

GARDEN AND ORCHARD.

The Tent Caterpillar--When Shall We Fight It?

BY MARTIN BURRELL.

During a recent Institute trip through the eastern counties of the Province, I was much struck with the evident desire to ventilate and thoroughly discuss the questions of the hour. Even in comparatively remote districts a full discussion of the San José scale was asked for. The introduction of this injurious insect into Canada has not been an unmixed evil, as it has decidedly roused people to a realization of the fact that "bugs" must be reckoned with, and to be reckoned with effectively, must be studied in something more than a casual manner. It is a matter of regret, however, that while many people are reaching out for knowledge about a pest that may never come near them, lots of our commoner injurious insects are getting in their work unchecked all round them. One of these, the tent caterpillar, has done such immense damage in the east during the past season that a few words of special reference to this insect may help in the inevitable fight against them next season. There are two kinds of these tent caterpillar moths, the commoner form, *Clisiocampa americana*, being considered here. This insect passes the winter in the egg state, the eggs being found in little clusters or bands round the smaller twigs, and usually containing two to three hundred in each cluster. The young caterpillars hatch out early in the spring, immediately spinning a silken web, which is enlarged with their own growth. In about six weeks they are full-grown, and some two inches long, and the amount of foliage eaten during the latter part of their life is almost incredible. Arrived at maturity, the caterpillars leave the nest and spin their cocoons in some convenient spot near by. The moths emerge in July, and deposit the eggs, which remain unhatched till the following spring. The tent caterpillar infests many species of trees, and it is, of course, impossible to fight it effectively when it appears in such numbers as it did during the past season. But while we have got to let it play fast and loose in the bush, we can at all events save our orchards with comparatively little trouble. There are three ways of fighting this nuisance, viz., picking off the egg clusters, crushing the nests when small, and spraying with Paris green (4 ozs. to 50 gals.) when the leaves are bursting out. In an orchard of any size, the spraying method should undoubtedly be adopted, as the Paris green can be added to the Bordeaux mixture, and an application can then be given, which will, if thoroughly done, kill the apple scab, codlin moth, and tent caterpillar at one fell swoop. In small orchards, or where only a few trees are grown, by far the best plan is to examine the trees during the next five or six weeks, and rub off the eggs. Give the boys 5c. a dozen for the clusters; it will do you good, and the boy too. A few hours' work will prevent the defoliation of every apple tree round the house lot. It is not nearly so formidable a task as it seems to go over a good sized tree and clear off every batch of eggs. We see what we look for, and the eye is soon trained to detect not only these objects, but the various scale insects which are so injurious to our orchards. The destruction of the foliage of an apple tree is not only a serious loss that season, but the next also. It is true that the tree will usually put out another crop of leaves, but the growth is necessarily much later, and less likely therefore to be ripened up by the winter, and in the effort to meet this unusual demand on its energies the tree is likely to neglect the work—important to you—of forming good healthy fruit buds for next year's crop. Fix the tent caterpillar then, for if you don't, rest assured he will fix you. You will probably see five webs where you saw one this year, and you will kick yourself as you, in imagination, see the beggars laugh and hear the song go up from a million throats, "Tenting on the Old Camp Ground."

Nova Scotia Apples.

Of the exhibit of Gravensteins made by the Nova Scotia Fruit Growers' Association at the Trans-Mississippi Exposition at Omaha, Mr. F. W. Taylor, Supt. of Horticulture, has written Pres. Bigelow as follows: "It gives me great pleasure to say how much your exhibit of Gravenstein apples was appreciated by all lovers of good fruit. The delicious flavor, delightful aroma, and beautiful appearance of the apples attracted a great amount of attention and favorable comment. I am sure that it was well worth your while to make this exhibit, and I assure you that the attention it attracted was equalled by perhaps no exhibit of the same size. The quality of the apples is so good that I do not wonder that your English cousins are glad to buy them at a profitable price."

A Manitoba Apple Tree.

The above is a photograph of a Duchess apple tree in bearing in the garden of Mr. W. L. Lyall, of Portage la Prairie. Last year, 1898, it produced 17 beautiful mature apples.

QUESTIONS AND ANSWERS.

(In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.)

Veterinary.

DIFFICULT PARTURITION IN EWES.

E. M., Northumberland Co., Ont.—"I had two ewes last spring that had great difficulty in lambing. They were in trouble for hours and made no apparent progress. On examination I found the mouth of the womb closed, so that I had difficulty in introducing one finger, and it took a full hour to expand the passage so that I could get my hand in, when delivery was effected in a few minutes. What was the cause and what is the remedy in such a case?"

[Our opinion is that it would have been better to have exercised patience and let nature have its course, when probably expansion would have taken place and delivery would have been all right. We have known one or two cases, in a long experience, where womb was closed as indicated and extreme measures had to be resorted to. In that case, it would be better to smear the neck of the womb with fluid extract of belladonna and give time for relaxation before forcing matters. It is well when parturition is long delayed to make examination to ascertain if the presentation is normal, and, if so, it is generally safer to wait with patience. If the presentation is not as it should be, it must be placed right, and then the birth should not be too much



A MANITOBA APPLE TREE.

hurried. In case of presentation of the hind feet, it is better to take the lamb away in that position.]

GREASE.

J. C. B., Middlesex Co., Ont.—"I have a heavy farm horse, nine years old, which knocked the spur from the hind heel last fall. It has discharged ever since, with a very offensive smell. Have been using carbolic acid and grease on it. What treatment do you recommend?"

