

2. Examine closely sickly young trees in your orchard, and trees or scions brought from nurseries in infested localities.
3. If only a few trees are infested destroy them.
4. Trees well cut back and treated with whale-oil soap, as referred to above, will be largely saved.
5. Watch the fruit from infested trees and destroy the scale upon it.

The above notes have been written so that some of the leading facts about this alarming insect may reach at once the readers of the FARMER'S ADVOCATE.

J. HOYES PANTON.

## VETERINARY.

### Scab in Sheep.

Canadian flocks, we are pleased to say, have enjoyed a gratifying immunity from the affliction of scab, but it is known that a few cases have occurred in certain districts during the past year which have readily responded to treatment, and we do not at present know any existing cases, though it is possible there may be such, and if so it is important that it should be promptly and vigorously dealt with, as the disease is highly contagious, and is contracted not only by contact with infected animals, but also by contact with fences or the sides of buildings against which affected sheep have rubbed. The term "scab" is a poor one to apply to this trouble. It is simply a parasite or insect resembling a cheese mite working in the skin of the sheep, and is scientifically known as "Acariasis," from the name Acari, which signifies the whole family of scab insects in general. The symptoms are extreme itchiness, manifested by the sheep continually rubbing itself against something. The wool, on account of the parasites working in the skin, falls off in patches. Finally the sheep will bite its body in mad agony, will fall off in condition, and become a miserable looking object. The scab is caused by the bite of the insect, producing a tiny elevation on the skin, filled with an aqueous serum or fluid. This bursts from inflammation, and the matter dries and forms a scab, under which these insects live and bite into the flesh, depositing a virus that poisons the skin and causes more and more of these little corpuscles to form, and they multiply with the increasing numbers of the insect, limited only by the surface of the animal it works on and the length of time it can endure the torture. Sheep owners unacquainted with the trouble are apt to pay little attention to it and neglect it till it has become deep-seated before they seek to apply a remedy, and this delay makes it more difficult to deal with, besides the loss of flesh and growth resulting. On the first appearance of the trouble the infected sheep should be isolated from the flock and given specially careful treatment for cure, and the whole flock should also be treated as a prevention. No matter what the season of the year is, the sheep should be dipped in one of the prepared sheep dips advertised for this purpose. It should be applied at a good degree of strength, stronger than for ticks, and as hot as the animal can safely bear it. This softens the scab so that it can be readily broken up, as it should be, so that the emulsion can reach the bottom of the disease. In bad cases a second dipping should be given in a week or two to destroy any germs or parasites which may have escaped or have developed since the first treatment. In regard to this, as well as to most of the ailments stock are liable to, it is well to remember that prevention is better than cure, and if every flock owner would make it an inflexible rule to dip his sheep at least once a year, and do it thoroughly, the probability is that this trouble will never appear in his flock, though it may be introduced by purchased animals from other flocks; but to be safe it is wise and will amply pay to dip twice a year, in early spring and late fall; the latter service may be done by pouring, opening the wool in many places over the body, and pouring the dip from a coffee pot, using about one quart of the mixture to each sheep. This will keep the skin in a healthy condition, destroy all ticks and lice, and promote the growth of wool and the general health of the flock. No man need hope to get the best results from his sheep who neglects to do this, and such neglect is a direct pecuniary loss, which is wholly inexcusable and prodigal.

We may add that under the existing Animal Diseases Act, owners of sheep affected with scab failing to report the fact to the Minister of Agriculture at Ottawa are liable to a penalty as high as \$200, and are not entitled to compensation for such animals as may be slaughtered in accordance with the provisions of the Act.

Under the latest order from the U. S. Department of Agriculture it is a violation of the law to receive for transportation or transport any sheep affected with scab from one State or territory to another, or to deliver for such transportation to any railroad or ship company any sheep knowing them to be affected with scab.

