

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 20 or 30 gallons to the Cunningham acre, or 24 to the English statute acre, sown and harrowed, with light clover harrows, 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 favorable 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 $3\frac{1}{2}$ 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 subjected 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 also have a quantity of flat stones, or pieces of timber laid at short intervals over it, to keep it under water, and be tramped down twice a day or as often as it rises up, during the first few days; but it will sink after the fermentation, and should then be carefully watched, to ascertain when it is ready for removal. This is one of the most critical stages, and on it a considerable part of the profits, or loss, may turn, and

if there be in the neighborhood any good judge he should be consulted. In the absence of such, a sheaf should be taken out, washed, and dried in the sun, and tried whether it would clean freely. If part of the sheaves or wood part, adhere to the fibre, it must remain a little longer in the steep, but experience alone can teach, and no directions can be given that would be understood by persons unacquainted with the matter, but I am certain there must be in every district of Canada many Irish and Belgians, fully up to the subject, and that little difficulty need be anticipated in procuring the services of such. In spreading care, should be taken to shake it well and spread it evenly and thin, but if want of room should necessitate the spreading of it thicker, the rows should be at such a distance from each other as to admit of the flax being turned, then a *day or two* on the grass, in order to give an equal exposure and bleaching to both sides. If it has been properly watered, it need not remain more than two or three days on the grass. When lifted it is to be tied up in sheaves and put under cover of a house or shed, till it is convenient to remove it to the scutch mill.

While on this head, I may mention that the desideratum so long wished for by Flax growers in Ireland, viz., a machine for cleaning without the necessity of employing so-called *skilled* hands has been recently patented and brought out by the Messrs. Rowan of Belfast. (This is a piece of information which may be of great service to our friends in Canada, but which you are quite as well acquainted with as I am, having witnessed its operations with me), I believe it comes nearer to the requirements of the Flax growers both in this country and Canada than anything yet invented, and the fact that I, who never attempted to clean Flax in the old mills, found no difficulty in doing it in Rowan's is, I think, proof positive of its adaptation to unskilled labor. This machine, like most new inventions, has met with some opposition; it is objected to on the ground that it gives less cleaned Flax, than the old mill, but as this comes from *mill owners*, an interested party, it should be received with caution, and was not borne out by our experience.

That some modification of the *speed* or *rate* of driving the machine may be necessary to adopt it to the harder or softer qualities of flax I do not doubt, that it only requires a larger or smaller pulley on the scale, which costs little to effect.

The present seems a very favourable time for introducing the growth and preparation of flax into Canada. The demand for it in Belfast, Lurgan, Dundee, &c., is greater than can be supplied. The emigration of the province since the breaking out of the war in the United States, (aided by the information you have diffused here respecting Canada), has resulted I understand, in at least nine thousand more than in any former year. Many of these emigrants are from Ulster, the flax-growing portion of Ireland, and from Belgium, where it is equally well understood. The weekly intercourse between the St. Lawrence and the Foyle, and Mersey, by steam, affords an opportunity of forwarding the article at once to the