

The President of the Grain Exchange on Flax.

Mr. Wm. Martin, the proprietor of the Hope Farm, St. Jean, and ex-president of the Winnipeg Grain Exchange, in his retiring address at the annual meeting of the Exchange, referred thus to the subject of flax-growing:

Flax is a crop that is deserving of more attention than it has received in the past. It is a crop that is considered the money-making crop in North Dakota and Minnesota. Hitherto it has been grown chiefly in the Mennonite settlements of Manitoba, but during the past year it has been introduced into other districts by our friends who have come from the American side to settle here. Flax is the only crop that can be grown successfully on new breaking, and on that it often gives results equal to the best crop from older cultivated land. It is one of the staple crops in all climates, doing equally as well in India and Argentina as in America. It commands a price double the price of wheat, and is likely to continue for some time to hold its value. In the United States it is the one article which the farmer produces on which he realizes the benefit of a protective tariff, the high duty guaranteeing the American grower a price induced by the excellent home market and the inability of the home product on some occasions to supply the demand. In Canada flax is on the free list, while all other grain products have a tariff, and flax is the only farm product in which a tariff would do good. If our farmers had the same protection that the American farmer has, flax would be the most remunerative crop that the Northwest could produce. This matter ought to be taken up by our farmers, friends, and grain-trade critics. This is one line of the grain business where they could do the country some good. Here is an article that can be produced most successfully by our farmers; it is the basis of an important line of manufacture, which would find a large home market, and yet flax is on the free list and linseed oil has only a nominal duty, while wheat and flour, which are produced in excess of home requirements, and have to seek an outside market, are guarded by a heavy duty against foreign competition. The flax crop of Manitoba has, as yet, been a trifle, but when one looks at the strides it has made in Dakota, and how important a part it forms in the crop statistics of that State, one does not need to be a prophet to foretell that with fair treatment it will soon amount to an important factor in the productions of this country. It, too, like wheat, is trekking north. Beginning in Kansas, the flax crop of the United States has steadily marched north, making in turn, Kansas, Iowa, Minnesota and Dakota the banner flax State of America.

Ventilation Principles.

The best location for the ventilator shaft is near the center of the stable, where it will interfere with the work in the smallest degree; in case the arrangement of the building will not permit, other locations can be made to serve the purpose. If horse fork or sheaf carrier interferes above, place it at end.

EXITS FOR BREATHED AIR.

The impurity of breathed air, carbon dioxide, although warm, is heavier than the remainder of the air in the stable, and the cold air is also at the floor; therefore, especially in winter, the effort should be to remove the impure and cold air, which is done by having the exit shaft open near the stable floor. In the illustration of King's system (see our Feb. 5th issue), an opening is provided at the ceiling (at B) for warm air to escape when the stable is too warm and when it is felt necessary to force the ventilation; both openings, the one at the floor and that at the ceiling, should have registers, so that the draft may be regulated.

FRESH-AIR ENTRANCES.

The construction of a stable should be such as to have it warm and free from drafts, and if a constant stream of warm fresh air takes the place of the impure and cold air nothing more remains to be desired in the scheme of ventilation. The bringing in of fresh air should be done so as to even up its temperature before bringing it in contact with the animals. In order to do so, fresh air must be brought in at the ceiling, and thus use the waste heat to warm up the newly-entered air; as the breathed air is being constantly removed, the fresh air falls to the level of the animals, who thus do not lie in a zone of cold air. The inlet into the stable is at the ceiling; the outside inlet is, however, four or more feet below that, in order to avoid the cold air being drawn out, as might happen through a direct opening in the wall. In the matter of inlets, they should be on all sides of the stables, small in size and fairly numerous, thus lessening chances of drafts in addition to distributing the air better. The ordinary hot-air registers can be used for the exits, while the inlet openings could be provided with a wooden slide on the outside, to be closed if the wind was blowing on that side of the building.

Contagious Abortion Again.

