

the markings of this species, especially about the basal portion of the wings, where the black markings vary from mere dusting to distinct narrow lines or fasciæ. Perhaps Clemens' variety No. 3 is the most distinctly marked form, but there is no such thing as a distinct and separate variety, as the variations are of all kinds between the extremes.

The larva is of the second group, and the mine is an irregular whitish blotch on the upper surface of the leaves of different white oaks (*Quercus Alba* and *obtusiloba*). The pupa lies on the upper surface under a thin coverlet of silk. Imago in April, May and July. *Alar. ex.* nearly  $\frac{1}{2}$  inch. Common—Pennsylvania—Kentucky.

There is another mine of a very distinct species, hereafter to be described, on the upper surface of the leaves of the same plant, and sometimes both occur upon the same leaf. Seldom more than one larva in a mine.

2. *L. tiliacella*. *N. sp.*

Glistening, snowy white; middle portion of the anterior wings from near their base to the base of the ciliae pale golden, which is produced along the costa to the base—three broad silvery white fasciæ dark margined internally; the dark margin of the third fascia widely interrupted in the middle, and the pale golden very indistinct, sometimes not visible, behind it; the second fascia is about the middle of the wing. *Al. ex.*  $\frac{1}{4}$  inch. Kentucky—rare. Larva of the first group, white, covered with dispersed longish hairs. Mine on upper surface of *Tilia Americana* (the Linden). Small, circular or ovate, brownish, mottled with whitish; not visible underneath until the lower cuticle dies. This is one of the anomalous mines and larvæ before referred to.

3.—*L. luctidella*, Clem., *loc. cit. supra*.

Besides the markings mentioned by Dr. Clemens, nearly all my specimens have the silvery band dark margined strongly by a dorsal black streak, and have also a distinct black costal spot at the base of the ciliae. *Al. ex.*  $\frac{1}{4}$  in. nearly. Pennsylvania and Kentucky. Common larva of the 1st group—pupa in thin whitish silken cocoon.

Mines the under surface of leaves of *Tilia Americana*. It first separates the lower cuticle, between two veins, over the whole surface of the mine, and then picks out the parenchyma in specks above, so that the incomplete mine resembles and may be mistaken for that of *L. tiliacella*, but the perfect mine is white upon both surfaces.