### Glanders in Minnesota.

Dr. Reynolds, veterinarian at the Minnesota State Agricultural College, reports the appearance of glanders among horses in 51 places in Minnesota during 1896, and they are well distributed, from Kittson and St. Louis counties, in the extreme northwest and northeast corners of the State, down to the southern boundary. The losses for the year aggregated less than \$10,000. But this is a disease that must be vigorously dealt with or

its ravages will become serious, owing to its highly contagious character. The Doctor suggests the employment of a field veterinarian by the Board of Health, for the purpose of visiting all localities where glanders appears or is suspected, so that the work of control or suppression may be effectively done.

### Glanders in Glasgow.

The Subcommittee of Glasgow Corporation on Glanders have reported to the executive, under the Diseases of Animals Acts, the result of the deputation to the Board of Agriculture on 31st March, consisting of Baillie Chisholm, Councillor M'Farlane, and Professor M'Call. The deputation learned that the Board of Agriculture had no power to authorize by-laws for dealing with the construction and ventilation of stables. These could only be dealt with after definite legislation. The department had not hitherto regarded glanders as so important as to require their interference in the direction mentioned by the deputation; but no objections were likely to be offered to efforts made by such a municipality as Glasgow to obtain special powers. In regard to means presently available, Mr. Elliot, secretary to the Board, and his advisers agreed that the existing provisions were, on the whole, reasonable for Glasgow to adopt, viz., that 40s. be paid to owners of horses for each animal slaughtered for glanders; that efforts should be made to secure the co-operation of owners to have the Mallein test applied to horses occupying the same stable as that in which a horse is found to be affected by glanders; that horses which react to the test should be slaughtered; that, if an animal thus slaughtered is free from the disease, the owner should be paid full value for it; but if the animal has the disease, the owner be paid one-fourth of its value. The deputation recommended that, without expressing approval of these proposals, the subcommittee should invite a conference with several of the representative owners of horses in the city, so that their views may be considered before coming to a final decision. The subcommittee agreed to report this to the executive. A report submitted to the committee shows that since 1886 there have been in all 758 cases of glanders in the city, of which 619 were in the Tramway Company's stables. At a meeting of the executive committee on 11th inst., twelve outbreaks of glanders were reported since 10th ult., affecting twenty-two horses, all of which had been killed.—*Scottish Farmer*.

## 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.]

### Legal.

#### FENCE ON HIGHWAY.

**PATHMASTER, Nipissing District, Ont.:**—"A has a fence extending out upon the public road, but, of course, not upon the travelled part of the road. B has notified the Council to have it removed. Must the Council have it removed, and if so within what time?"

[The Council cannot be compelled to move in the matter at all unless the fence or obstruction amounts to a public nuisance, but B of course may institute the proceedings, and unless there are very strong reasons why the fence should remain on the road it would be removed.]

### CONTRACT.

**READER, Wellington Co., Ont.:**—"The agents of a machinery manufacturing company, after a great deal of persuasion, induced B to sign a contract for the purchase of a binder. B, on consideration on the following day, wrote to the company requesting them to cancel the order, and wrote two other letters shortly after to the company notifying them that he could not afford to pay for the machine, and would not take it. About two months after this B received a letter from the company saying the machine would be delivered to him, and he is asked to come and take it home. Is B bound to take the binder, and what would you advise B to do?"

[B made a contract, and of course is liable in law to perform his part by taking the machine. No doubt the company's action is rather high-handed and severe, and perhaps in case of a suit they would not recover very much in damages if B does not take the machine. We cannot, without knowing more of the circumstances of B, very well advise further as to what B had better do, but if he can make a reasonable settlement he should make it.]

### Veterinary.

#### AILING PIGS.

**R. M., Lanark Co., Ont.:**—"I have seven pigs two and a half months old that were left with the sow till nearly eight weeks old, when they looked extra well, and they went on well for a time after weaning. Yesterday I was told something was wrong with them, and found them looking gaunt, lying on their sides principally, breathing short and panting. The body jerks and trembles as they breathe. They stand with their hind legs close to-

gether and a little under them, and step rather short. Their feed has been barley meal and whey, and were usually fed more than they would eat up clean. They have had ashes and salt mixed with earth before them for ten days past. Pen is kept clean and dry."

