

cross-breeding the deterioration of the grain by improper culture is not so rapid and ruinous as in wheat improved by the in-and-in breeding or pedigree system. Crosses or hybrids when once fixed retain their power and good qualities many years, even when badly handled. From which it is obvious that for the average farmer a good hybridized wheat brought to perfection by some one skilled and experienced is a better variety for him to cultivate than the pedigree wheat.

A report has been made to the Commissioner of Agriculture by one of the most extensive dairymen in New England in relation to the use of the centrifugal machine for cream raising and butter making. He says: The value of this process in saving more of the butter from milk than the ordinary methods of setting milk has not heretofore been systematically shown by European writers, where this process is used. His use and experience with the centrifugal machinery leads him to make for it the following claims, and to express the concluding convictions:—1. It will do away with the bother and expense of setting milk in pans for cream raising; 2. The cream can be separated from the milk as soon as withdrawn from the cow, and the cream churned immediately; 3. A more complete separation of the cream from the milk than can be obtained by the ordinary process; 4. Purity of product; 5. Larger yield of butter than by the ordinary system; 6. A fresh skim milk, and hence in a better condition to market; 7. Diminutive waste in the handling; 8. A quality of cream which is unsurpassed for table use. It seems to us that the use of the centrifugal machine will ultimately revolutionize the milk interest, although as yet its use must be deemed as experimental only. It will be seen that the conditions required for a farmer's dairy centrifugal are different from those required for a factory where much milk is handled and much power is at hand. A machine at low cost, one that can be revolved at a sufficiently high speed by such a power as a farmer can support, will tend to make easier the care of the milk and enlarge the profits. A dairy of twenty cows would save enough yearly in extra butter produced to pay for a machine. In our opinion the farm machine must belong to the self-delivery class, be one in which the milk can be passed in a steady stream, and which will separate the milk into cream in one pail and skim milk in another. It must be simple in construction and efficient in action. The use of centrifugal machines for cream raising will also, in our opinion, call attention to the difference between milks, and will thus tend towards an increased attention to securing uniformity of milk by the use of milk from distinct breeds of cows. From a theoretical and experimental position it may be prophesied with considerable certainty that the best results will occur where large globuled milks are used, and where the feed is of a nutritious and succulent character. Many experiments are, however, yet necessary to fully demonstrate all the possibilities of the machine and what are its defects.

A bill has been introduced in Congress and reported upon favorably by the Committee on Agriculture, "To Enlarge the Powers and Duties of the Department of Agriculture." This bill will probably become a law this session. It makes the Commissioner of Agriculture Secretary of Agriculture and a Cabinet Minister. It provides for an Assistant-Secretary of Agriculture, who shall be a practical agriculturist; and that for the purpose of collecting and disseminating all important and useful information concerning agriculture, &c., the Secretary shall organize the following bureaus, with a chief of each bureau having a practical knowledge of the subject:—1. Bureau of Agricultural Products; 2. Bureau of Animal Industry, in

charge of a veterinary surgeon; 3. Bureau of Land, the chief of which shall report upon the resources or capabilities of public or other lands for farming, stock raising, timber, minerals, &c.; 4. Bureau of Statistics. This will greatly enlarge the powers of that department, and enable it to give much more valuable information to the public in the future than it has in the past.

Manitoba Letter.

[FROM OUR OWN CORRESPONDENT.]

February 6th, 1882.

