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CULTIVATION AND MANUFACTURE OF
FLAX AND HEMP IN CANADA.*

(Concluded from page 230.)

Flax as a Farm Crop. †

Flax is one of those hardy plants which grow upon almost any kind of arable soil capable of producing average farm crops in common cultivation. Like other plants it has its likes and dislikes, and succeeds best when cultivated on a medium rich sandy loam. The fibrous nature of its roots causes it to delight in a deep and open soil, through which they may ramify, both vertically and horizontally. Low alluvial soils tend to encourage mildew, which, not unfrequently, attacks flax cultivated in such situations in America.

Rotation is almost immaterial, provided the soil is in good heart and free from weeds. In Europe it is made to take every position which can be assigned to it in rotation with other crops, convenience generally being the rule which determines its place, but when special attention is devoted to rotation, practice serves to indicate that it should follow a straw or hoed crop.

The Seed.

European flax-growers exercise the greatest care in the selection of their seed. In Germany particular value is attached to linseed from Courland and Livonia, where the soil and the nature of the climate, especially the short hot summer, bring the flowering and fruit time near together; so that the flowers, being simultaneously and uniformly fructified, produce ripe and perfect seeds. The Belgians, also, always select Baltic flax for their seed. For the heavy soils the Dutch seed is frequently used, which is the produce of Riga seed, once grown in Flanders. The American seed has been tried, but experience has shewn that the plants had a tendency to grow branchy instead of a single erect stem; and although good for seed purposes, a large

portion of the fibre was necessarily lost in scutching. In the regular flax growing countries, where they rely greatly upon their flax as the money-producing crop, they always obtain a new supply.*

Professor Wilson recommends sowing merely sufficient foreign seed to reproduce the quantity required for the succeeding flax crop, in order that a clear sample may be obtained, for foreign seed is notoriously dirty. This practice is generally followed in Belgium and Ireland.

The quantity of seed sown varies from one to two bushels to the acre. The larger quantity being used when flax is grown for the sake of its fibre. Thick sowing induces the plant to grow up a tall slender stem, and its fibre is developed at the expense of the seed. When sown for fibre and seed it is recommended to be sown earlier than when seed alone is the object of its cultivation. The seed should be very lightly covered, a common brush-harrow being used for the purpose, and the work finished with a light roller.

Sown in the last week of April, or the first week in May, after danger from frost is over, the flax crop will be ready for pulling in Canada about the middle of July, according to the season and the latitude, and the exact time for pulling, if both fibre and seed are to be saved, is a matter of much importance. "In Belgium—and we instance that country, as the flax cultivation has a higher importance there and receives far more attention than with us—the way they proceed is this:—A full grown plant is selected, and the best matured and richest capsule is taken. This is cut across with a sharp knife, and the section of the seeds examined if they have become firm inside, and the outside has assumed a good deep green colour, the plant is considered fit for immediate pulling. At this time the entire plant will exhibit signs of its approaching maturity. The bottom of the stalk will be seen to have assumed a yellowish tint, and have become much harder to the touch than it was before, good indications of an interruption to the circulation of the juices of the plant. If this altered condition be allowed to go on by the plant remaining in the ground, the change of colour will rapidly make its way up the stem until it reaches the capsules, and then the seeds will be found to be fully matured, quite hard, and to have assumed the dark colour with which we are so familiar in the market samples. The next stage of the plant would be the bursting of the seed-vessels, and disjunction of their

* This article, by the Editor, was published in the *British American Magazine* for August.

† It does not come within the scope of this article to discuss, or even to describe the minutiae of flax cultivation or the preparation of the fibre. The reader who is desirous of devoting attention to this part of the subject will find ample information in "Our Farm Crops," by Professor Wilson, of Edinburgh; also in various articles and Correspondence in the *Canadian Agriculturist*; Kirkwood on Flax in the Parliamentary Reports. A small pamphlet entitled "Flax, directions for its Cultivation and Management." "A manual of Flax Culture," (Moore, Rural Manual, Rochester. N. Y.) The same remarks apply also to hemp.

* The amount of Riga flax seed exported for sowing in 1850 was 126,518 barrels. Each barrel weighs about 200 lbs, and contains three and a half bushels. The prices of Riga seed have ranged from 35 shillings sterling to 53 shillings per barrel, or about \$2.50 to \$3.75 per bushel, within the last twenty years.