

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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dilute the farmer forces or becloud the issue by fusion with other elements or other contingents, nor is it necessary in order to accomplish that for which farmers took up the cudgel, namely, a square deal. There is danger of shipwreck when any farmers' organization steers too close to the political shoals, and our interest in the matter ceases if the object of the proposed party is to wage political warfare and gratify the desires of those in both groups who may have political aspirations.

In the last analysis the best kind of a representative is the man who can forget that he is a farmer, an artisan, a laborer or a capitalist and work in the interest of all his constituents without regard to class or creed. We are, first of all, Canadians, and no political organization will ever become a national party in Canada unless it can accept men and women as Canadians irrespective of the manner in which they earn a living.

A really and truly People's Party would be a splendid thing in Canada, but the best way to accomplish that would be for all classes to exert themselves through the political organizations now extant and assume control of the machines which determine policies and the political fortunes of men and women.

On Friendly Terms with the Mechanical Milker.

BY ALLAN MCDIARMID.

I remember, a number of years ago, it used to be considered a rather bad sign of a farmer, if he was in the habit of letting the "machine agents" induce him to buy many new implements; letting them "rope him in," as we called it.

It's not so much the case now, for the reason that what used to be considered a sort of luxury has now become a necessity. A man trying to farm to-day, without the help of machinery, would be taking one of the many short-cuts to the poor-house. No hired help is getting to be the rule where, a number of years ago, we had men calling around every few days, asking for work. The fact that it is an age of machinery probably accounts for the number of men who are leaving the country districts and finding employment in the cities, but the compensation lies in the possibility there is for the farmer who finds himself urged on every hand to let the machine do his work.

With the above as a sort of an apology I am going to confess to the weakness of having bought, this last

spring, a milking machine, or, as the agent called it, a mechanical milker.

I used to think, and say, that the owner of fifteen or twenty cows hadn't any real need of a milking machine, and that they cost too much money to pay interest on the investment as a time-saver.

However, I reached the point where I concluded to make the investment, anyway. Whether thinking on my part or talking on the part of someone else was the means to this end is a matter of no importance. I have had the machine, now, about five months and the point is, am I satisfied with it, or not?

I think I may say that I am. The only time it has ever refused to do its work was when the engine wouldn't back it up. All engines seem to get balky occasionally, whether they are employed to drive an aeroplane or only a milking machine, and it has happened with me, several times, that I have had to finish up the milking by hand. But this cannot fairly be laid to the fault of the machine. I have found it always "on the job."

The age we are living in seems to set a good deal of importance on the value of time. And there are days when the man on the farm has to plan pretty carefully to be sure of getting the hours off, for eating and sleeping, that he has found out, by experience, are necessary.

I have experimented with this matter of time and the milking machine, and found that I could milk my herd of fifteen cows in just about half the time it took to do it by hand. And this using one double-unit. For a small herd more than the one double-unit would be a nuisance, rather than a help, I think. By not leaving the machine attached to the cows too long, one man can keep himself fairly busy with but the one. Stripping the cows, changing the machine from one pair of cows to the next and carrying the milk doesn't leave him time enough to light his pipe, or anything like that.

In regard to the time to detach the machine from the cow, I have found that as soon as the first signs of a slackening in the flow of milk is noticed, then is the time to take it off. By not doing so you are wasting time. You can take what the cow has left more quickly by hand. And you are doing this while the machine is milking the next two in the line. The point is to keep both the machine and the operator busy from start to finish. There is an advantage, too, in not being in danger of leaving the teat-cups attached after all the milk has been drawn. Hardly any cow will milk out evenly from the four quarters, and there is no advantage, to say the least, in having the suction continue when there is no longer any milk to be drawn.

Another point about the milker, and a pretty important one, is the question of keeping it clean. If it can't be kept in a condition in which there is no danger of it tainting the milk that runs through it, then it is useless, and worse than that. But if one undertakes to follow all the directions on this score that are given by the books of instruction that are sent out with the machines, or the advice that comes to us in the farm papers every few weeks, he is not very apt to run into this danger. The fear would be, rather, that he would make himself sick of the whole business and come to the conclusion that there was more time lost in washing and rinsing than was saved in the milking.

These directions generally read something like this: "First wash machine by drawing through it a pail of clean, cold water, then a pail of hot alkali water, and after this a pail of clear hot water. Now immerse the teat-cups and tubes in a solution of chloride of lime and leave them there until the next milking. But before using again rinse by drawing through them a pail of clear water. All metal parts must be scalded and dried thoroughly every day. Once a week the teat-cups and tubes must be taken apart and cleaned with the brushes supplied with machine. In hot weather do this twice a week."

Now if a prospect like that doesn't scare the notion of a milking machine out of the head of the average owner of a small herd of cows he must be pretty fond of washing and keeping things clean. Or else he intends to hand that part of the business over to his wife.

How many places are there where the hot water called for can be conveniently supplied early in the morning, the time the milking is always done? Some simpler plan than all this washing and sterilizing will have to be devised if the milking-machine is going to be of much service to the owner of the small herd.

