

at the low rate of £24 sterling, which is capable of doing an amount of work equal to any other machine, and can be attended by a boy or any labourer with a few hours instruction. It was exhibited at the late Agricultural Show at Belfast, and highly approved of. I have in my possession a number of statistics and works on the cultivation of flax, all of which I will be happy to furnish to the Board of Agriculture. I also place in your hands for publication, a letter from Robert McCrea, Esq., Grange House, near Strabane, a gentleman who farms largely and grows large quantities of flax, and from whom I received my information, in his house. He had on his farm this year the growth of two barrels of seed, sent him by his brother in Guelph, which I believe was obtained from a Mr. Perine, in the County of Waterloo, and which looked as well as any I saw in the country. I am told there are several thousand acres under cultivation in that district this year, and if this crop is profitable in Waterloo I see no reason why it should not be profitable in other parts of the Province.

Your obedient servant,

J. A. DONALDSON.

To John A. Donaldson, Esq., Canadian Emigration Agent, Londonderry.

DEAR SIR,—The interest you have taken in my attempts to bring the capability of Canada as a flax producing country before the public, leads me to think that a few hints on the preparation of the soil, steeping and after management of the crop, might be useful on your return to that country.

My trip in 1859 gave me ample opportunities of judging, and I have no doubt there is much land in Canada West capable of growing good flax, as I saw in company with my brother, several fields grown by Messrs. Perine, of Waterloo County, and it only remains to be seen whether the climate and water are suitable for its preparation for the linen manufacturers of Belfast and Lurgan, &c.

The land best suited for the growth of Flax has a clay subsoil, and should have a portion of it mixed with the active soil by deep plowing, or trenching; at the same time care should be taken that too much of it is not brought up in one season, as it would override, or neutralize the action.

But whilst a clay soil produces both the heaviest crop, and the finest quality, many other descriptions of soil give good crops, under proper treatment.

In Canada there is a long period of fine weather after harvest which will afford an opportunity of cleaning the land intended for Flax, of root-weeds; this is best done by scarifying, harrowing, rolling and raking just deep enough to bring the root-weeds to the surface, when they should be removed, or burnt, and the ashes spread. If this be done early an interval of a few weeks

may be allowed to elapse before plowing, to let the small seeds vegetate. The land should then be plowed as deep as possible, (if stiff and difficult, with three or four horses, or oxen, and allowed to remain open and exposed to the action of the frost during the winter, which greatly facilitates the working of it in spring.

As soon as the frost and snow are gone, and the ground partially dry, or sufficiently so to admit of harrowing, and rolling, it should be subjected to a thorough working of these implements, following each other till the top is as fine as an onion bed, and the bottom so solid as to exclude the drought, which in any climate is injurious to the Flax, but in Canada would destroy it.

When the proper season for sowing arrives, (and this differs in different climates) the land should be marked into ridges of 10 or 12 feet wide, to facilitate the sowing and pulling; and the seed at the rate of about 28 or 30 gallons to the Cunningham acre, or 2^d to the English statute acre, sown and harrowed with light clever barrows, and rolled. If the land be in good condition, this is an excellent preparation for clover, and it is often sown with Flax, and the pulling of this latter crop is understood to be favourable to the growth of clover, by moulding it, and leaving it to the free action of the atmosphere.

In pulling, great care should be taken to keep the ends even, as the value of the crop is more influenced by this operation being well executed than most people are aware of, and if not attended to in the pulling it can never be effectually remedied afterwards. If rushes can be procured for bands it will save a considerable quantity of the Flax, and be much more convenient for tying it; the sheaves should be small to facilitate the steeping and spreading, and if it can be correctly *struck* in the water the shorter time it remains on the grass the better; the ponds for steeping should be about 3½ or 4 feet deep, care being taken to avoid *iron*, or other *mineral* springs, which would prevent it from bleaching white; the best water being soft running water, and the warmer it is the shorter time will it require to remain in it; I have known it to water in *five* days, and to take *twenty-one*, but generally in this climate ten.

If the sheaves be packed neatly on their root end, standing nearly straight, or but slightly leaning towards the end of the pond at which the filling has commenced, it will water more equally than if put in less regularly, and will be more easily taken out and less subject to be straggled, or torn. When the pond is full the flax should be covered with straw or grass to protect it from the sun, when it rises above the water, which it will do no matter how deep, when the fermentation takes place; it should always have a quantity of flat stones, or pieces of timber laid at short intervals over it, to keep it under water, and be trampled twice a day, &c.