

Sheep Scab.—This serious hindrance to the well-being of sheep, and menace to our United States trade, is mainly confined to Ontario. The efforts of the Department are directed principally against the exportation of sheep or lambs affected with the disease, either grade or pure-bred. Unfortunately, some of the dealers in wool-bearers have not exhibited that public spirit so essential to the conservation of the Canadian trade in live stock, and in several cases have, for a temporary pecuniary advantage, imperilled the trade with our neighbors. The disease, as is known to many, is caused by the scab-mite (*psoroptes communis ovis*), and causes irritation of the skin, itching and rubbing, and falling out of the wool, and ill-health of the sheep, and necessitates dipping of the flock at regular periods to eradicate the disease. Recovery does not occur spontaneously, and if owners are careless, the death-rate may be high. The only method is to dip, using, preferably, a dip containing sulphur. The parasites causing the disease multiply very rapidly, hence the measures taken need to be prompt.

Rabies.—The chief interest of this disease lies in its menace to human beings, and it need not be considered at length here, beyond the statement that, when an outbreak occurs, the locality is quarantined and all dogs ordered muzzled, stray ones being ordered destroyed. I am sure the average sheep-breeder wishes his particular district were under quarantine against rabies.

Mange.—This disease occurs in horses and cattle, and, beyond a few scattered outbreaks, is confined to cattle in Western Canada, where for years it has infected the herds on those far-flung pasture fields. The disease is due to a parasite, the *psoroptes communis var bovis*, a scab mite, and the only cure for affected cattle is by dipping. Attempts were not made seriously to control this disease until four years ago, when the first compulsory Mange-dipping Order was promulgated, a measure that, in order to be effective, needed the hearty co-operation of cattle-owners and departmental officials. To allow mange to go unchecked would be suicidal, and it would only be a short time before our export-cattle trade would be but a memory, instead of a reality. Dipping costs money, but mange cannot be eradicated any other way, and cars must be cleansed and disinfected to destroy the infection.

Recent press despatches contain an announcement, which, if given the careful consideration of Canadian breeders of live stock, should impress upon them the great need for the continuance of effective quarantine regulations and the co-operation of stock-breeders with the Department in securing their enforcement. The despatch in question is to the effect that foot-and-mouth disease has broken out in the County of Aberdeen, Scotland. One does not need to delve

into statistics to convince this intelligent body of men that it is absolutely essential to maintain every possible precaution against the introduction of disease from other countries.

DISCUSSION.

Q. I would like to ask Dr. Rutherford if, in the event of an outbreak of foot disease in the Old Country or foreign countries, could there be a prohibition of importation from those countries?

Dr. Rutherford.—When I saw that, I issued instructions at once to issue no permits for cattle, sheep or swine until we knew exactly where we stood.

Q. I would like to ask if distemper will develop into glanders?

Dr. Rutherford.—No, sir. Glanders is due to a specific germ, and unless you have that specific germ you cannot have any glanders. There are cases, however, where animals have distemper, and if exposed to affection become easily affected with other diseases.

Q.—In What part of Canada is sheep-scab prevalent?

Dr. Rutherford.—I am very glad to say it is not prevalent in any part of Canada. We have occasional outbreaks at present in Western Ontario, in a few of the counties lying in the Western Peninsula and Manitoulin Island. We have had a good deal of trouble with sheep-scab during the last two or three years, but, by great exertion, we have helped to get it under control, and we hope to keep it that way.

Q.—What means have I, as a buyer in the Maritime Provinces, say, to assure myself, in coming to Ontario to buy sheep, that I will not bring it home to my pasture?

A.—You have no assurance. If you deal with decent breeders, on whose word and integrity you can rely, you will not be likely to get it; but if you are deceived in your buying, and do get it, we will be pleased to issue a prosecution, and have done unto the gentleman as he did unto you.

Q.—Can a man be perfectly sure that some of the sheep he purchases have not got it?

Chairman.—If they have, they did not get it from my flock. (Laughter.)

Q.—No, but I ask Dr. Rutherford can I be sure that the sheep I buy have not got it?