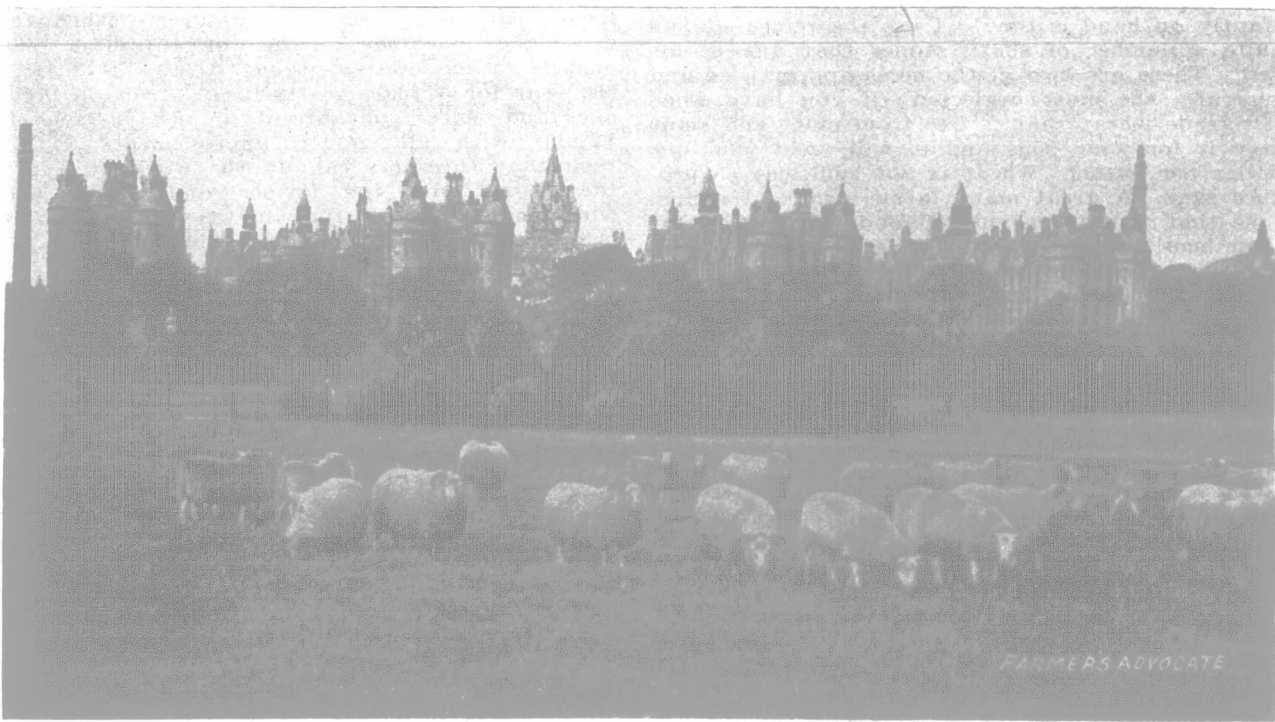
Dr. Peters, of the Nebraska Experiment Station, has the following to say regarding the stamping out of this serious menace to the stock-breeder:

It was suggested several years ago by some veterinarians that the bull might be the originator of the contamination, but for a great number of years the most stress was laid on the fluid that exuded from the vagina. It was thought that the contamination took place in this way to the stable, but it was known that cows aborted that had never been in the stable and could not have been contaminated very easily in that way. In Denmark, where the disease has been prevalent, it was found that the bull was the animal that carried the infectious germs. When this fact was thoroughly established, there was a campaign made against the bull and he was thoroughly disinfected before serving the cow, then thoroughly disinfected after serving, and since this practice has been in vogue it has reduced abortion in a great measure. Alongside of the disinfection of the bull, the cow that aborts must be taken care of immediately; the afterbirth burnt—not buried, but burnt—the premises where the cow aborted thoroughly disinfected with slaked lime and the cow immediately disinfected with a five-per-cent. solution of chloro-naphtholeum and lukewarm water. This is best applied with a common fountain syringe. The rubber syringe is inserted into the uterus with the hand, which has been previously oiled; then the solution filled into this fountain syringe and the entire vagina irrigated in that way. After two or three quarts or probably a gallon of water has been allowed to flow into the uterus, the tube is disconnected from the fountain and it is allowed to siphon out

Thermometers for Farmers.

