

An Official Inspector for Western Ontario.

Dr. J. H. Tennant, V. S., of London, Ont., has been appointed an Official Veterinary Inspector of the Dominion Department of Agriculture, with authority to apply the tuberculin test and issue the necessary certificates required to accompany cattle exported to the United States. This will prove a very great convenience to the large number of breeders west of Toronto whose herds are so frequently drawn upon by American buyers. Attention was several times called, through these columns, to the vexatious delays to which breeders were subjected with the previous limited staff, most of whom were located at eastern points. The Department is, therefore, to be commended on the appointment of Dr. Tennant. All expenses in connection with the testing of cattle for export will be borne by the Department. Any parties desiring to have their cattle tested for export should notify the Department, and, on receipt of such notification, instructions will be at once sent to Dr. Tennant.

How a Bunch of 1,700-lb. Cattle were Fed.

To the Editor FARMER'S ADVOCATE:

In answer to your letter, I give you the following particulars: Eight steers of Shorthorn breeding were purchased by Mr. Isaac Groff, from a gentleman near Ailsa Craig, Ont., for me last fall. They were shipped in on 1st of November, and stabled on arrival. The eight animals were put into one stall arranged for eight head. The animals were three and four years old when purchased. I cannot give any particulars of their earlier history, as the animals were purchased for me according to what my choice of feeding steers should be. I started feeding them upon a mixture of hay, bran and chopped oats three times a day for nearly three weeks, and when the animals were brought into such condition that I felt satisfied that a change of feed was desirable, I fed them from that time on with a mixture prepared as follows: Into a large box I put chaff on bottom, and added pulped turnips with a little salt, and ground flaxseed, alternately in layers, and prepared this a meal ahead, at meal time each animal being fed a scoop-shovel full of this mixture, together with chop. The chop consisted of oats, black barley, and a small quantity of peas, and was fed a graduated ration, the largest allowance being a gallon and a half to each head. The flaxseed I used was pure ground flaxseed, not oil cake, about 200 lbs. being fed in the six months to the eight head. Proper attention was paid to the ventilation and cleanliness of the stable, and all the straw that they possibly could use was given them for bedding. The animals were clipped shortly after being stabled, and every attention was paid to the condition of their skin. They were let out to water twice a day, having to go one-eighth of a mile to reach it, which gave them a half mile of exercise each day. You can understand by what I have mentioned that the ration fed was so graduated from time to time as I considered best for them, giving the allowance herein mentioned as the largest portion given at any time. They were allowed all the hay they could eat (mixed timothy and clover). I fed them six months, within a few days, and the average gain was 331 lbs. The heaviest steer weighed 1,820 lbs. when sold, and gained nearly 100 lbs. more than the others.

Waterloo Co., Ont.

GEO. H. BAUMAN.

[NOTE.—The eight cattle above referred to averaged 1,702 lbs. each, and were pronounced by good judges to be the best lot seen on Toronto market for many years.—Ed.]

Anthrax, and Vaccination for Blackleg or Quarter Ill.

A couple of enquiries received recently, regarding the above diseases, suggest the propriety of some further reference to the subject in the FARMER'S ADVOCATE. Without dealing with the different types mentioned, anthrax and symptomatic anthrax or blackleg—both fatal in their character—it may be noted that they are among the oldest of cattle scourges, being communicated by germs. In discussing blackleg before the last annual meeting of the Kansas State Board of Agriculture, Dr. John R. Mohler, of the U. S. Bureau of Animal Industry, stated that the microbe usually gains entrance into the system through punctured wounds made by briars or stubble, and develops rapidly, causing the familiar dark hemorrhagic swellings, the animal usually dying in about twenty-four hours. The swollen parts contain millions of spores, which, if not destroyed, are scattered by dogs, wolves, buzzards and crows over great areas, be-