[We judge these pigs have been kept too closely confined, and have not had sufficient exercise and access to the ground and to grass. They have also been fed too liberally for pigs confined to the pen. Indigestion and fever seems to have been brought about by these conditions. Soda thrown into the pen for the pigs to pick at and root over should be helpful. We would change the feed for a time, using shorts and ground oats mixed, and some greasy swill, and would get them out on the ground in the cool of the evening or early morning for exercise. Feed lightly till they get over the trouble, when the feed may be gradually increased.]

Since the foregoing was written we have received the following letter from our correspondent: "I wrote to you two days ago concerning my pigs. I noticed afterwards that the sick ones were costive, but the treatment has removed that. The worst one got a dose of castor oil. This morning she made a great effort to get up when the others were fed. She died in two hours after. We opened her. The blood was very dark. We could see nothing amiss save there was a fatty or jelly-like layer over the small intestines on one side, which had a yellowish appearance on one spot. The intestines are full, though they eat nothing or very little. A lump appeared on the side belly of one, and has spread all over the belly. Two spots of a purple color were on it, and they have enlarged also. The small intestines appear bloated, and give a yellowish or apple green colored fluid—quite thin—when cut."

**NOTE.**—Judging from this report the case requires the attention of a competent veterinarian. We would suggest the advisability of reporting it at once to the Minister of Agriculture, Hon. Mr. Fisher, Ottawa.—**ED.**

### LUMP JAW.

**J. M., Grey Co., Ont.:**—"Two cows are running at large. They have lumps on their jaws which have broken and are running. Can they be cured; if so please give remedy? Is their milk good to use, and is the disease infectious?"

[The disease commonly called lumpy jaw is technically known as actinomycosis. It is generally considered incurable, but if taken before the disease has become deep-seated it is sometimes amenable to treatment. When a fistulous opening exists, as in this case, about a teaspoonful of tincture of iodine may be injected into it three times a week, the object being to diffuse that agent through the swelling, so that it may come in contact with the parasite and destroy it. A solution of sulphate of copper may be used for the same purpose. Such solution to be composed of sulphate of copper, half an ounce; water, one pint; injected with a syringe. Boring into the bone with a quarter-inch auger, and pouring tincture of iodine into the holes, has been recommended. The animal in this case would have to be thrown and secured, and the holes should be filled with iodine every fourth day till they heal up. Another remedy which has proved effective in some cases is that of administering iodide of potassium internally. A good purge should be given at first, from one to two pounds of salts, with a little ginger added; then give daily doses of one dram of iodide of potassium in a mash, gradually increasing the quantity to two drams in the course of a week. If the animal goes off its appetite cease giving the medicine for a few days, and then commence again. In about six weeks an improvement is generally noticed, the lump drying up and disappearing. The disease is considered somewhat infectious, and also hereditary. Animals affected with it are condemned at the stock yards, and are not allowed to be sold for meat. According to the law governing the sale of milk in cities milk from cows having any disease, including actinomycosis, is forbidden to be sold or used.]

### Miscellaneous.

#### QUACK AND CANARY REED GRASS.

**"SUBSCRIBER":**—"I enclose you herewith two grasses for names. The seed of sample "A" was sold to me for Kentucky blue grass, and "B" I found growing in patches in swampy flat along creek."

[The grasses are: "A," quack grass, pure and simple. This grass in no way resembles Kentucky blue grass, which has an open, loose panicle, the seed of which is nearly ripe now. Quack grass is found all through Canada, and it is just possible that your correspondent may be mistaken in thinking that the seed was sold to him as Kentucky blue grass. The seeds are not in the least alike, and it is hardly possible that any seedsmen could confound the two; nor, indeed, is any seedsmen likely to have for sale the seed of quack grass, for, although it is an excellent grass for feed, it becomes such an extremely troublesome weed that no one would think of sowing it for a crop. The Kentucky blue grass germinates sometimes rather slowly and does not flower the first year. The other specimen, marked "B," is the valuable canary reed grass, a luxuriant but rather coarse grass which grows naturally in low, wet lands in all parts of Canada. It is very valuable from the fact that it will grow on overflooded meadows and marshes where few other grasses of value will live. **J. FLETCHER,** Central Experimental Farm, Dominion Botanist.