

Agricultural.

CULTURE OF FLAX.

We continue the remarks on this subject, from No. 4, Vol. 2, of The Canadian Illustrated News.

SOIL AND ROTATION.—By attention and careful cultivation, good flax may be grown on various soils; but, some are much better adapted for it than others. The best is a sound, dry, deep loam, with a clay subsoil. It is very desirable that the land should be dry, as, when it is saturated with either underground or surface water, good flax cannot be expected.

Some persons have the impression that the richest soil that can be obtained is the most appropriate, and would produce tall, heavy flax. But this is not the case, for where the soil is too rich the fibre is not of a good formation, and the stalks grow woody and coarse; whereas, on dry loam, with clay subsoil, the coating and fibre grows finer, and more in proportion to the woody part, and renders the flax more valuable.

Flax should not be sown in valleys, if other places can be obtained. When sown in valleys it inclines to grow rapidly, and the stalks lean across each other; and where they come in contact that part becomes rusty and readily gives way when dressing, which renders the flax of little value.

It is of importance not to grow flax, or indeed any crop, too often upon the same space of ground. An excellent crop of flax is generally obtained after wheat and of wheat after flax. A regular system of rotation in cropping is strongly recommended, as the surest method of preserving the land in good heart, and of securing abundant crops.

PREPARATION OF THE SOIL.—One of the points of the greatest importance in the culture of flax is, by thorough draining where the land is wet and by careful and repeated cleansing of the land from weeds, to place it in the finest, deepest, and cleanest state. After wheat, one ploughing will suffice on light friable soil, but two is more efficient, and on stubborn soils three may be found necessary. The second ploughing should be given late in November, that the soil may be exposed to the ameliorating influence of the winter's frost. As no crop requires a more thorough and minute pulverization of the soil than flax, it is indispensably necessary to have it exposed to the winter frost, by which it is crumbled down finely. In spring this fine winter surface must be harrowed, and in order to consolidate it, it is of advantage to roll it. When the soil is not a heavy clay, it is better to use the cultivator than the plough in spring, in order to avoid as much as possible the turning down of the fine surface mould, which is so necessary for the flax seeds. After harrowing and before sowing, care should be taken to collect weeds of all kinds.

SOILING.—It is of importance to procure good, clean seed, sifted clean of all weeds which will save a great deal of after trouble when the seed is growing. Sow about two bushels of seed to the acre, or even a little more. It is better to sow too thick than too thin, as with thick sowing the stem grows tall and straight, and the fibre, is found greatly superior in fineness and length to that produced from thin sown flax, which grows coarse and branches out, producing much seed, but a very inferior quality of fibre, and a small weight of straw to the acre, whereas when sown thick a much greater yield will be secured. After sowing, cover with a seed harrow, going twice over it—once up and down, and once across, as this makes it more equally spread, and avoids the small drills made by the teeth of the harrow. Finish with the roller, which will leave the seed covered about an inch—the proper depth. Rolling the ground after a shower, when the plant is about an inch above ground, is advisable, care being taken not to roll when the ground is so wet that the earth adheres to the roller.

Flax seed, to insure a good crop, should be sown on a quiet day, and should not be permitted to be blown by the wind, which will not leave the seed equally distributed on the ground.

In this country flax should be sown any time between the 25th of April and the 10th of May. It is recommended to sow, if possible, about the 10th of May. For fine fibres early sowing is necessary. Vegetation is more rapid in the latter part of the season, but for fine fibres there is nothing like steady growth.

WEEDING.—If care has been paid to cleaning the seed and soil, few weeds will appear; but if there be any, they ought to be carefully pulled. As the price to be paid for the flax must be regulated by the quality, it will be to the advantage of the farmer to pay particular attention to keeping it clean of weeds.

PULLING.—The time when flax should be pulled is when the seeds are beginning to change from a green to a pale brown colour, and the stalk to become yellow for about two-thirds of its height from the ground.

