. pallidus of Leach was found in the larva state by that gentleman at Obau in Scotland, upon Pinus sylvestris. (Pl. 7.) On the 6th of September they spun cocoons; on the 14th of June following one female hatched. L. rufus Klug. is not uncommon in the same country, and is also occasionally met with at Birchwood. June appears to be the month in which all the species are found in the imago state, and the males are by far the rarest ; that of $L$. pallidus is unknown, and I have seen but one British male of $L$. Pini.

De Geer devotes the whole of tab. 36. vol. 2. to the illustration of L. Pini; and his listory of it at p. 971 is not less interesting. The larvæ (says that author) are gregarious, of an obscure ochre colour with a row of large black spots down the side, when fullgrown with another row down the back : they assemble in July upon the branches of the pine in large troops of more than a hundred; they commonly repose along the leaves, having their heads inclined on one side; they are very voracious, not only devouring the straight leaves of the pine, beginning at the end as one eats a radish, but also the bark of the young shoots; and after having despoiled one branch of its leaves, they go in a body and fix upon another, until so many branches are stripped that their habitation becomes conspicuous. When touched they raise their heads and let flow from their mouths a drop of clear resin, which has the scent and consistence of that exuding from a wounded branch of the pine. In every state the sexes may be known by their size ; even the cocoons which are fixed to the branches of the pine are much smaller in the males than the females; the larvæ form cocoons about September, but they do not change to pupæ until the spring; and one of Dr. Leach's caterpillars of L. pallidus remained two years in that state without nourishment, which could not happen if they were not perfectly secluded from the air: the males bred by De Geer appeared in May,-the females did not hatch till June.

Lychnis divica mas. var. alba (White Campion) is figured.

