Flax Culture.

Sir,—As spring seeding will commence in a few days it becomes the duty of every farmer to consider the nature of the crops suitable to the charactar of his soil, and best adapted to meet the commercial demands of the country. Since last spring our commercial interests have undergone a great change. The abrogation of the Reciprocity Treaty has materially changed our commercial relations with the neighbouring Republic. We can no longer, with justice to ourselves, remain dependant upon a foreign nation for articles, which home skill and capital can manufacture equally well. The growing wants of our home population must be met by the produce of our own soil, and the skill of our own artisans. Barley, which last year formed the staple agricultural production of Western Canada, will, when subjected to a high impost, command a much less figure than last year when an open port was ready to receive it on the other side of the lines. In view of these facts, every farmer should direct his attention to the cultivation of a crop which will command a home market—to something that will tend to lessen our importations, and find a manufacturer and consumer within the Province.

The experience of the last five years has proved sorrowfully to many, conclusively to all, that wheat is not to be relied upon as a certain or remunerative crop. The failure of the wheat crop has shown the folly of pursuing the cultivation of a single kind of crop, and relying upon it as the staple agricultural production of a country. Had Canadian agriculturists taken note of this fact five years ago, our country would not have witnessed the disastrous results which the failure of our staple crops has entailed upon the community.

Among the various crops of which the failure of the wheat crop has necessitated a trial, Flax occupies the most prominent place.

The objection which many advance against the cultivation of Flax, is the labour and expense that attend its pulling. Now this objection is more than met by the advantage that accrues to the farmer, in being enabled to sell the roots along with the fibre, and as more or less earth necessarily attaches thereto, they tell materially in the weight of the crop. The variety of uses to which the fibre of flax may be employed as a substitute for cotton, is opening its introduction into nearly every department of textile manufactures in Britain and the United States. The fibre can be converted into a hundred different kinds of goods in common demand in the every day business of life articles on which Canada has been paying a duty of twenty per cent. Until lately nearly all the flax produced in America was raised simply for the seed, and in that respect was considered profitable—how much more so will it become when the fibre from an acre of land is worth double as much as the seed.

The rebellion in the South having severely affected the produce of cotton, the process of cottonizing the fibre of flax is beginning to engage the attention of artizans, so that Canadian producers need not entertain fears of overstocking the market of the world. Mr. Donaldson recently said:—"A two-fold benefit will arise from the production of this new class of goods. First it will take the place of cotton-batting, which like all articles of that class is at war prices. Secondly, the farmer will be relieved of the most objectionable part of the labour which attends flax,—that of pulling as it can be cottonized when taken from the field in any shape without regard to its being made into sheaves."

The cultivation of flax has led to the erection of mills in several counties of Western Canada, for the manufacture of the fibre into articles for home use. Messrs. W. A. & D. A. Milne, of Scarboro., have, at considerable expense, erected a flax mill in this neighbourhood, which will be ready to commence operations in a few days. Their mills will employ the latest and best style of machinery for the manufacture of flax, which can be procured on this continent, and now they are ready to pay the highest cash price for any amount of flax straw that may be delivered at their mills. The inducements which they hold out to flax growers are of a superior description. They offer seed, free of expense, to all who may choose to sow it; the only equivalent asked is an equal amount of seed, returnable next fall. They also agree to purchase the crop as it comes from the field, so that farmers can avoid all trouble of thrashing, rotting, &c. These are advantages which should not be overlooked. Parties in this neighbourhood, who have raised flax for the last two years, have received the results of their past crops with entire satisfaction, and are preparing to go largely into its cultivation this year. Considering our present mercantile position, it becomes the duty of every man, who has a piece of ground suitable, to sow some flax. He would, by so doing, not only adopt the best crop to bring remuneration to himself, but also give encouragement to those who by a large investment of capital are endeavouring to create home manufactures, by which Canada can only become an active and independent nation.

FARMER.

Scarboro, April 19th, 1866.

Seed Should be Sown on a Level Surface.

This should be done for various reasons. The principal is, the simultaneous germination and equal growth of the grain: it should all mature at one time. This would prevent the early-matured from becoming over-ripe, and dropping on the ground—thus losing part of the crop. This we see in most cases: there is an almost universal neglect here. That seed which is buried deeply, will require more time to make its appearance—and it will not be sufficiently ripened at the time of harvesting: while that under the most favourable circumstances will ripen, not only in advance of the most tardy, but the bulk of the crop. The early-matured and the late, will therefore be lost to a greater or less extent. We see this more particularly in oats. A few heads comparatively—and those the largest and finest—ripen first, and before the crop is fit to cut. These fine heads are generally lost. Now, were the whole crop like these early heads, it would be greatly improved, and a fine one indeed. A level surface, and a uniform good chance to all, will do this, especially if the seed is uniform in its quality and time of ripening.

Our great difficulty is, we do not harrow enough before we sow. Not only should the ground (for small grains) be thoroughly harrowed before sowing, but rolled. This will make a floor, a uniform surface. Then good plump seed, if possible of uniform ripening, is to be sown, and sown evenly, when there is little or no wind. The soil being thus prepared, being made mellow and level, a fine-toothed harrow should be passed over it, just sufficiently to cover the seed; then roll again. The grain will all be ripe at one time—and there will be a level surface to reap it—no shelling, no loss; it will all be perfect.—*Colman's Rural World.*

Leached and Unleached Ashes.