Speaking for myself I overcame the above difficulty to my own satisfaction in this way: I had a pail made out of galvanized iron, large enough to hold the teat-cups and rubber tubes of one double-unit. In the bottom of the pail were a dozen, or more, holes of the size of a ten-cent piece. After drawing a pail of cold water through the machine, according to the directions, I place cups and tubes in this galvanized pail and lower the whole thing into the well. A rope of the right length, fastened to the base of the pump, keeps them at the right depth in the water. They are left there until next milking. In lifting them out the water drains away at once through the holes in the bottom of the pail, and they are taken up without difficulty. The water in the well being almost ice-cold, the danger of germs shouldn't be very great, I fancy. At any rate, I send my milk to a cheese factory and no complaints have been made, at any time since I installed the milker, of any taints in the milk.

I find once in two weeks sufficient to take the teat-cups and tubing apart for a thorough washing. When I was very busy it has gone longer. And the water I washed them in was hardly discolored.

I don't want to discourage cleanliness. But there is such a thing as going to too much work to gain that end. And the method outlined above would seem to prevent the need of this. It seems to work.

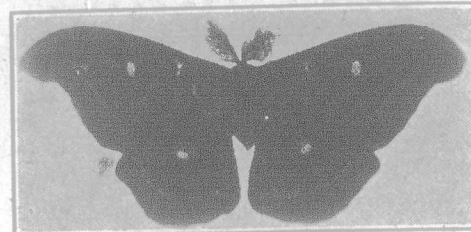
Nature's Diary.

BY A. BROOKER KLUGH, M. A.

THE GIANT SILK-WORM MOTH. II.

The *Promethea* is another large moth having a wing expanse of from three to four inches. The female of this species has light reddish-brown wings, which are marked somewhat like those of the *Cecropia*, but the white crescents are smaller and those on the front wings are either lacking or less conspicuous. The male has blackish wings with clay-colored outer margins, and has the fore-wings more prolonged at the tips.

The full-grown larva of the *Promethea* is over two inches in length, bluish green in color, has two large red tubercles on the second and third segments, a yellow tubercle on the eleventh segment, and black polished tubercles on the other segments. It feeds on the leaves of a large number of trees, particularly on those of the ash and wild cherry.



Polyphemus Moth.
One-half natural size.

When the larva of the *Promethea* is full-grown it covers the upper side of a leaf with silk, likewise covers the petiole (leaf-stalk), then fastens the petiole securely to the stem with silk, so that the leaf will not fall in the autumn. Then it draws the edges of the leaf about itself and inside this folded leaf it makes its cocoon. If it happens to be a compound leaf (that is a leaf with leaflets, such as the ash) in which it is pupating, it not only fastens the leaf to the stem, but fastens the leaflet to the petiole. This fastening of the leaf, so that it does not fall, by the *Promethea* caterpillar, is one of the most wonderful examples of instinct to be found among insects—a seemingly intelligent action performed perfectly without previous experience, and which must, from the very nature of the case be performed without any "knowledge" of the purpose, since no *Promethea*, either larval or adult, has ever seen a leaf fall, as at that time this species is a pupa within its cocoon.

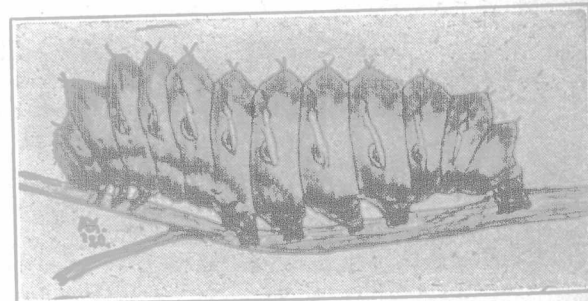


Fig. 3—Polyphemus Larva.
Natural size.

The *Polyphemus* is, as far as my experience goes, the commonest of these four large moths in eastern Canada. The wings of this species have an expanse of four or five inches, are yellowish-brown in color, and near the centre of each wing is a clear, mica-like spot.

The larva of the *Polyphemus* feeds on the leaves of many different kinds of trees. The full-grown larva is about three inches long, light green in color, with pale-yellowish oblique lines on each side of the body. The dense, oval, cocoon is made of silk and a few leaves closely wrapped and tied together. This cocoon has no valve for the escape of the adult, but the moth secretes a fluid from its mouth which softens and partly dissolves one end of the cocoon so that it can emerge.

The *Luna* Moth is an insect which excites admiration whenever it is seen. The wings expand about 4½ inches. It is pale green in color with long "tails" to the hind wings, and an eye-like spot in the centre of each wing. It seems to vary in abundance from season to season more than do the other three species of Giant Silk-worm Moths, and some years, as for instance 1918 in eastern Canada, are "Luna years."

The larva of the *Luna* is about three inches in length, pale green with a yellow stripe along the sides, and with six small reddish or purplish tubercles on each segment. It feeds on the hickory, walnut and other forest trees. When this caterpillar is about to pupate the color of the back usually changes from green to pinkish.

The cocoon of the *Luna* is usually made on the ground, and consists of leaves tied together with silk. It is a good deal thinner than those of the other Giant Silk-worms.

Figures just compiled by F. Hearn, Chief Dairy Instructor in Western Ontario, relative to dairy production in Western Ontario in 1919, leave no doubt as to the progress being made in dairying in this part of Canada. Those who assert that the dairy industry as a whole is going backward should consider all branches of the industry before releasing their hold on optimism.