Dr. Rutherford.—No, you cannot be sure. A man may sell sheep perfectly honest, without being aware that they had contracted it in an incipient stage. If I were in your position of responsibility, I would be very careful, and I think I would dip after getting the sheep home. I think that would be the safest way.

Q.—I appreciate that last suggestion very much.

CONTAGIOUS ABORTION.

Q.—What is the proper treatment for contagious abortion in cattle?

Dr. Rutherford.—Now, you have asked me a question—a question not altogether easy to answer. Contagious abortion is one of the most serious plagues that a man can get into a herd. As a rule, it does not persist in the same herds over three years. There are two lines of treatment, one for a prevention of its spread, and the other the treatment of the individual animal which may have been suspected of being affected, a pregnant animal. The first consists in the isolation of any animal with abortion, the destruction of the envelopes, and the disinfection of the stall where the animal has been kept, and the irrigation, for her own future safety, of her genital organs with a proper solution. By following that method in every case closely one may be able to prevent its spread; but, as a further precaution, practical men consider it advisable to wash daily the external genital organs of all the other animals which could have come in contact with the animal affected. Of course, we have had other cases outside of the specific causes. I am not an advocate of the system recommended of irrigating the internal genital organs of animals which are in abortion, but all the external parts should be treated for some time after the abortion has taken place. Now, as to the treatment of the animal suspected of being infected, without having reached that stage when the abortion takes place. Some of our best breeders of the Old Country and here advocate the administration of carbolic acid internally, beginning with a small dose of two or three drams, well diluted in water, daily, and increasing it to perhaps an ounce of carbolic acid a day for a large animal, and our experience is that this is the surest method of eradicating the disease from a herd. I am not in a position to say whether this is a correct view or not, for this reason, that I have seen myself cases in which no carbolic acid was administered, nor any other antiseptic used, and the disease, which was undoubtedly contagious abortion, cleared itself out of the herd inside of two years.

Now, you can understand, if a man had begun giving carbolic acid, and continued to do so for two years, and the disease disappeared, he would be apt to give the credit to the carbolic acid, whereas time and again I have seen the disease disappear of its own accord. So you cannot be always certain, especially when the physical effect of carbolic acid has never been demonstrated by our scientific men in this regard. A common cause of contagion is the careless introduction of pregnant animals into your herd without being fairly well certain that the disease does not exist in the herd from which it came, and especially in the introduction of an affected bull. If you get a bull affected with contagious abortion, you would be almost certain to bring it into your herd, and there is nothing more reprehensible than a man owning valuable breeding herds, and his bulls being allowed to be used on all sorts of cows and under all sorts of conditions. Every breeder ought to see that his stock bulls are not used indiscriminately on all cows that may be brought to him.

Q.—How long might sheep-scab exist in my flock and be not visible without a microscopic investigation?

A.—I think it would be possible to exist six or nine months, but not likely, for it generally shows itself in the course of three or four weeks. In mild weather it might be dormant for a considerable number of months.

Q.—It will show it more quickly in cold weather?

Dr. Rutherford.—Yes, much more quickly.

Q.—I should think it would show sooner in warm weather?