We have been repeatedly met with the assertion, from time to time, that unleached ashes were more valuable as a manure than leached ashes. Thinking that some reason might be given for an opinion so widely at variance with what had seemed to us as the true theory, we have been led, of late, to examine the whole subject a little more critically. The generally received impression among farmers has been, that the most important element in ashes was the potash, while they have overlooked the fact that the silex or sand in plants was quite necessary to the growth of plants as the potash. The stalks of wheat, corn, hops and other plants, require silex in their composition. They will not grow without it and produce fruit. But here comes a difficulty. Silex, or sand, will not dissolve in pure water, as we all know, but how, then, does it become food for plants? If silex is mixed with potash, we can melt it in a furnace and form glass. If it is mixed with potash and held in water or steam, it will dissolve a portion of it. So when ashes are leached, a portion of the silex is rendered soluble by the potash, and thus the silex, potash, lime and other elements are already in a state of solution, and ready to be used as food for plants. But unleached ashes are not in that condition, their elements are, as it were, separated from each other, and their action in the soils is slow at first, but will undoubtedly last longer than leached ashes. Acting on this principle, we have thought that experiments should be instituted by saturating unleached ashes with water, two or three weeks before using them, making use of just water enough so as not to have it run off in the form of lye. We cannot but think that they would prove a most powerful manure, and we recommend a trial of unleached ashes by our farmers in the manner we here suggest, with the expectation that they will report for our columns the results.—*Maine Farmer.*

Stock Department.

Rinderpest in Scotland.

Public attention has, for the last month or two, been directed to the remarkable cases of Rinderpest said to have affected many of the herds of cattle in Kincardineshire, and the wonderful recoveries made; and being desirous of ascertaining the correctness of these reports, I resolved to make personal examination. I was the more induced to do this, as these cases and cures were certified by the district inspector, whom I knew to be a respectable practitioner, and, among others, by Mr. Taylor of Cushnie, and Mr. Alexander of Halkerton, two of the leading and most intelligent farmers in the country. I would premise that the plague has, in general, been carried from south-west to north-east, the prevailing winds (which are presumed to carry the infection) having blown in that direction. Influenced by the belief of this theory, the farmers in that county expected the plague to visit their cattle from Forfarshire in the west, where it raged; and they were not long kept in suspense, for many undoubted cases of a virulent nature did occur in the course of a short time. The question arises, Were the cattle in every farm steading where the epidemic made its appearance cases of *plague?* This formed the subject of my inquiry. The first place I visited was Fasque. I was previously informed that Sir Thomas Gladstone's cattle had been ill for some weeks, but that they had been cured by the Worms treatment, as announced by Sir Thomas in the *Times* and other newspapers. I was disappointed, however, to find that such was not the case, as out of a herd of twenty-one very fine cows, fifteen had within the last few days died, and I could see that more must die. Mr. Murray, the intelligent landsteward, conducted me over the premises, and described to me the circumstances connected with the disease and treatment. No particular *precautionary* measures had been taken, but on the very first symptoms of the disease appearing, the usual remedies—assafœtida, &c.,—were applied. These, after a few days, seemed to have the desired effect of arresting the complaint; and Sir Thomas, no doubt unaware of its insidious nature and frequent liability to a relapse, and being anxious to lose no time in giving others the benefit of his experience, prematurely announced his success. Better fortune attended his young stock. This consisted of one and two-year-old stots and queys, which were housed in sheds some 200 or 300 yards distant from the cows. Mr. Murray informed me that they had mostly all been ill, but very slightly so, except one which had died. He said that a few of them had shewn some of the symptoms, but he was not prepared to attribute their recovery to any particular source. I was afterwards kindly conducted over eight or nine farms, where the cattle were said to be affected with *Rinderpest.* With one exception, besides the above, although some of the cattle at each place were undoubtedly ailing, the leading symptoms of that disease were certainly wanting. I was told that very few, if any, in the respective herds escaped illness where any were seized. The question naturally arises, If these be not mild cases of *Rinderpest,* what are they? It was not murrain, for there were no vesicles in the palate, nor excoriated mouths; and while undoubted plague existed all around, no other epidemic was known. The symptoms indicated, moreover, were nearly allied to those observed in the early stage of *Rinderpest,* but they stopped short of the profuse discharge at the nose, the cough, the heaving of the flanks, and the characteristic grunt of the terrible pest. Before stigmatizing the representations of those who honestly believe the authority of the inspector and their own observation of the existence of the true disease among their stock, we must remember that it does not assume its virulent form on every subject of its attack, where death among others on the spot may be doing its work extensively. In the course of my experience, over a wide district where *Rinderpest* prevailed, I was always meeting with some such very mild cases in the midst of those of a virulent and fatal character that, had I met with them in less suspicious circumstances, I should not have considered it plague. If this can be said of one or more cases under such danger, why may not a whole stock be attacked with impunity? Considering the nature of this terrible disease, I am, of course, doubtful of this, and yet we have analogous cases in the human subject in fever, where nearly a whole family may be carried off, while those in the next house, under the same complaint, may suffer hardly a day's sickness. But the diagnosis is not the only point to be looked at in these cases. The parties interested affirm that the virulence of the disease has been warded off by special dietary and other treatment previous and subsequent to the attacks. The former consisted principally in the free use of salt, along with their ordinary