coming permanently located in the soil, where they retain their fatal properties for many years. The virus is most potent when received from a diseased animal still living or only recently dead. In passing, we might mention that a writer in the English *Live Stock Journal* cautioned stockmen against bleeding a beast dying of blackleg, as the fatal bacilli were thus liberated. Great care should be taken to prevent the escape of either blood or mucus upon the land. Dr. Mohler, in the address to which we have referred, recommended as the safest and most satisfactory disposal of the carcass to destroy it by fire, placing it on a few logs with faggots above, pouring over all a quart or so of coal oil, and then setting all ablaze. Owing to the difficulty of eradicating the germs from pasture, he recommends the protection of the animals in affected localities by vaccination, whereby the system is made immune. A minute amount of attenuated or artificially-weakened blackleg virus is injected into the system, usually on the shoulder or neck immediately in front of the shoulder, whereby a mild and clinically unrecognizable case of the disease is produced. The virus is obtained from animals that have died from blackleg, by cutting into strips parts of affected muscles and drying them in the air. When perfectly dry, these are pulverized, mixed with water to form a paste, smeared in a thin layer on flat dishes, placed in an oven and heated for six hours, at a temperature approaching that of boiling water. The paste becomes a hard crust, which is pulverized and sifted, and measured into packets containing from ten to twenty-five doses. This vaccine, as it is called, must be thoroughly tested so as to ensure its being neither too strong nor too weak.

In Kansas alone, some 67,259 head have been vaccinated, and the results have been most gratifying, the annual loss being reduced from ten head out of every hundred to only one head out of every hundred and ninety-four. The immunity from one vaccination usually lasts from one year to eighteen months. In Canada we have had the material furnished in the form of blackleg vaccine, for injection, and "blacklegine," in the form of an impregnated cord.

By way of further caution on the subject, Dr. Jas. Law mentioned, in discussing bacillar anthrax, that eating the flesh of animals killed while suffering has often conveyed the disease, despite cooking. Fifteen thousand of the inhabitants of San Domingo once perished in six weeks from this cause, and a whole family was once poisoned in Aberdeenshire, Scotland. The Tartars perish in great numbers from eating anthrax horses.

Prof. F. C. Harrison, Bacteriological Department of the Ontario Agricultural College, writes us as follows regarding the above subject:

"The two diseases—anthrax, or splenic fever, and symptomatic anthrax, or blackleg—are entirely distinct, being caused by different germs, giving rise to different symptoms and producing different pathological effects. A comparison may be drawn by brief reference to the following table, which summarizes the chief points of each:

	ANTHRAX.	SYMPTOMATIC ANTHRAX.
Various names.	Splenic fever, charbon.	Quarter evil, black quarter, blackleg. Called by the Germans, Rauschbrand, from Rauschen, to crackle.
Causal agent.	Bacillus anthracis.	Bacillus anthracis symptomatici.
	These germs are easily separated from one another, thus:	
	Oxygen necessary for growth.	Grows best in an atmosphere of hydrogen, or in absence of oxygen.
	Forms no gas.	Forms gas, hence the crackling noise under skin of affected animal.
	Non motile.	Actively motile.
Lesions.	Spleen enlarged, dark colored, and soft. Liver often with cloudy swelling. Capillaries filled with the organism.	Emphysematous swelling of muscular and subcutaneous tissues of the leg and quarter, accompanied by the formation of gases with strong odor. On section the muscles and tissue are saturated with bloody serum, and dark, almost black, in color.

"Hence, it will be seen that the two diseases, like the two organisms, are easily separated; in fact, it is much more difficult to separate symptomatic anthrax from malignant oedema than the former from anthrax."

E. B. PARKER, of Quebec Province, writes that during the past year he has derived so much benefit from reading the FARMER'S ADVOCATE that he will never be able to do without it again. The hints on general farming and stock-raising he found particularly valuable.

Bogus Bidding Exposed.