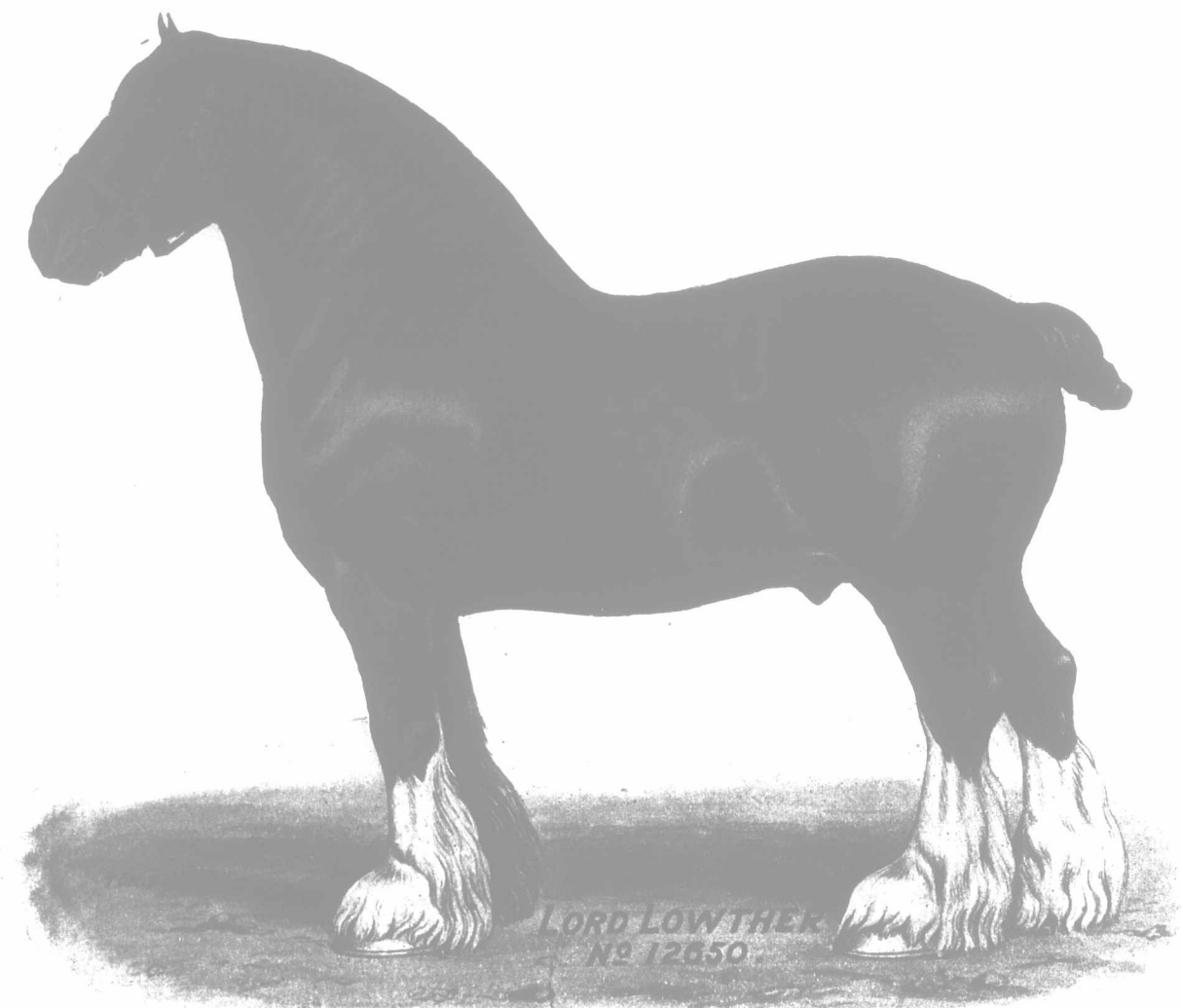
Dr. Rutherford.—Yes, but as soon as the animal acquires its natural cover, this insect proceeds to clear it off.

Q.—Will the oil dip eradicate it?

Dr. Rutherford.—No, the most of dips are not much good. The dip we use for that consists of 8 pounds of lime, 24 pounds of sulphur, and 200 gallons of water. We use it pretty warm, at from 105 to 110 degrees.

Q.—Has the oil dip been as effective as the lime-and-sulphur dip for mange?

Dr. Rutherford.—I am not in a position to state that, for we are just getting in our reports, but as far as they have gone, the oil dip, as applied by many in Assiniboia or Alberta, has by no means been as effective as the lime-and-sulphur dip. I believe, if the oil dip is prepared properly, so as to make a satisfactory emulsion, that it probably would be successful, but it seems to be so much more troublesome to get at the proper proportions, the proper combination of the various ingredients, that the lime-and-sulphur dip, so far as our information goes, is infinitely superior and more reliable, the only drawback being that, in the case of mange, it is not safe to give more than one dip, whereas, in the case of a satisfactory dip of emulsion, one dipping would do.



Lord Lowther (imp.) (12650).

Clydesdale stallion; brown; foaled May 21st, 1900; sire Lord Lothian; dam Kate Darnley. Imported and owned by T. J. Berry, Hensall, Ont. See "Gossip," page 802.