

in the fall; keep in a damp place, either in the lumps. Earth is not sown in early in the spring a well grown or, as they require are liable to be other similar in- protected from the previous number we is more than one ing the haw, still formerly stated, preserve them in prepare them for n in the spring. well here—or the a, has been very

the Fall.

h your paper, and e money, and no e ADVOCATE. In ke about plowing ot say whether on without plow-

ROBT. SQUIRES.

fall generally be- time as to need mellow, and that ed by the harrow itivation is some- d sufficient ly. If ong and rough, so f earth have been the frost, there is d to be less com- e cultivator to be rming the surface d.]

sheep.

farmers' advocate, etter pens made esent time, Cots- an be shown from e entered in one hing should be e sheep.

DARLING, Brinsley. the attention of ther Exhibitions.

Lands.

people who read y enquiries of me the prospects gen- ory, I deem it ad- ation through the d paper, and more e such a deep in- patrons as well as

to say that I left east, on board the anded at Prince y, on the 5th of ssed for grandeur in passing Silver east of the Land- Prince Arthur, and magnificent nder Cape, 1,400 et; and between s of considerable of solid stone. perous and rising only come three ulation of some tages it possesses y few years grow It is at the head

of navigation on Lake Superior, and in the heart of one of the greatest mining regions in the world; also, the Dawson Gravel Road and Canada Pacific Railroad terminating there, the town has a bright future, to say nothing of the great importance of the farming prospects in its immediate vicinity.

I will mention the township of Oliver as the first free grant township, in travelling up the Dawson Road, which runs in a north-west direction. We pass through the township of McIntyre, which is all located as mining lands, and mostly rocky, although the land is tolerably good after we get six miles from the town; and at eleven miles the Dawson Road intersects the townline of Oliver, where it is somewhat stony, but in going south one mile we come to first-class land. The township of Oliver has an area of 40,000 acres, 35,000 of which is first-class land, the soil being all of clay loam, and being splendidly watered with spring creeks, which are swarming with trout. This township was burnt over eleven years ago, consequently the timber is extremely light, being mere underbrush, with the exception of some groves and dry swamps, where there is green timber sufficient for building and fencing purposes—when the roads are made passable for teams to take all the necessities of life into the township. I consider the most of this land can be cleared for about five dollars per acre, and when cleared it will appear like an old farm, as the stumps are rotten and will burn up. About three-fourths of Oliver is taken up for actual settlement, and a few of the settlers have this year raised potatoes and oats on their locations. The first clearings were made this year. There is one great drawback in settling there at once; there is no leading road to intersect the Dawson Road, so it is impossible for settlers to get their families in at present, but it is to be hoped our Government will open one leading road next spring, as there has been a petition signed by the settlers and sent to the Commissioner of Crown Lands, asking for such road.

The Dawson Road runs across the north side of Oliver, and the C. P. R. is now graded through the south side, and there will be a station in the township next year when the road is opened. Oliver is particularly adapted for stock-raising, as the land is good, cheap, well watered, and abounds in summer feed, such as blue joint grass, and wild tares and peas. The tares are as well developed as our field tares, and the peas also, with the exception of the smallness of the pods and grain. The timber is all soft, with the exception of a considerable of birch. The township is in a valley, although it is quite rolling enough to drain well. I did not hear of more than one field of wheat being raised there this year, of which I have a sample, and it is first class, being of the winter variety. I think wheat will do well, as the snow remains on the ground all winter without any thaws. It is admitted by all who have had the experience, that cattle winter far easier there than they do in this section, as the climate is more regular and mild, without sudden changes or rains. I speak advisedly when I say that the climate is far healthier there in summer than it is here, as there is no really hot weather, and the air is thin and pure. People boast of having extra good appetites to eat. The conditions of settlement are as follows, according to the latest arrangements made by the resident agent:—A married man with a family can pre-empt 160 acres, and is allowed to purchase the same amount, to complete the half section, at 50 cents per acre; and all single men or women over 18 years of age can get 160 acres free, but are not allowed to purchase any at any price. The terms of settlement are, to clear on each 160 acres, 15 acres, and build a log house within five years after executing the same. This is a splendid chance to get good lands for nothing, as the soil is good, and being so near a rising town, with good leading road and a railroad also, and Prince Arthur is a first-class market—will always be. There is an abundance of wild fruit in the woods, and any amount of fish and game, and potatoes turn out as high as 300 bushels to the acre. Timothy hay does remarkably well there, and I saw a field of buckwheat well matured when it was harvested this fall, long after the frost had killed the potato tops down here, and the leaves were green on the buckwheat. I personally inspected the township of Oliver, so I speak from experience, and as I was brought up on a farm, and well used to clearing land, I feel that I am competent to judge of these facts. Should any of your readers want any further information at any time, I will be most happy to communicate with them on the Free Grant subject. Mr. Editor, hoping that you will not consider my long and rambling letter too long for publica-

tion in full, with best wishes for the prosperity of your excellent paper, I beg to remain respectfully yours, L. JONES.

Rape Growing vs. Canada Thistle.