The *Guardian*, Charlottetown, P. E. I., in its issue of May 10th, reporting the proceedings of the Island Legislature, states that Mr. Mathieson asked the Commissioner of Agriculture if the Shorthorn bull recently purchased by the Government in Ontario was bought at auction. The Commissioner replied: "The animal was not purchased at auction, but was bought at private sale for \$350. He was afterwards offered at auction, to see the real value of the animal, and it was demonstrated beyond doubt that the animal is a valuable one, as the Government were offered \$25 more than was paid for it." Mr. Mathieson "wanted to know why the statement was made in the stock farm report that the bull was purchased at Ottawa at a sale. Why was the animal set up at auction? Was it for an honest purpose? As a matter of fact, there is no record that there was a valid bid."

This is the bull that was officially reported as having been sold at the Government sale at Ottawa on the 6th of March last for \$505. In the printed rules, or terms and conditions, governing the sale was the following: "There shall be no puffing or by-bidding by the owner of the animal or anyone authorized by him. Statutory declaration may be requested from any buyer or seller that any purchase or sale is bona fide, and that there has been no by-bidding or puffing in connection therewith." We presume this was not what the Minister of Agriculture was thinking about when, in his opening speech at the Guelph sale, he remarked that what was needed to make these sales a success was to establish confidence.

Deception never pays. It is sure to be found out sooner or later. Honesty is the best principle as well as the best policy.

FARM.

The House Cellar.

It is highly important that every farmhouse have a good cellar for the preservation of perishable food products and for sanitation. It is used as a storage for vegetables, fruit, meats, eggs, butter, etc., for a longer or shorter period, even from autumn till summer in the case of potatoes and the like. Yet how many poor cellars there are to be found throughout the country, many of them dark, ill-ventilated excavations, with decaying wooden floors, and very little chance of getting sunlight into them! They are often the habitat of mice and rats, which, when once well introduced, are difficult to eliminate except by a general renovation and removal of floors, etc. Rats sometimes prove a blessing in disguise in compelling the renewing of cellar walls and floors, and having the entire old basement revolutionized.

First of all, in re-flooring or repairing a cellar, an efficient system of drainage should be provided, and so arranged with a grate over the drain source that vermin cannot enter the cellar. In retentive clays, more than one drain passing under the floor may be necessary, and each given a good fall away from the house. In the construction of these drains, agricultural drain-tile, not more than two inches in diameter, may be used, laid at the bottom of a well-graded trench and continued to the point of outlet. H. B. Bashore recommends, in "Outlines of Rural Hygiene," wrapping the joints of the tile twice around with strips of muslin drawn tight. This makes a perfect cellar, holding the tiles in line, and affording much the best protection against the ingress of sand or silt. It is well to lay the drain along the two sides of the cellar, not more than two feet from the side walls, and curving so as to meet at the end of the cellar opposite the outlet. The drains may meet again where the main drain leaves the cellar, and at that junction is a suitable place for the opening through the cellar floor into the drain for flushing of the cellar floor. This may be effected by a tile set on end standing on the tile below and coming just to the surface, but covered with a grate to prevent coarse, solid matter entering the drain, or rats or toads getting into the cellar.

For a cellar floor nothing that we have seen can surpass cement concrete, but before commencing to put it in, the walls, which should be of cement, stone or brick, should be put in first-rate condition by cementing up all cracks and holes so that when the floor is put down this part of the work will be finished, and can all dry together. All old sills and wood of any kind should be completely removed, and nothing left in the foundation that will decay. The loose soil should all be scraped off and the surface well pounded and covered with three inches of concrete made with coarse gravel, broken stones, and sand, mixed six parts to one part cement, well moistened and firmly rammed down. Allow this to set a few days, and cover with cement one part to three parts of clean sharp sand well rammed down and floated smooth. When this has firmed up, the cellar will be appreciated as never before, as it is easily kept clean, always dry enough, and rats cannot work into it. The next few weeks is a favorable time for doing this class of work, as it is the slackest season of the year when cement work can be done, and then the cellar will be ready for use by the time the hottest weather and flies have arrived.