

has been advocated by Mr. D'Alton McCarthy, M.P., in the Dominion House of Commons. The influence of the railways has hitherto been great enough to defeat it. Let it be thoroughly shown that the country, and especially the farmers of the country, imperatively demand the establishment of such a Board, and the immediate establishment of it. Let every Township Council and every Agricultural Society at its annual fall meeting after the exhibitions prepare and forward petitions to the Dominion House of Commons praying for the establishment of such a Board. Only by such united and zealous efforts can the evils that threaten us be averted. And they are no dream. They are at our doors. Let apathy be abandoned. Let action such as we have indicated be the duty of the hour. Let petitions from one end of Ontario to the other pour into the Federal Parliament at its next session. And let every farmer watch the proposed legislation, and the course of his own representative with regard to that legislation. If the railways can emasculate it when proposed, rest assured that they will. Let it, therefore, be carefully studied. In the presence of the gigantic evils of railway monopoly, and of all such modern aggregations of capital, the old motto that "eternal vigilance is the price of liberty" receives a new and intensely practical signification. If we suffer from those evils we will have ourselves to blame. Action, immediate action, in the direction indicated is imperatively needed.

REPORTS ON AGRICULTURAL STATISTICS.

The able and extremely interesting reports that have been issued, from the Bureau of Industries, by the efficient and indefatigable Secretary, Mr. A. Blue, are to be brought to a close on the 1st of November. The following circular has been issued from that office, to all the correspondents. We shall give our readers, as we have each month done, the substance of the promised November report, and review the season's work of this Bureau. It has been a most busy and most successful one from the first. Following is the circular:—

Dear Sir,—The last Monthly Report of the Bureau for this season will be issued about the 1st of November. It will contain tables of all agricultural statistics collected during the year, revised and corrected according to the latest data, a summary of the progress of Fall work, the condition of live stock, and other information of special interest to the farmers of Ontario.

You are invited to report for your township or district on the subjects outlined in the schedule below, and to mail the return in the enclosed envelope any time between the 20th and 25th inst.; if not sealed it is postage free. In some instances the returns of correspondents have not been received until the Report for the month was published, when of course they were too late to be of any use. This shows the importance of mailing promptly.

The variable character of the season has been well calculated to show the value of underdraining. A light fall of snow in Winter, spring frosts and cold spring rains, midsummer drouth, a heavy rain-fall during harvest and a second season of drouth at the time of fall seeding were a severe test to all inefficiently drained lands. A full report on this subject is desirable.

Returns are being received from threshers of the produce per acre of wheat, barley, oats, peas and rye, as found by actual results. Possibly these may not be complete for the whole Province, and you are asked therefore to report the average yield of those grains in your locality, as well as of other crops named in the schedule; also the average of Rent and Wages.

The other features of the return now asked for do not need specific reference; their scope and object will be clearly understood. I shall, however, be glad to have correspondents who make a specialty of any department of agricultural indus-

try report at length on matters relating to their particular interest.

It is due to the correspondents of the Bureau that I should acknowledge the intelligent part they have taken in its work. Their returns have been on the whole very complete and comprehensive, and many valuable practical suggestions have been received from them, both as to method and subjects of inquiry. Yours very truly,

A. BLUE, Secretary.

THE Jubilee Singers, who have charmed the most select circles in the Old World with the sweet melody of their voices, are now making a professional trip through these Provinces. They will visit all the principal towns and villages of the Dominion; and will, doubtless, everywhere meet with full houses. When they reach your neighbourhood, dear reader, do not miss the opportunity of hearing these cultivated singers. It will be a rich treat—a pleasing memory in after years!

We are in receipt of Nos. 1 and 2 of the *Nor'-West Farmer*, published at Winnipeg, Man., by the *Nor'-West Farmer Publishing Co.*, of which Mr. L. K. Cameron, lately of the *London Advertiser*, is the manager. The paper is published monthly, presents an attractive appearance, is full of just such reading as will prove useful and interesting to the prairie farmer and household, and is sure to prove a great success. There is no better agricultural journal published in the Dominion to-day, and certainly no other so well adapted to the wants of *Nor'-West* readers. Only \$1 per year.

THE PRODUCTION OF BEEF AND MUTTON.