One of the useful articles which should be in the possession of every stock-breeder is a clinical thermometer. This delicate little instrument may be obtained for \$1.50 to \$2. The temperature of farm animals is averaged at 100 degrees Fahrenheit by most persons. The following temperatures will, however, show the variation in different animals: In the horse, while in health and at rest the normal temperature is 100 degrees Fahr., in cattle 102 degrees, in the pig 102.5 degrees, and in the sheep 103 degrees. Any material variation from these figures should always be regarded as indicative of constitutional disturbance. When the temperature in either of the animals referred to is more than a degree above or below the figures given it may be taken as a certain indication that the health of the animal is not what it ought to be. With regard to the method of using the clinical thermometer, we quote from Hopkins' "Veterinary Elements": "The temperature of animals is usually taken in the rectum, where the thermometer is allowed to remain from 1 to 3 minutes. Always shake the mercury down in the thermometer before using it. To do so, place the instrument bulb down between the finger and thumb, then with a wrist movement shake the thermometer in a downward direction. The bulb of the thermometer should have a little vaseline put on it before introducing it into the rectum. It should be introduced slowly, and if any obstruction is met with, should be turned between the fingers and its direction changed slightly."

Geo. C. Currie, Boiessevain, Man.: "I esteem your paper highly."
January 30th, 1902.



ROYAL INFIRMARY FLOCK, EDINBURGH.

Good Mares Wanted.

All will agree that the horse-breeding business promises to be fairly remunerative in the West for some time to come. The demand for range-bred drafters is good and prices are fairly stiff and may be expected to get more so as seeding time approaches. The favorite with the farmer, and certainly the most remunerative, is the drafter. To produce that horse good mares are needed.

The importation and sale of stallions for the coming season has been good, and a recent sale of pure-bred draft mares shows that the demand for such is also good. The necessity for excellence in the female is more imperative in horse-breeding, speaking as a general thing, than in the breeding of any other class of live stock. The statement made frequently by cattle-breeders, that "the bull is half the herd," is very true in regard to his influence; in horse-breeding the stallion sometimes exhibits similar prepotent powers, but not as regularly or as strongly as does the pure-bred bull. One reason for this is that in many cases the ancestry of the stallion is not at all ancient, and the mares are in many cases of mixed origin, due to the vacillating breeding policy followed by too many farmers. So that in the majority of cases the purchase of a well-bred young brood mare of the desired type will bring in more quickly the desired result than would an attempt to grade up from the common stock. We do not by any means wish to discourage the breeding process, but believe that for the ambitious horse-breeder, the thing to do is to purchase a first-class brood mare.

Michael Whitfield, Ireland, Mo.: "I could not get along on the farm without the Farmers Advocate."
February 4th, 1902.

Paint the Buildings.

In this country, where the sun's rays at times beat down mercilessly and cause timber to shrink and warp, the damage to buildings can be, in a measure, prevented by the use of paint. Nothing adds so much to the appearance of the farmstead as a few coats of paint applied to the buildings and fences, unless it be a nice grove of trees and a fruit garden. During the waiting days of March the mixture could be applied, or else after seeding was through. The following recipe for a paint is cheap and may be applied by any person: Slack $\frac{1}{2}$ bush. fresh lime with boiling water, strain through a fine strainer, and add 1 peck salt (previously dissolved), 3 lbs. ground rice boiled to a thin paste and stirred in boiling hot, 1 lb. Spanish whiting and 1 lb. glue, previously dissolved. Add 5 gallons hot water to the mixture, stir well, and let it stand a few days, covered. It should be put on hot. About a pint, properly applied, will cover a square yard. With lamp-black or venetian red, any dark or reddish shade can be made.