

first, second and fourth annulets. A series of sub-dorsal, sooty black patches, tapering posteriorly, varying in different individuals. The two rows approach each other posteriorly, and on joint 13 form a single, large, quadrate patch anterior to the pale suranal rim; spots partially broken between the annulets. A similar lateral row of sub-quadrate spots; a smaller one on sub-ventral ridge, and a small spot above base of each abdominal foot, except toward the extremities of the body. Venter immaculate.

At maturity the larvæ moult, leave the trees and form their reddish-brown cocoons at the surface of the ground. Head shining sordid white with a blackish shade all over the vertex and part way down the sides, not on the clypeus; sutures evident, eye in a black spot; mouth red; width as before. Body sordid white, 6-annulate, slightly shining; alimentary canal empty. Black spots as before, but not sooty, slightly shining and minutely white-dotted. Thoracic feet slightly blackish or wholly watery-whitish.

Found on *Pinus rigida* and *P. Banksiana* at Woods' Holl, Mass., in August. Flies emerged the following spring. This was determined by Mr. MacGillivray as *Lophyrus Lecontei* (?); but as the larva corresponds with Riley's description, I have left off the mark of doubt.

*Imago*.—♂. Shining black, a ventral band and tip of abdomen rufous; all the femora, tibiæ and tarsi rufous, the anterior legs palest. Veins and stigma pale brownish; hind wings smoky outwardly; antennæ 21-jointed.

♀. Reddish; sides of thorax above wings and abdomen, except at tip, black; a black shade below sub-ventrally, especially on abdomen and on anterior femora; antennæ black, 21-jointed. Cross-nervure of lanceolate cell hardly oblique.

The following synopsis will separate the larvæ of *Lophyrus* at present described in works to which I have access:—

Larva without spots; head black (*Abies*)..... *Lophyrus abietis*.

Larva with angular black spots.

Head black, no sub-ventral spots (*Pinus strobus*)..... *Lophyrus Abbotii*.

Head red; small sub-ventral black spots (*Pinus rigida*, etc)..... *Lophyrus Lecontei*.