

bearing apple and pear trees and upon all orchard trees of bearing age within forty feet of such bearing trees (here might be embodied the age of tree or bearing age) for the purpose of destroying the larva of the codling moth.

THE BANDS.

2. The bands shall be made of "Burlap" or "Sacking," or such other material as may be considered suitable, and shall be not less than four or five inches in width and three thicknesses, and be securely fastened at a convenient point between the crotch and the ground.

THE DUTY OF THE OWNER OR OCCUPANT.

3. He shall remove said bands and carefully inspect and destroy all larva found therein and replace the bands, and continue the regular inspection thereof at intervals of twelve to fourteen days during the months of June, July and August, commencing on the 15th of June and ending on or about the 20th of August.

ADOPTION OF ACT.

1. The council of any municipality who may adopt the provisions of this act shall enforce the provisions thereof in the manner hereinafter described. They shall cause to be distributed to each owner or occupant of land within the municipality a copy of this act, not less than one month before the provisions of this act shall become operative. They shall also distribute to the same persons a sufficient number of blank forms of declaration to be filled in and signed by the said owner or occupant, setting forth the day upon which he performed the work and certifying that the work had been well and carefully done.

APPOINTMENT OF INSPECTORS.

5. The said council adopting the provisions of this act shall appoint an inspector or (in case of the council considering it more expedient for the efficient and economical carrying out of the provisions of this act, a division of the municipality) inspectors.

DUTY OF INSPECTOR.

6. The inspector shall at regular intervals, collect the forms of declaration and inspect the work done and, if neglect has been clearly shown, shall cause the work to be well done and the cost thereof to be levied as an extra tax upon the said property.

*NOTE.—The matter of penalties, appeals and remuneration is left by the committee to the Legislature to define. The committee would suggest that the party performing the work should state approximately on the form of declaration the number of larva destroyed at each operation for the encouragement of other municipalities who may contemplate the adoption of this act.

The Hon. John Dryden is prepared to do anything in his power to assist in the matter, and only needs further consideration of the methods advised before taking action.

Slingerland, of Cornell, in Bull. 142, says:

"We will hazard an estimate at the annual tribute which our New York apple-growers pay for the ravages of this pest. The average annual crop of apples in New York now amounts to about

5,000,000 barrels; as \$1.50 per barrel would seem a fair average valuation, the total valuation of the annual crop may be estimated at \$7,500,000. Although many New York fruit-growers are fighting this insect with modern methods, we think that the wormy apples would constitute at least one-third of the total crop. That is, New York fruit-growers yearly furnish \$2,500,000 worth of apples to feed this insect; and there must be added to this at least \$500,000 worth of pears (certainly a low estimate for New York) which the same insect renders worthless. This makes a tax of \$3,000,000 which a single insect levies and collects each year from the fruit growers of our state."

Now Ontario follows closely upon New York State in the production of apples, consequently the loss with us from codling moth would be somewhere between two and three million dollars.

For a long time it has been supposed that the egg of the codling moth was deposited in the basin of the apple, under shelter of the calyx, but Slingerland says, "During the past two years we have seen hundreds of the eggs on apples in New York orchards and have never yet seen one on or down in between

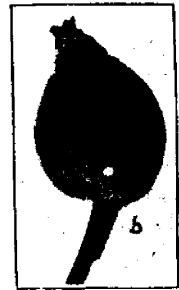


FIG. 1747.
EGG OF CODLING
MOTH AT b.

the calyx lobes. Most of the eggs we found were glued to the skin, apparently without much choice as to location, on the smooth surface of the fruit as shown in fig. 1747. The eggs have been aptly characterized as resembling a minute drop of milk adhering to the skin of the fruit. The egg is a thin scale like object, not quite so large as the head of a common pin, and is of a semi-transparent whitish color, often with a yellow tinge, which is sometimes quite pronounced. Unless one has seen the eggs they could not readily be discovered on an apple; the one on the apple in fig. 1747 was unnaturally whitened to bring it out in the reproduction."

From careful observations made by Gillette, of Iowa, and Lord, of Nebraska, it ap-