[This is a diseased state of the secretive portion of the heels. It occurs especially in heavy horses, and when well established is very difficult to cure entirely. Do not wash the heels with water again; the long hair prevents thorough drying; when very muddy allow to dry and brush off. For immediate treatment apply a warm poultice of mashed turnips and powdered charcoal, then apply the following ointment: Vaseline, 4 ounces; boracic acid, 2 ounces; iodoform, 1 ounce. DR. W. MOLE.]

BRUISED SOLE OF HORSE'S FOOT.

D. H., Sans Bruit, Quebec.—"I have a horse lame of the front feet. He is naturally flat-footed. I took him to a veterinary surgeon, who claimed that it was on his coffin joint. He was blistered around the coronet, and does not seem any better. I have another horse, five years old, and he has a blood spavin about the size of an egg. He appears to be stiff in going. Could you tell me any remedy?"

[This form of diseased feet is seen in heavy cart horses, especially cross-bred. The symptoms are variable; harshness and brittleness of the crust, with a fullness of the sole and low, weak heels; a shuffling gait, the heels are first put to the ground.

This form of lameness is difficult of cure, and only by careful shoeing can it be at all relieved. Get the blacksmith to make a pair of shoes thick at the toe, gradually thinning off to the heels; do away with toe pieces and calkings. The blister around the coronet was the correct treatment. For bog spavin apply biniodide of mercury ointment, 1 part to 8 of lard, four times, with intervals of one week. DR. W. MOLE.]

REGARDING BROOD MARE.

SUBSCRIBER, Stormont Co., Ont.—"I have a fine brood mare, 13 years old; in good condition; when within two months of her foaling period, fell while driving; seven days later she gave birth to a dead foal, with tendency to expel the uterus. Is now apparently well. Would I do well to breed again at once, or should I wait a few months or a year? Will this affect her the next time?"

[The fact that the mare showed a disposition to expel the uterus is evidence of internal irritation, and so long as that condition exists, even in a small degree, service would be of no avail. We would suggest that the mare be allowed a month or six weeks' run on grass, so that she may entirely recover, before breeding her. It should not be necessary, however, to keep her entirely from work during this time. If she entirely recovers, as we expect she will, her future usefulness as a breeder should not be impaired.]

WARTS.

W. C. M., York Co., Ont.—"I have a mare troubled with spongy warts; they are raw and bleed quite freely. Kindly state what treatment you would advise?"

[The treatment depends on the size and shape of the warts. The knife is the best way to remove them, if they have not sufficient neck to retain a ligature (waxed thread tied round tightly to cut off the circulation). The bleeding may be arrested by an application of tincture of the chlorate of iron. About 24 hours after cutting off the wart, apply caustic potash, and again in three or four days. It may be necessary to apply a poultice after each application of potash, to reduce the irritation. Surgery of this or perhaps any sort should not be attempted by one not familiar with using the knife. The knife should be disinfected with hot water before using, and the wound should be dressed with carbolized oil occasionally till healed.]

RHEUMATISM IN MARE—INDIGESTION IN CALF.

XL., Deleau, Man.—"(1) Mare ten years old, just recovered from a very severe attack of influenza. When recovering, became very lame in the hind feet or fetlock. For a week or so the left one was the worst, knuckling right over, and almost impossible to make her move. The right hind foot or fetlock then became the worst for a week or so, and now the left front foot is the bad one, and the hind feet appear to be almost all right. Am treating for the blood. Appetite now good. Good warm frame stable.

"(2) Thoroughbred calf one month old, suckling, has lately become dull looking. When chewing cud a thin green watery fluid runs from the mouth. Appetite fair. Eats a little hay."

[Your mare's ailment is of a rheumatic nature. It is quite common as a sequela of influenza. Feed exclusively on bran-mash diet for sixteen hours, and then give the following aperient: Barbadoes aloes, 4 drams; calomel, 1 dram; ginger, 2 drams; soap, sufficient to form a ball. Continue the bran-mash diet until the slight action of the bowels, which the ball will likely produce, has ceased, and then give in soft food, morning and evening, for ten days, salicylate of soda, 2 drams.

"(2) The symptoms are those of faulty digestion, for which there are various causes, such as the milk being too rich or too poor in quality, or it may contain some extraneous substance which renders it indigestible. If the cause is found not to be in the milk, give the calf a dose of castor oil (from four to six ounces), and follow up by giving, in one pint of barley water, one teaspoonful of bicarbonate of soda morning and evening for one week. Two ounces of lime water may be given instead of the soda. A tablespoonful of finely-powdered charcoal may be advantageous, administered two or three times a week.]

DROOLING AND SORE TEAT.

SUBSCRIBER, Hyde, Assa.—"I have a heifer, calved last August. A week ago, in the morning she was drooling at the mouth and nose, her eyelids and lips were swollen, and her four teats were swollen and seemed tender as if fresh calved. In the evening she seemed all right, but her teats are sore yet. She is getting hay and good water. Could you tell me what is the matter, and what to do for her?"

[The "drooling" at the mouth, running at the nose, etc., having disappeared so soon, was apparently caused by some temporary local irritation. The sore teats may have been caused by being chilled. Apply to the teats, morning and evening, after milking, the following liniment: Glycerine, 4 ounces; tincture of arnica, 2 ounces; fluid extract of belladonna, 4 drams; creolin, 2 drams; olive oil, 2 ounces; mix.]

ENCHONDROMA.

W. A. L., Grey Co., Ont.—"My horse has a lump about the size of a quart bowl on his side, quite low on the ribs and a little behind the surcingle. It was hard and a little tender at first, but neither of these conditions exist in a marked degree now. I have applied a mixture of hops, vinegar and salt with