It is most essential to take time and care to keep the flax even, like a brush, at the root ends. This increases the value to the manufacturer, and of course to the grower, who will be amply repaid by an extra price for his additional trouble. It is of great importance to pull the flax before it is fully ripe. Every day it is allowed to stand after it is ripe, it loses in weight and in value. After the flax is pulled, it should be set in two rows, the seed ends up, inclined to each other, and meeting at the top. When it has stood for three or four days, it should be fully dry (weather being favorable), and may then be put up in small sheaves, and placed out for rotting, either by steeping, or by exposure to dew.

ONIONS.—According to the London Gardener's Magazine, charred rubbish and sand are capital materials for surfacing onion beds, as they keep the bulbs dry and warm while their roots are revelling in the rich soil below. Moisture at the base of the bulb for any length of time is most injurious to the onion; on the other hand, a dry heat at the surface is very beneficial, and it is the sun-heat alone which renders the Spanish onions so superior to the English in flavor and beauty of the bulbs. The hotter the season or the climate, the sweeter is the flavor of the onions; and the colder the season or the climate, the more pungent. Onions grown in the north of Europe are many degrees more fiery than those grown in the south. The hoe should never be used among onions. It does a deal of mischief, and if any onion is once loosened in the soil, it never makes much growth afterwards. So, too, the bulbs should never be earthed up; they should stand wholly above ground, and have good depth of soil to root in. Sand, salt and soot are good top dressings for an onion bed, to be put on at least a week before sowing. The same writer recommends gas lime and deep trenching as the best preventives of the onion maggot.

CULTIVATION OF TOBACCO.

They who are interested in the culture of tobacco may find information of the first preparations for the crop in the Canadian Illustrated News of May 30, as grown in Connecticut, United States. And we may inform them, that tobacco grown near Dundas, west end of Lake Ontario in 1862, met with a ready market in Canada; and the price far exceeding any profit ever derived from Canadian soil for any other product.

The tobacco will not grow much until it is loosed, as the ground becomes hard and must be well stirred to give the root a chance to start. We use Nourse, Mason & Co's horse hoe for cultivation between the rows. There is an advantage in setting the plants on a ridge, for they are not so apt to be covered with dirt by the horse hoe, or by a heavy shower. We generally hoe as we can, but rarely more than three times, unless the ground is very weedy, which should not be the case in good farming.

The cost of production varies greatly with the seasons as when we have a dry season we have to water the plants and cover them with a little cot, to prevent the sun from scorching them. The past season was very favorable, there having been so much damp weather about setting time that we did not cover or water a plant on $\frac{1}{4}$ acres.

After the tobacco is set the labor is about double what it is on corn. I have never made an exact calculation of the expense of raising tobacco; but for myself I can say I would rather take care of an acre of tobacco than two acres of corn. The land which will produce 2,000 pounds per acre of tobacco, will not produce over 70 bushels of shelled corn, which shows a large difference in favour of the tobacco.

About the middle of August the tobacco is in blossom. We then go over the field and break off the tops, taking off about 4 or 6 leaves with the top, according to the size of the plant.

In about a week a sucker starts at the junction of each leaf with the stalk. These must be taken off before cutting, as if left on it is very inconvenient to handle the tobacco.

We generally begin cutting about the 10th of September, for by that time most of it is ripe, and if it stands after it is fully ripe, it will often rust. The rust is in spots on the leaf, and injures the quality.

We commence cutting in the morning after the dew is off, and let it lay for a while to wilt, being careful not to let it lay long enough to get sunburnt. After being wilted enough to handle without breaking the leaves, it is placed in a cart or waggon and drawn to the curing house, which is generally a shed or rough building, which may be

shut up close or opened to let in air. The best buildings are about 24 to 36 feet wide, and as long as convenience may dictate—36 feet allowing of three 12 feet rails across the building. We hang from 26 to 47 plants on a rail, according to size.