Agriculture has made great progress in our young and growing Province during the past year; nearly double the number of acres have been under cultivation than in any previous year, and the crops on the whole have been good, so that the farmers have reason to feel glad and be rejoiced, as well as encouraged, for while their labor has been rewarded with a bountiful harvest, prices have maintained a firmness that is not usual with such general abundance. This winter, up to the present time, has been an exceptional fine one, with the exception of a few slight storms of short duration. The roads have been good and favorable for the farmers marketing their produce. Upwards of three hundred thousand bushels of grain have been bought here since last September, with a prospect of 200,000 additional bushels being marketed before spring. The energetic buyer for the Ogilvie milling company, Mr. R. Ross, having secured 81,434 bushels of wheat, paying for the same \$69,800.00; the highest price paid, \$1.00, and the lowest 80 cts. per bushel. The wheat purchased by Mr. Ross, part of it is shipped to Winnipeg, to be used at the company's extensive flouring mill, recently erected at that place; and the other part of it is being shipped to Duluth, to await the opening of navigation in the spring, and it will then be forwarded to Montreal. As yet the wheat bought at this place has not been graded, or in other words, all kinds and samples passed for No. 1 hard; being a great injustice to the farmer that has grown it pure and unmixed, and of good quality, and tending to injure the reputation of our Manitoba wheat. In conversation with Mr. Ogilvie, of the above named firm, he said that he would grade all wheat purchased by him next season, and make a difference in the price from 15c. to 20c. a bushel, in favor of the Scotch Fife, as it is in his opinion the best kind for milling purposes; and that the company realizes 50c. more on the barrel for flour made from Fife wheat than for that made from any other kind. A large number of acres have been under the cultivation of flax the past season, a good many sowing it on new breaking, calculating the crop of flax to pay the expense of breaking the land. In some instances fair crops have been obtained, but the most of it treated in that manner only gave light returns. It is grown for the seed and not for the fibre; 70,000 bushels have been marketed here up to date, 60,000 bushels of it being purchased by Mr. Erbach, representative of the firm of Livingston & Co., Baden, Ont., and it is shipped to their extensive oil works of that place. The annual meeting of the Morris Electoral Division Agricultural Society was held at West Lynn, on Monday, 16th of last month, and nearly all the influential farmers in the neighborhood attended it. They elected their former President by a large majority, and he urged the farmers and members of the Society to meet together monthly, and discuss subjects relative to their interests, and pointed out to them the advantage to be gained by procuring pure clean wheat of a standard variety to sow the coming season, also advising them to adopt a better system of its cultivation. It is the intention of the directors to hold a plowing match in the spring, open to the Province, under the auspices of

the Society, and if they succeed in carrying out their plans, it will be the first plowing match ever held in the Province, and doubtless a great deal of good will result from it. Beef and mutton are shipped in large quantities from Ontario and meet with ready sale at Emerson and Winnipeg. At present the home supply of those commodities are not near equal to the demand, nor it is not likely to be for some time to come owing to the large influx of immigrants that are constantly settling in the Province, a fact that should encourage our farmers to pay more attention to stock raising, as our soil and climate are admirably adapted for that branch of industry. Real estate is in active demand, judging from the number of improved farms that are changing hands at advanced prices, causing quite an excitement in the farming community, and two questions are oftentimes asked: Has the boom reached your locality? Are you speculating in town property? Those questions I generally answer in the negative, for I am under the impression that the farmer should not be too much of a speculator. In some instances it may answer, but in the majority of cases the farmer that pursues his legitimate calling, using prudence and forethought generally, succeeds the best. The annual meeting of the Provincial Agricultural and Industrial Society of Manitoba, is to be held in Winnipeg, for the adoption of the report of the retiring council, for the election of a council for the ensuing twelve months, and for the transaction of general business. The council is to consist of seventeen members, five from the city of Winnipeg, and three from each of the four counties, Ligar, Marquette, Provencher and Selkirk. The obliging and energetic Secretary, Mr. Acton Barrows, is striving hard to get the farmers throughout the Province to take an active part in the good work, and get them to become members of the Society and aid in making the next annual exhibition a grand success. Horses are in good demand, and the horse dealers are doing a lively business in that line. They ship them from Ontario, and a good many old, inferior horses have been brought here and palmed off on the unsuspecting settlers at long prices. Several car lots have arrived lately for the spring trade. Messrs. Vance & Shortreed landed a nice lot of medium sized horses last week from the county of Wellington, and are selling them rapidly at \$175 to \$200 a piece.

North-west Letter.

[FROM AN OCCASIONAL CORRESPONDENT.]

Battleford, Jan. 31, 1882.

I intend to send you a sketch of the farm buildings at Eagle Hills, if you will put it in the ADVOCATE. The country is very different to Manitoba; it is a fine rolling wooded country, capable of producing everything to make a farmer happy and contented. It has been a very fine winter. The cold is not near so intense as at Manitoba, and I have yet to see the first blizzard of which I was rather in dread, as I thought that, living further north, the storms of Manitoba would be nothing to the Northwest, but I find the winter pleasant and agreeable. The country along the Battle River valley and between that and the Saskatchewan, possesses many inducements to the farmer. The fine, open lands that offers no impediment to the plough, and at the same time interspersed with large blocks of timber, makes the place very desirable. It would seem as if some one had made those very extensive clearings, as we might call them, and then gone away and left them, but we look in vain for the house or barn or cattle.

Farmers coming to this country would do well to bring as many cattle and horses as possible, particularly the former, turn them out on those fine well sheltered, well watered lands, and they cannot fail to do well.

I will get you as many subscribers as I can by next mail, and will send you my own also. Some of the Indians are doing well, and will be able to take care of themselves; other are lazy and poor, particularly those lately from the plains.