The Canadian Entomologist.

VOL. IX. LONDON, ONT., SEPTEMBER, 1877.

No. 9

A NEW LEPIDOPTEROUS INSECT INJURIOUS TO VEGETATION.

BY A. R. GROTE,

Director of the Museum, Buffalo Society Natural Sciences.

(Read before the Am. Asso. Adv. Sci., August 30, 1877.)

In the months of June and July the Red Pine (Pinus resinosa) and and the White Pine (Pinus strobus) show by the exuding pitch that they are suffering from the attacks of an insect. The wounds occur on the main stem below the insertion of the branch. On cutting into the bark the injury is found to be caused by a small larva, which, when full grown, measures 16 to 18 millimetres. The head is shining chestnut brown with black mandibles. The body is livid or blackish green, naked, with series of black dots, each dot giving rise to a single, rather stout, bristle. The prothoracic shield is blackish. The larva has three pair of thoracic or true jointed feet, and four abdominal or false feet, besides anal claspers. This larva, eating on the inner side of the bark, and making furrows in the wood, causes the bleeding which, when the depletion is excessive or continuous, and especially in the case of young trees, has proved fatal.

In July the worm spins a whitish, thin, papery cocoon in the mass of exuding pitch, which seems to act as a protection to both the larva and the chrysalis. The chrysalis contained in the cocoon is cylindrical, smooth, narrow, blackish-brown, about 16 millimeters in length. The head is pointed, there being a pronounced clypeal protuberance; the segments are unarmed; the anal plate is provided with a row of four spines, and two others, more slender, on either side of the mesial line, below the first. It gives the moth in ten to fourteen days. The perfect