The but of the stalk is placed against the rail and the twine passed around it, the twine being on top of the rail between every two plants, as they are placed on alternate sides. The rails are about 20 inches apart, allowing room for a good circulation of air which is absolutely necessary, as without it the tobacco will sweat on the poles, and is lost.

In about six weeks or two months the tobacco is sufficiently cured to strip. After it is well cured the first damp day we open every door and window to let in the air, for it is necessary to have it damp to keep it from breaking.

When it is taken from the poles it is placed in a pile, a double tier, the tips lapping about 6 inches or 1 foot, butts evenly laid and closely packed to prevent drying.

If not damp, it may lay for several days without injury, but it requires close watching to prevent it from heating. We divide it after stripping into three kinds: called wrappers, seconds and fillers. The wrappers are the choicest leaves, the seconds have many imperfect leaves and bring about half the price of wrappers, the fillers are the poorest leaves and bring about one-third the price of wrappers. When the leaves are put together and a leaf coiled around the butts which makes a band. As a general thing the more particular, in assorting, the better price we get. I have seen a really nice lot of tobacco sold for a small price for want of care in assorting.

I think we have averaged fifteen cents a pound for wrappers, seven and a-half cents for seconds, and five cents for fillers during the seven years we raised tobacco, and the weight would average 1,500 pounds per acre, though we have raised 2,200 pounds on one acre, and sold it for twenty cents per pound for the first quality.

In such a yield as the above there would not be over 500 pounds the first and second qualities both together. After stripping, it is evenly packed in piles, (keeping the various qualities separate, of course,) butts out and tips lapping a very little, three or four inches perhaps. We do not case it, but sell to dealers who do. The case is made of merchantable soft pine boards, and is about 3 1/2 feet long by 2 1/2 wide and 2 1/2 deep. About 100 lbs of tobacco are put in each case, by means of a screw. In a few days after casing, the sweating process commences. During some stages a person not acquainted with it, were he to examine the tobacco, would say it was worthless, being perfectly soft and apparently rotten. I have often seen the outside of the case so hot as to draw the pitch from knots in the boards.

The tobacco must go through this process before it is manufactured. To give it the necessary finish. This year we shall probably get a higher price than ever before. I have already heard of 25 cents per pound being offered for all three qualities.

Commercial.

It is probable that most readers of this journal, who are immediately interested in ascertaining the prices of farm produce in the local and export markets of Canada and of New York, obtain their information through the daily papers before they see this. The object we have more particularly in view, when inserting market reports, which are several days old, is to preserve them as items of current history. This journal is preserved by many subscribers, and in course of time will be very generally bound in volumes. Daily papers are not preserved in that manner if at all. Also, the Canadian Illustrated News is sent by mail to Europe in larger number than any other paper published in Canada; that is an additional reason for inserting one or two of the Canadian Market Reports with those of New York.

We select the latest down to the time of preparing to print. But this being an illustrated paper other circumstances than latest news govern the time of the week selected for printing.

TORONTO MARKETS.

Toronto, June 15.
Fall wheat not so brisk, and about 2c easier, at 88c to 96c per bushel. Spring wheat also lower at 80c to 83c per bushel for good samples. Rye nominal, at 56c to 60c per bushel, or about 1c per pound. Bar-

ley very dull, selling at 55c to 60c per bushel. Oats in moderate supply, at 45c to 46c per bushel. Pease sold at 56c per bushel on the street, and 56c to 58c per bushel by the ear load, with fair enquiry. Potatoes in large supply, selling at 30c to 50c per bushel retail, and 20c to 35c per bushel, at wholesale. Apples sell readily at \$2 00 to \$3 00 per barrel. Fresh butter 13c to 16c per pound. Good dairy packed butter draws 12 1/2c per pound. Eggs sell at 9c to 14c per doz. Chickens sold at 40c to 50c per pair. Ducks scarce at 60c per pair. Hay sells at \$15 to \$16 per ton for best. Straw, \$8 per ton for the best. Hides, per cwt., \$5. Calf skins, 8c to 9c per pound. Sheepskins, \$1, 50 to \$2, 00 each. Wool in light supply, selling at 30c to 37c per pound. Pelts, 30c each. Lambskins, 50c each. Beef, 1st class \$5 50 to \$6 per cwt., 2nd class \$4 to \$4 50 per cwt., and 3rd class \$3 50 to \$4 per cwt. Flour dull and unchanged; Superfine, \$3 90; Fancy, none offering; Extra, at \$1 25 to \$1 30; double-extra at \$1 75 per barrel.