The following is a synopsis of the paper read by Prof. Brown, of the Ontario Agricultural College, at the annual meeting of the Agricultural and Arts Association, at Kingston:

He said it was much to be regretted that scientific bodies had left to individuals the inquiry into the science of producing these articles of human food cheapest. The most simple and most natural way of producing these articles was by grazing, but conditions were not always favourable. The aim of the modern agriculturist was to secure the greatest amount of beef and mutton in the shortest possible time. To learn what foods were best calculated to produce this result, and how to obtain them cheaply and in abundance, was a difficult problem. It was now allowed that three years for cattle and one year and a half for sheep should be the time for maturing, yet science had not yet said whether the flesh of younger animals would or would not be as good for human food. No men agreed either upon the cost of producing these animals. Entering upon the practical consideration of producing beef, he supposed the case of a steer weighing when bought on 1st of October 1,050 lbs., costing to the purchaser \$47.50, on which the breeder or seller has a profit of 1½ cents per pound, calculating all the feed at cost and allowing for the manure—the practical mode of dealing with this animal, so as to produce the best results in beef, with the smallest possible expense. In case of old land it was absolutely necessary that fertilizers should be used, and he claimed that nothing would take the place of the barn-yard manure. Animals giving milk or those still growing could not give first-class manure. On the other hand they did not want aged animals, because they would cost too much per pound, were slower at flesh making, and practically they could not be got. Taking the animal referred to, he recommended careful housing, avoidance of draughts and changes of temperature. Let the

temperature be steady, somewhat low rather than changeable. It was a mistake to shut the door on sheep, except in cases of ewes just lambed. Not only ventilation, but drainage and proper light also were necessary. Native grasses gave all that could be required for the completion of growth, fattening, or milking, but these fodders were found in practice to be too slow. Mixed food was found to be the best, and grain had a more fattening effect according to weight than other classes of food. In regard to preparing food, he had come to the conclusion that uncultivated hay and roots were the most healthful but least economical, leaving much refuse. Cut fodder and pulped roots, allowed to slightly ferment, were economical and well adapted for both feeding and milking, and that steaming food was unnatural. Loose box management and prepared raw food were wisest. Animals should have all the water and salt they could use, and five meals a day should be given, and change of food, not too rapidly made, was beneficial. Curry-combing should not be oftener than once a day, but if judiciously done would add \$4 to the selling price of the animal. He quoted figures to show that the turning of fodder into beef did not pay of itself, but that the manure from the animal was what made the margin of profit, while practically grain, etc., fed cattle might be counted as sold at the profit which they would bring in the market. It did not pay to hold cattle after they were fattened up to 1,500 lbs. A variety of causes had led Canadians to produce more beef than mutton, but he claimed it could easily be shown that the latter was the more profitable crop. By crossing the ewe of the country with a thoroughbred ram, just the sort of animal required for wool and mutton could be obtained; and with liberal feeding, and selling the produce after the first shearing, good results would be obtained. In conclusion, he stated that in order to make more complete the description he was writing of the stock, he had asked 1,800 breeders by circular for information, and had found there was only one thoroughbred bull to every 100 farmers in the Province, and four pure-bred cows to every purebred bull. A thousand head of pure-bred calves were dropped every year, at which rate it would be fifty years before every farmer had a thoroughbred bull, even were none removed from the country. In sheep, for every thousand head of grades the Province had but one purebred ram. Were it more difficult to make a living directly out of the land no doubt our live stock prospects would improve.

Mr. G. F. Frankland, of Toronto, was called upon to speak, and after saying a few words of high appreciation of the address of the President, as well as that of Prof. Brown, went on to say that notwithstanding that it was a great feat to bring cattle to such a tremendous weight as 2,000 pounds, he had always found that in England he could do much better with animals weighing from 1,400 to 1,600 pounds. He found also that sheep shown by Mr. Hood, of Wellington, were a cross from the Oxford Down ram with the Canadian sheep. He had carefully examined them, and had made up his mind that when slaughtered the meat would show more lean than in other cases, which was just what was wanted. The export trade was becoming a more regular business than it was, and dealers could not expect the profits they used to have. The fact was freights were lower and the prices of cattle were higher, so that farmers got the benefit of the increase of trade.

An eccentric old gentleman, being waited upon with his surgeon's bill, cogitated some time over its contents, and then desired the man who called with it to tell his master that the medicine he would certainly pay for; but as for the visits, he should return them.