

fragments of the material it is destroying; but it spins a more or less complete silken tube through the hair when attacking fur.

Although the moths appear throughout the summer, it is stated that there is in the north only one brood in the year, but I think this can hardly be the case, and, although I have this season failed in rearing the young caterpillar from the egg, a brood hatched early in June contained some specimens which were 4.50 mm. by the middle of August, when the whole of them died without any apparent cause; and the perfect insects were to be found flying from the month of May until September the 28th. The caterpillar attains full growth in autumn, when it builds for itself a close cocoon in which it remains unchanged until spring. For this purpose it occasionally takes other materials than those it has been feeding on. I have one cocoon composed of asbestos fibres which were in a drawer with some paint brushes that had been destroyed, but the asbestos fibre alone had been used in the formation of the cocoon. Another cocoon is composed of fibres of cotton wadding and the caterpillar had apparently subsisted almost entirely upon the gummy coating with which the surface of the wadding had been dressed.

Tinea pellionella is thought by Prof. Riley to be the commoner species in northern regions, but this has not been my experience. In fact, it has only been sent to me from Nova Scotia, New Brunswick, and on one occasion from Toronto. In this latter case, it had certainly been recently imported from England. In Prof. Riley's interesting account

in *Insect Life*, its habits are thus briefly described: "The small light brown moths distinguished, as shown at Fig. 33 by the darker spots at intervals on the wings, begin to appear in May, and are frequently seen flitting about as late as August. They pair, and the female then searches for suitable places for the deposition of her eggs, working her way into dark corners and deep into the folds of garments, apparently choosing by instinct the least conspicuous places. From these eggs hatch

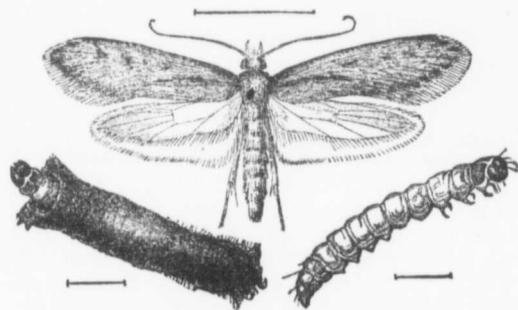


Fig. 33.—*Tinea pellionella*—enlarged.—adult; larva; larva in case (after Riley).

the white soft-bodied larvæ (Fig. 33), each of which begins immediately to make a case for itself from the fragments of the cloth upon which it feeds. The cases are in the shape of a hollow roll or cylinder, and the interior is lined with silk. As they grow, they enlarge these cases by adding material to either end and by inserting gores down the sides which they slit open for the purpose. The larva reaches its full growth toward winter and then, crawling into some yet more protected spot, remains there torpid through the winter within its case, which is at this time thickened and fastened at either end with silk. I have known these larvæ in autumn to leave the carpet upon which they had fed, drag their heavy cases up a 15-foot wall and fasten them in the angle of the cornice of the ceiling. The transformation to pupa takes place within the case the following spring. The heat of a dwelling-house does not seem to affect the development of the pupæ, but the caterpillars remain unchanged till spring even in a highly heated office."

With the exception of the difference in making their cases, the habits and injuries of these species are very similar, and the same remedies will apply for both. A most interesting experiment, demonstrating the manner in which the case of *T. pellionella* is made, can be tried by providing the young caterpillars with different colored materials for making their cases. I have cases showing rings formed from scarlet and black wool, blue peacock's feathers and white lamb's wool.

Perhaps the most remarkable result of the work of any insect which has ever come under my notice, was a piece of a pillow-case which was sent to me by Miss Lucy C. Eaton, of Truro, Nova Scotia. The specimen at first sight has the appearance of beau-

had only been
all of these ill
sons of careless

ication of the
ision has been
hich has been
ount given in
The whole
iven, together
, in CANADIAN
article by Prof.
t article have

in Canada as
white or buff
was separated
k Schæffer be-
axillary palpi,
than a quarter
y active, flying
hen disturbed.

the forewings
out any spots.
different shade
eggs are laid
wards to be the

Immediately
r spins a silken
ch of food. It
s done by the
it is full fed,
ich it has been
ists mainly of
condition are
and brushed.
heavy pieces of
weeping is not
stant supply
boxes through
icacy for these
ir come amiss.
ollowing: the
single summer
jury from this
luable picture
d considerable

cola biselliella,
been destroyed,
e very remark-
erior has been
se, protruding

as does that of
y mixed with