iks of trees. ily a short cre counted octs did not und resting wes.

ggs in conatural con-

its life. In rvæ at this ney at once ne construc-

ain burrow manner of regular, but ion of any whole mine arva, which nother part

ir way into

the degree r. covering number at ral affected

g the mines ne desertion practically mall pieces pinning the

a, the larvarafine theme found in trees, even and inconpar in great

ny diseover, n the buds, ance to its

uds in conwell. They

tack on the at the side do so just at the edge of the bud scales, although sometimes one will pierce the scales themselves. In a few cases larvæ were noted entering buds which had not begun to swell, but which were still in a dormant state. Over the entrance to the burrow, the caterpillar spins a fine net-like web. The larva burrows to the centre of the bud both by means of eating its way in, the material passing through its alimentary canal, and hy biting off and carrying hits of leaf to the outside. The latter method is used when the insect is piercing the tough outer layers of the bud.

"Should the temperature drop after a warm day has tempted the caterpillars to come out of hibernation, but before they have had the opportunity to enter a bud, they will seek shelter under loose bark on the limbs. Many larvæ were found under the bark on April 16, hut by April 23 all had apparently entered buds.

"As before mentioned, the larva upon entering the bud makes its way directly to the centre, there feasting on the tender ovary of the unopened flower, a few only attacking leaf-buds. It is this habit which causes the greatest amount of injury, for often every bud on a large limh will be affected. After consuming the inner portions, the larvæ feed upon the leafy tissue of the bud, remaining within until the hud expands and the leaves begin to unfold.

"As the first leaves open out, the larva fastens them together, spinning its fine strand of silk as it erawls about. It now constructs for itself a shelter or cocoon of silk, often rolling over the edge of a leaf and constructing it from within, or hringing the tips of several leaves together and spinning it in the midst, or making a combination of the two methods. As a rule, the larvæ during the day are to be found at rest within this cocoon, giving evidence for the supposition that the insects are nocturnal feeders.

"On May 15 it was noticed that some of the nests in the leaves were empty, and by the next day a large percentage of the larvæ had disappeared. However, a search revealed the caterpillars under hits of loose bark on the limbs and trunk constructing cocoons in which to pupate. On large trees where there is a great deal of roughened bark the cocoons are difficult to locate, but on smaller trees they will be found clustered in the crevices on the trunk; this is especially true on young pear trees, where most of the bark is smooth, affording the insects no shelter. A search among the leaves and dehris on the ground heneath the trees revealed a few larvæ transforming in the shelter there afforded.

"The last "ng larvæ in the orchard were found on June 19. Thus the larval stage covers as period of about 10 months.

In Nova Scotia the following facts regarding the life-history of the lesser budmoth may be of interest to orchardists. All data were collected in 1915.

May 10.-Larvæ first entering buds.

July 1-12 .- Larvæ pupating.

July 29-August 4.—Adults emerging. Late August.—Larvæ hibernating.

DESCRIPTION OF Recurvaria nanella IIh.

## THE EGG,I

"Some of the eggs received had been loosely deposited among the hairs on the underside of an apple leaf, singly or several sticking together, for the most part along the veins of the leaf. Another lot had been deposited on a twig under the edge of a small seale. The egg is ohlong, inclined to be cylindrical, though irregularly so, and

<sup>1</sup> Bull. No. 113, U.S. Department of Agriculture, by Scott and Paine.