

The Moth Trap used with oil lamp to burn all night.

carried out on a large scale, but the principle can be followed and a home-made trap constructed by any man or boy around the farm at a cost of about a dollar and a half for the entire outfit. We will send particulars to any interested reader. A friend made a couple for his home garden in Southern Manitoba. The first night the pails underneath his lamp were packed nearly three parts full with dead moths, many thousands of which were females big with eggs. The second night they were only about three inches deep in the bottom of the pails, and on the fourth night there were only a few stragglers, showing conclusively that the immediate neighborhood had been so denuded of the "seat of the trouble" that nothing was to be apprehended from the little that was left.

It is not unlikely that a few grey heads will smile at these suggestions and want to know how any one is to deal with a quarter-section, not to mention a 640-acre farm, with a performance of this kind. There are at least a dozen complete answers to this incredulity. First of all, the widespread and constantly increasing seriousness of the trouble justifies any experiment that will deal with at least some portion of it.

The suggestions given have quite a few things to commend them to everyone involved. (1) They are inexpensive. (2) They are not laborious; two boys each evening will do all that is needful on say a ten-acre patch. (3) If there is a desire to engage every available hand on the farm or neighborhood on a thoroughly organized campaign, the season of the year is just the time when hands can be spared — between seeding and harvest — when the insects are most of all in evidence.



Felio duenei.

Again, it will afford one of the most interesting, instructive, not to say exciting, bits of sport the young folks can be lined up in. It is essentially a job for the boys and girls. If the writer might offer a suggestion it is that as a practical — intensely practical — part of their educational syllabus the schools right through the country should be harnessed to this work of "swatting the bug." The matter opens up a field of untold wonders in recreative as well as big paying employment which cannot be exhausted in one short article. We have set the ball rolling and will continue to push it, if for no other reason than that we have "been at it" for years, and have had the satisfaction of clearing more than one neighborhood in which the caterpillars of those moths were threatening to become a nuisance.

Many of our moths (that is the perfect or winged insect) are deprived of the mouth organ or feeding tube and are unable to feed.

Paris: Green or any other poisonous substance used in combination with sufficient strength to kill insect life is an exceedingly dangerous thing to have lying around any farm. It is a constant menace both to animal and to human life, but the very practical proposal offered in this article will kill nothing except the insects it is intended to kill. These suggestions are not the sudden, untried "idea" of an odd moment but on a small scale they have been followed out by thousands of entomologists as well as some painstaking farmers in different parts of the world. There's no doubt as to the result if one will but take the pains.

These live only for a short time (eight to fourteen days), and having done their part in perpetuating the species, they die off. They are not attracted by the nectar, but they fly to lights. On the other hand the "Cut-worm" crowd swarm both to nectar and lights, and therefore the treacle pot and the all-night lamp come in for an equal share in the business of luring them to their doom. The distinctive merit of the "trap" is that having been set, it is working all night, roping in its victims by the thousands while its owner sleeps.

The most prolific breeding grounds are around places where cultivation or an attempt at cultivation has been made. Weeds or summer-fallow offer the most tempting inducements to the female moth seeking for a "sure thing" for her brood. So that in making a start with this propaganda it should preferably be made in the neighborhood of a cultivated spot or where it is intended to cultivate. The edge of a poplar, oak or other bluff adjoining summer-fallow or where it is intended to raise a crop of grain, roots or vegetables is a good place to make a fair trial.

On no account "let up" on any efforts that are being made

along the lines suggested by the Department bulletins. It is needed in the last degree to have every iron in the fire because this evil is growing apace. Witness the sudden developments in Ontario already referred to and the universal complaint from market gardeners, especially in the prairie provinces. The newspaper says "they know not whence they came," but the most elementary knowledge of the beast will tell them that they have been allowed to breed in some neglected spot — possibly more than one — where the weed inspector has "joined the majority," or has not been able to make his weight felt.

These spots could not have been many miles away. A cultivated observation would at sometime or other have seen the beginnings of this great army on the march, in time at least to have decimated it or prevent its reaching the awful proportions it has assumed. The bulletins for the greater part give very fair reproductions of the



Noctua fennica.

house of the "bed-bug," the little red-brown blood sucker that is as familiar and on no less affectionate terms with the members of the household as the domestic pup.

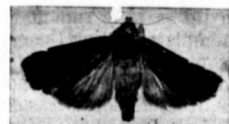
The cut-worms and the army-worms belong to a far more aristocratic family than the bugs. They have a more complex organization and go through exactly the same wonderful metamorphoses that those great insects of many colors perform in course of their career. They are very dainty in their methods and easily killed off if you know their weaknesses and their life-habits which at times enable us to get after them without chasing every flighty individual on the wing.

The bugologist who runs after his quarry only with a green gauze net is wasting an awful lot of time and far more precious energy. The net has its uses but its function doesn't come into the programme we must follow out to get after the multitude.

Those warm evenings — best of all after a thunderstorm when things have quieted down — is the psychological moment for making a big kill, just as a few succeeding dry hot days is the ideal condition under which to put the cultivator or a "Cyclone Weed-Killer" over a well established weed crop on summer fallow.

There's a time for everything in dealing with things that live, grow and perpetuate their species and generally time enough to deal with them successfully (either in killing or curing) if we will take the opportunity. But "Opportunity" it is said, has only one little lock above her forehead. She is bald behind and if you don't seize her by the forehead, there's nothing to catch hold of once she has gone by.

NOTE.—The foregoing article has not been written merely to provide amusement to our readers. The purpose behind it is a very serious one, viz.: to call attention to a very grave condition of things which has not yet been sufficiently "brought home" to those who are most vitally concerned. The writer of it will be glad to reply by return mail to any interested inquirer.—Ed.



Hadena denastria
(The Destroying Haden)

The real bug is not the creature that is doing the mischief. A bug is a wingless insect and is fairly represented by the prehistoric