

PROFESSOR McEACHRAN DISCUSSES THE FINANCIAL ASPECT OF THE CATTLE PROHIBITION ORDER

On the 14th inst. Dr. McEachran discussed the subject of the cattle trade of Canada and the United States as affected by present regulations, considered from a commercial point of view, before an audience of representative commercial men in the lecture-room of the Veterinary College, Montreal. Mr. Thomas Cramp occupied the chair. The action of the Minister of Agriculture in issuing the prohibition order, the speaker contended, placed the whole Dominion under an everlasting debt of gratitude to him and the Government which so nobly seconded his efforts in taking such a bold step for the public weal. We learn from the statistics collected for the census of 1871, that in the Provinces of Ontario, Quebec, New Brunswick and Nova Scotia, we had 836,743 horses, 2,604,290 cattle, 3,155,539 sheep, and 1,366,083 hogs, representing a money value equal to about \$133,866,567. It would be but fair to add one-fourth of these amounts to allow for the development of cattle breeding and the large number of animals in Manitoba and the North-West Territories which have been added within the last eight years. \$178,333,209 would be within the mark, he believed, as the value of our stock. Of this Canada does not lose two per cent. owing to their being no contagious diseases in this country; Great Britain, on the other hand, loses 50 per cent. directly and indirectly from this disease, and other Continental countries are equally as unfortunate. It is estimated the money lost in Britain from the foot and mouth disease amounted to thirteen millions sterling. After pointing out other instances of the great loss of wealth from cattle disease, the speaker contended that the Government would be blameable if it did not take measures to protect our cattle.

LAST SEASON'S CATTLE TRADE.

From Mr. C. H. Chandler, of this city, an authority on cattle statistics, the speaker quoted to show the extent of our export trade: From 11th May to 21st November, 1878, there were shipped as follows: Cattle, 18,655, at an export value of \$1,678,950; sheep, 41,250, at an export value of \$333,000; horses, 690, at an export value of \$82,200; hogs, 2,027, at an export value of \$26,375. Total, \$2,117,525. The amount paid for supplies was \$4,827; amount paid for shipping, \$35,730, representing a business of \$2,248,082, exclusive of funds paid to our railways and steamboats, and the trade was only beginning. Not only are the English and French markets open

to our cattle, but at this moment a shipment of 500 head is leaving Halifax for Germany. The agents for the German Company, Messrs. Glichen and Knoek, arrived here a few weeks ago to arrange for a regular trade between Canada and Germany in cattle, poultry and grains, as well as in medium-sized horses. After some remarks on the history of the cattle quarantine in Canada against the "foot and mouth disease" and rinderpest, remarks were made by Messrs. W. W. Ogilvie, Masterman and Thomas Cramp, and a vote of thanks to the Professor was carried.—*Montreal Witness.*

MONTREAL vs. CHICAGO

AS A PLACE TO PURCHASE CATTLE FOR SHIPMENT TO EUROPE.

The *American Stockman* of 6th instant says:—Our readers will remember that certain German gentlemen came here last year and bought a number of cattle which were taken to Schleswig-Holstein and there ripened. These cattle were afterwards sold in the markets of the continent, English laws forbidding their sale, alive, in Great Britain. The profit thereon was not so great as the feeders hoped, perhaps, but there was nevertheless a profit, and there exists a disposition to try again. This time, however, our German friends have gone to Canada to buy, and are now in Montreal, whence they write that they have given orders for the purchase of five hundred cattle. They say that they were induced to go there to purchase, not by the belief that they could get cattle as cheap there as they could here, nor by a supposition that they could get better stock, but they went because expenses of handling the cattle would be so much less than in the markets of this country. In Montreal they are charged no yardage on their purchases, and have the privilege of buying feed wherever they choose at whatever price they can get it for. The road from Montreal to Portland will return to them as rebate \$18 of the \$38 per car freight charges, and in Portland privileges like those given in Montreal are secured.

We had hoped that this continental trade would be nursed and grow to something which would be considered of importance even to so vast an interest as the cattle trade of the West. Restrictions imposed by the English Privy Council upon the importation of American live cattle do not affect this new traffic, for the stock taken to Germany could not enter English markets alive. Still we do not lose the hope that Chicago will yet enjoy the benefits of this German demand for American cattle, for we do not believe that it will be easy, with all the advantages mentioned above, to buy cattle in

Canada in great enough numbers and of good enough style and quality to serve the purpose of German graziers. The rebates and privileges mentioned will amount to not much more, these buyers themselves estimate, than fifty cents per cental. It is not impossible that they may find themselves called upon to pay fully that amount more for the stock than it could be bought for here. We do not assert that this will be so, but that Canada can supply five hundred tidy, well-bred stock steers at short notice we are not ready to believe.

PHOSPHATES.

ADDRESS AT THE RECENT MEETING OF THE NEW YORK STATE GRANGE BY PROF. G. C. CALDWELL, OF CORNELL UNIVERSITY.

The quantities being given in all cases the number of parts of acid in 10,000 parts of soil; two soils contained four to five of the acid, twenty contained five to ten, eleven contained ten to twenty, and four contained from twenty to twenty-six of the acid; some exceptionally rich soils have been found to contain fifty to one hundred and fifty parts of phosphoric acid in 10,000 of soil; but the ordinary limits will be found to be two in 10,000 as the lowest, and twenty in 10,000 as the highest, and it will be safe to say that the average proportion is about ten of acid to 10,000 of soil. A quantity represented by two to twenty ten-thousands is but a small proportion; but when we come to consider how much this means in the soil of a whole acre, it does not appear that plants needing phosphates in their food will be so nearly starved as might at first thought seem to be the case. The mass of soil represented by the area of an acre taken to the depth of one foot would weigh about three hundred and fifty times ten thousand, or 3,500,000 pounds; therefore to estimate approximately the quantity of phosphoric acid in an acre of soil within easy reach of vegetation we have only to multiply the quantities that I have given for 10,000 parts by three hundred and fifty; two in 10,000 means seven hundred pounds to the acre, while twenty in 10,000 means seven hundred pounds to the acre; and the average of ten parts in 10,000 means the apparently abundant quantity of three thousand five hundred pounds to the acre.

Some of you may perhaps have heard the lecture which I recently delivered before the Elmira Farmers' Club on lime, and have noticed that I called special attention to the constancy of the occurrence of lime in plants. The statements that I made there, in regard to that point, hold good, as well in regard to phosphoric acid or the phosphates. The thousands of analyses that have been made of the ash of plants, or that part left behind when the plant is burned, show that phosphate is always present, no matter what may have been the conditions under which the plant grew, whether in water, or in marshes, or on dry land; whether in soil rich or poor in phosphates. We may take the plant in any stage of its growth, from the most immature to the ripest, or we may take any part of the plant, or any special organ, even down to the