

The Ontario Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 20,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs, that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

F. W. HODSON, Secretary.
Parliament Buildings Toronto, Ont.

LIVE STOCK FOR THE WEST.

Space is already allotted for a portion of another car, which, it is expected, will leave the latter end of October. Any person having stock they wish sent in this car will communicate with F. W. Hodson, Secretary Live Stock Association, Parliament Buildings, Toronto.

AN ABRIDGED REPORT OF ENGLISH AND EUROPEAN EXPERIMENTS WHICH ARE OF VALUE TO CANADIAN FARMERS.

HORSES POISONED BY BEING FED SPOILED POTATOES.

The Journal of the Royal Agricultural Society of England records an instance of no less than eleven farm horses dying within the space of three days from the effects of being fed spoiled potatoes.

The first animal, a Clydesdale stallion, was taken ill while ploughing. In the morning it appeared very lively, but about ten o'clock it fell down, as in a fit. It was able to get near home, although it fell down twice, but just outside the yard gate it fell again and could not rise, death taking place about one o'clock. The same afternoon a gelding showed the same symptoms, and died within two hours. On the following morning an aged mare died and two other young horses showed symptoms. A fourth animal was shortly afterwards taken ill, and all these four died within four hours. The others died the next day and the day after, the last one to die having been ill for twenty-four hours.

Except in the Clydesdale stallion, which fell down in a fit, the first symptom noticed in all the animals was weakness and loss of power over the

limbs. The animals lay or fell down, and were unable to get up; while lying down some attempted to eat a few mouthfuls, and there was no struggling or evidence of pain. Towards the last there appeared to be a difficulty in the swallowing, and a "fluttering" was noticed in the chest.

A post-mortem examination showed that all the organs were healthy, except the large intestine, the mucous membrane of which was slightly irritated.

The diet of the horses consisted of steamed potatoes, boiled barley, beans, and wheat chaff. The quality of the barley, beans, and wheat chaff was excellent, but the potatoes were old and many of them mouldy and much decayed. They had been stored in sacks, but were not sprouted to any extent. Some of the horses had been fed on them for ten or twelve days, and others for only three or four days.

The horses were kept in two stables some distance apart. In one stable all the horses died; in the other five out of the nine horses died, while four were unaffected. Three of these latter got no potatoes, while the fourth, through remaining in the yard with three of those who died, was "bossed" by them, and kept away from the manger containing the potatoes.

In order to ascertain whether the potatoes were the real cause of death, a quantity of them were sent to the Royal Veterinary College, and fed to an old cab horse. Great difficulty was found in getting him to eat them, but, by keeping him short of other food, he was induced to eat nearly two bushels in nine days. On the ninth day he was found down in his box and unable to get up without assistance. On the same day he fell again and

could not get up. Death took place quietly thirty-six hours later.

An examination showed that the stomach was healthy, but there were patches of inflammation in the small intestine and one of the large intestines (double colon) was inflamed almost throughout and of a livid tint. A small patch of pneumonia was present in the left lung.

A second experiment at the farm with a cart horse resulted in the same manner, the animal on the tenth day being unable to rise and dying quietly on the following day. The post-mortem examination revealed inflammation of the lining membrane of the large intestine.

A chemical analysis proved the absence of any mineral poison, and the steaming of the potatoes precluded all risk of infection from organisms. It is, therefore, probable that the poison was some organic substance generated by the bacteria which were growing in the decaying potatoes.

It should be stated that the quantity of potatoes consumed by each of the horses that died varied considerably. Some had two buckets a day for ten or twelve days, others only half a gallon a day for three or four days. This would appear to show that the poisonous substance was not equally distributed throughout the mass, and was probably confined to one or two sacks.

PARASITES OF THE LUNGS OF SHEEP.

In an article on parasites of the lungs of sheep by G. T. Brown, in the journal of the R. A. S. E., the writer sums up the points, in the, as yet, obscure life history of the thread worm, *Strongylus filaria*, as far as the latest investigations have brought them to light.

It appears that eggs containing living embryos, and embryos which have got free from the eggs, are expelled from the bronchial tubes of infested sheep in enormous numbers. It is also established that the adult worms have only a temporary residence in the lungs, but whether they are expelled living or dead has not been ascertained with certainty; nor is it known what becomes of them when they quit the lung-tubes. The embryos, it has been proved, live for months in wet earth; they may be dried by the heat of the sun without being destroyed; nor does the frost do them any serious damage. In common with the other form of strongyles, they are swallowed by earth worms and again ejected after