close range and finally almost touched it with the hand without its flying. The following morning the owls were all gone. We worked the thickets well for them but without finding a single bird. With them disappeared a number of Long and Shorteared Owls that were haunting the same localities the day previous and which we strongly suspected were to blame for the death of the two or three little owls whose remains we ran across in the course of our rambles.

POPULAR ENTOMOLOGY.

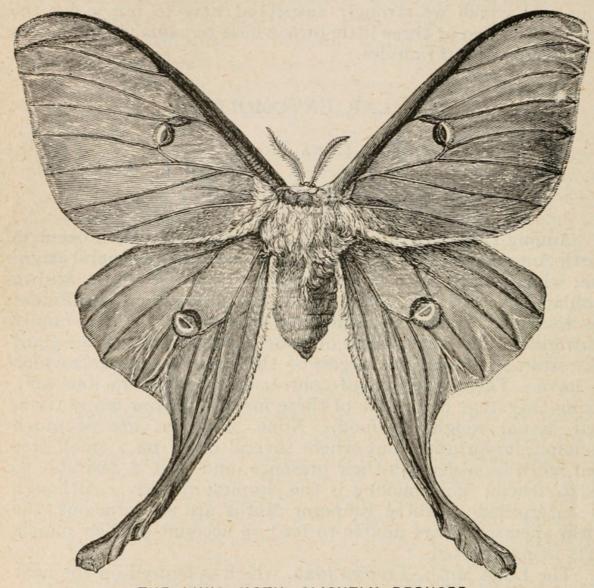
THE LUNA MOTH.

By Arthur Gibson.

Among the many kinds of beautiful insects which occur in North America, there are none which attract more general attention, when seen for the first time, than the large moths known popularly as Emperor Moths. Of these there are eight different species which occur in Canada: all belong to the family Saturniidæ. The caterpillars of these moths, known as the giant silkworms, are among the largest of the leaf-eating insects which we have. The larvæ are, of course, extremely voracious and, during this stage in the life of these insects, devour many times their actual weight of food. None, however, are of much economic importance, but where several occur on a small tree their work soon denotes their presence, and, if it is desirable to destroy them, hand-picking is the simplest remedy. Although the caterpillars of these Emperor Moths are so voracious, the moths themselves are unable to feed on account of their mouth parts being aborted.

The Luna Moth, Tropæa luna, which is figured on the next page, has most appropriately been styled "fair empress of the night" and "queen of the night." It was first described by Linnæus, in Systema Naturæ, in the year 1758, so has long been known to naturalists. It is indeed one of the most beautiful of all insects. The four wings are of a delicate green colour, the two front ones being bordered along the upper edge with purple, or purplish-brown, which colour also extends across the thorax near the head. The head, rest of the thorax, and abdomen is white, or pale greenish-white. The eye-like spot towards the middle of each wing is transparent in the centre and bordered with lines of white, pale purple, yellow and black on one side, and dark purple (or red), yellow, blue and black on the other side. The eye-like spot on each of the front wings is joined by a

band, which is mostly purplish, to the wide border, of the same colour, along the upper edge of the wings. The outer margins of the wings are also edged in the centre with purple, or purplishbrown. The legs are of the same purplish colour.



THE LUNA MOTH-SLIGHTLY REDUCED.

These moths may be found in Ontario and Quebec during the latter part of May and in early June. Specimens are often found in the day time, resting on the trunks of trees. They are active, however, only at night, when they are often attracted to the bright arc lights, especially those on the outskirts of towns and cities. Their flight is very graceful, and when seen flying around an electric light they are objects of much attraction, their long tails being very conspicuous in the bright light. Some seasons these moths are not uncommon. During the past few years many specimens have been sent to the Division of Entomology of the Dominion Experimental Farms, from widely separated localities. Almost all of the senders invariably make

the same remark, viz., that they had never before seen such a beautiful insect, and, of course, they all ask for its name and something of its life-history. Many of the boxes in which we have received these specimens contained, as well, pieces of sugar, etc. for the moths to feed on. Correspondents are surprised when told that they are unlike most other moths, in that they cannot feed.

Soon after the female moth emerges from the cocoon, she deposits whitish eggs, which turn dark before hatching. These are oval-cylindrical in shape and in size are about 2 mm. long by 13 mm. wide. They are attached to twigs or laid on the leaves upon which the caterpillars feed. In about from fifteen to twenty days, according to the season, the eggs hatch. The larvæ at first are pale green, about one-quarter of an inch in length, with brown markings on the head, and some have markings of the same colour along the side of the body. They cast their skins five times, and during the different stages noticeable changes take place. The tubercles on the body which at first are very small, become quite large in the later stages, and there is a conspicuous change in their colour. As the caterpillar becomes older yellowish lines appear on the body. The tubercles, when the larva is mature are, as a rule, pearl-colored tinged with purple; at the end of the body there are three brown spots edged with yellow. - In some specimens the tubercles are of a much brighter colour; one writer described them as 'blazing like a coronet of rubies." The larva is now about three inches long and of a beautiful pale bluish-green colour, the yellow band along each side of the body being conspicuous.

The caterpillar has been found feeding on walnut, hickory butternut, maple, birch, beech, oak, willow, plum and sweet gum. When mature, in late summer, it, as a rule, leaves the tree upon which it has been feeding and makes an irregular oval cocoon, generally among leaves on the ground. The cocoon is thin, not nearly as tough as that made by the American Silkworm, Telea polyphemus, which is a much more common insect in eastern Canada. The winter is passed as a pupa inside of the

cocoon and the moths usually emerge in May.

THE PREPARATION OF A CATALOGUE OF THE INSECTS OF CANADA.

By C. Gordon Hewitt, D. Sc., Dominion Entomologist, Ottawa

At a meeting of the Executive Committee of the Entomological Society of Ontario, held at Guelph, Ont., on November



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