NEW YORK MARKETS.

NEW YORK, June 15.
FLOUR.—Receipts 35,126 barrels; market 10c better on the low grades; sales 9,800 barrels at \$1 70 to \$5 10 for superfine State; \$5 60 to \$5 80 for extra State; \$5 90 to \$6 05 for choice do; \$4 65 to \$5 10 for superfine Western; \$5 60 to \$6 10 for common to good shipping brands extra R. H. Ohio. Canadian flour 10c better. sales 600 barrels at \$5 60 to \$5 91 for common extra, and \$5 95 to \$7 60 for good to choice extra. Rye flour steady at \$3 50 to \$5 10.
GRAIN.—Wheat.—Receipts 189,269 bushels; market 2c better; sales 80,000 bushels at \$1 20 to \$1 40 for Chicago spring; \$1 40 to \$1 42 for Milwaukee club; \$1 44 to \$1 47 for amber Iowa; \$1 48 to \$1 53 for winter red Western; \$1 54 to \$1 56 for amber Michigan. Rye firmer at \$1 to 1 04. Barley dull and nominal. Receipts of corn 84, 883 bushels; market 1c to 2c better; sales 70,000 bushels at 75c to 80c for shipping Western mixed; and 74c to 77 for Eastern. Oats 1c better, at 74c to 81 1/2c for Canada, Western and State, closing with scarcely so much firmness.

GREAT WESTERN RAILWAY.

Traffic for week ending 12th June, 1863, - - - - - \$43,656 50 1/2
Corresponding week last year. 42,743 23
Increase, - - - - - \$ 913 27 1/2

GRAND TRUNK RAILWAY.

Traffic for week ending June 6, 1863. - - - - - \$80,183 02
Corresponding week, 1862. - - - - - 62,852 71
Increase, - - - - - \$17,330 31

NORTHERN RAILWAY OF CANADA.

Traffic receipts for the week ending June 6th, 1863:—
Total receipts for week - - - \$8,965 58
Corresponding week, 1862 - - - 9,574 15
Decrease - - - - - \$608 57

INSTRUCTION IN MUSIC.

MRS. JOHN E. MURPHY would respectfully inform her friends and the public, that she is prepared to receive a limited number of pupils for instruction on the Piano Forte, at her residence, Mulberry street, between Park and MacNab. References given if required.
Hamilton, June 20th, 1863. 6

ELLIS' HOTEL,
NIAGARA FALLS, - - - CANADA SIDE,
NEXT DOOR TO BARNETT'S MUSEUM,
Board, - - - - - \$1.00 per Day.
Meals at all hours. Carriages in attendance at the door. Good stabling.
W. F. ELLIS, PROPRIETOR.

JOSEPH LYGT,
DEALER IN
PAPER HANGINGS,
SCHOOL BOOKS,
Stationery, Newspapers, Magazines, &c.
CORNER KING AND HUGHSON STREETS,
HAMILTON, C.W.

Agents for TORONTO STEAM DYE WORKS. Stamping for Binding and Embroidering.

S. M. PETTENCILL & CO.,
No. 37, PARK ROW,
NEW YORK.
No. 6 STATE STREET,
BOSTON.
Special Agents for the "CANADIAN ILLUSTRATED NEWS" and all principal Newspapers in the United States, Canada and Pacific Coast.