

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 or it a considerable part of the profit, 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 will clean freely. If part of the shoves, 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 on 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 cleansing 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 any thing 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 mills, but as this comes from *mill owners*, an interesting 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 adapt it to the harder or softer quality of Flax, I do not doubt. This only requires a larger or smaller pulley on the scale, which costs little to effect.

The present seems a very favorable 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 sup-

plied. The emigration from this 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 portions 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 best markets in the world, and of procuring such machinery for its preparation as may be required.

I have said nothing as to which seed should be preferred. Different soils and climates may require different kinds of seed, and few experiments, by intelligent growers, may be necessary to decide which is best suited to Canada. Riga is generally preferred here, on account of its growing longer than Dutch or American; but these latter were in more favor some years ago, when the spinning was done in a small wheel, in every farm house and cabin in Ulster, and was then thought to produce a *finer* article: but since machinery has taken the place of the domestic manufacture, the Riga is more generally sown.

You are aware that I had this year a barrel of Canadian seed, sown in the same field with five of Riga, as an experiment. The Canadian came up some days earlier than the Riga, and grew much more freely, up to the middle of June; it blossomed fully ten days earlier, and had fully three times the quantity of seed, but is of an average three inches *shorter* than the Riga. I am unable to say which will be the best quality, or the comparative quantities, each will produce, not having got it cleaned out, but I hope to be able to give you an account of them next week; I cannot doubt, however, that the Canadian grower of Flax would find his advantage in changing his seed either from Riga, or Holland, at least every second year, as like every other crop it has a tendency to degenerate when grown in the same locality, especially if that be not its native, and this is evinced by the immense quantity of seed borne by the Canadian here.

I sent two barrels of Riga Flax seed last year to the Messrs. Peile, but it was delayed at Liverpool and Portland, and did not reach them in time for that year's sowing; I suppose, however, they will have tried it this year, and if carefully kept, it may do pretty well, but can scarcely be considered a fair trial, compared with new. You can, however, hear from them on the subject when you return to Canada, and if you or any of your friends should desire it, I will have great pleasure in forwarding any quantity you may require, on the arrival of this year's growth.

From what I have written, as well as from your own observations during Spring and Summer, it is plain that Flax growing and prepared