SIR,—I see in your number for this month a statement that Rape growing will destroy the Canada Thistle. It is an easy thing to try the experiment, but I think it will be found that nothing will destroy that "Curse of the Ground" but digging it out carefully or pulling them up by the roots continually whenever they appear. We are very much troubled with them in this country, and I would strongly urge on the farmers of Canada to try and keep them down at the commencement, as they are annually a source of great expense to the British agriculturist in cutting them out of the grain crops. The best means on a large scale that I have tried to effectually check their growth is to plough up the ground 11 to 12 inches deep. By so doing we bring to the surface a complete network of roots, from just below the usual plough depth. The deep ploughing is usually done by steam; the depth of ploughing with a pair of horses being not much more than six inches in this country.

JOSEPH WALKER, The Poplars, Knaresboro, York. Nov. 27th, 1875.

The article referred to in the above communication was selected from an agricultural journal. We inserted it merely that the method recommended might have a trial from some of our Canadian farmers. You may have seen that we did not give it on our authority. We have had some experience in exterminating them, and have found the continued ploughing, or ploughing so as to prevent their profiting by the atmospheric influence, so necessary to vegetable life and vigor, to be effectual in their extermination. If a rape crop would prevent or weaken their growth, the simplicity and cheapness of the remedy would be a great argument in favor of its use.

Agricultural.

Farming in the Provinces.

It is a long time since I have written anything for you, but it is not because I do not take an interest in the *Farmer*, for the more I read it the more I esteem it, and should feel quite lost without its weekly visits. As for writing for scientific farmers I must be excused, as there are many much more capable to instruct and explain the manner in which our farm crops should be grown and cared for, it would be a waste of time and patience for me to take up your valuable space.

I will just say that I visited, in September last, some parts of Northern Vermont, and the counties of Stanstead, Compton and Wolf in this Province; and I must say that the crops in general are good, fully up to an average. Not many of our neat cattle have gone to your New England markets this fall, but our sheep and lambs have gone to your markets and our neat cattle have been and are being worked up for European markets by the Canadian Meat and Produce Company, a branch of said Company now being in operation at Sherbrooke.

This Company is now slaughtering and canning, already cooked, from 75 to 100 head of cattle per day. It is truly an establishment worthy of investigation, to see the cattle coming in alive at one end of their spacious building and going out at the other cooked, and fit for kings, queens, presidents, nobles and all other people to feast upon.

The people in this part of our Province have never before known what it was to have a ready market for all their surplus stock, and our desires now for reciprocity with your country are growing less and less, and it will soon cost more to pay the Government officials on each side of the line that separates the two countries from each other, than all the duties they can collect; and the duties thus collected tend very much to lessen the trade with each other. I think that the farmers in these townships are now realizing quite as much from the sale of their stock as the farmers are in Northern New Hampshire and Vermont. Next year our Canadian Meat and Produce Company are calculating to work up all our surplus sheep and lambs, so that you will not be troubled about their glutting your market.—H. F., Compton Co., to New England Farmer.

Draining Stiff Clay—Steam Plowing.

Mr. Mechi writes the following note to the English papers, illustrating his confident belief in the draining of heavy soils, but showing that steam plowing leaves the land in a condition rendering it less necessary than would otherwise be the case:—

There has been (and is now to a considerable extent) a belief that under-drainage is not wanted and would be of no use in the rank loams (loams, I suppose) of certain plastic clay districts of Essex, where surface furrows and deep cross water furrows are supposed to do all that is required by carrying away from the surface the surplus rain-water (there are no springs in these clays). I have vigorously protested against this mistaken and unprofitable opinion during more than thirty years, but to a great extent all in vain. "Water won't go through our still soils," is the usual excuse. But here and there in places certain large farmers have repented and amended and changed their opinions, but so quiet is it kept that one never hears a word about it. When I have mentioned some of these cases, I am told, "Mr. Mechi you must be mistaken, for Mr. So-and-so does not believe in draining such soils." The fact is, certain folks don't like to admit that they were wrong and Mr. Mechi right, so the matter is kept snug, and their brother farmers are deprived of the great benefits which they might derive (from draining such soils) in a wet season. I therefore now beg of them, at our usual public meetings, to publish the fact, and thus do much agricultural good. On my 60 acres of steam plowed land no water is to be seen (despite the drenching torrents) running down the furrows or water-furrows, although so little do my folks believe in the steam plow after drainage that they persist in drawing water-furrows, which will not, I believe, be required. In fact, the steam plow (not the cultivator) so dries the stiff land that it approaches a substitute for draining. No horse or man's footmark or wheel mark, but all lightly laid, friable and well aired and dried—perhaps too lightly laid as a preparation for wheat, which folks say "likes a solid bottom."

I will not mention names, but I know of one farm of 900 acres where I believe the drainage, in a wet season, would make a difference of £1,000 at least in the "balance sheet." Nov. 9.—More drenching rains, but still no appearance of water on the sloping surfaces of the steam-plowed fields. In fact many of the drains have not been called upon to act on this stiff unctious clay. The late Mr. James Smith, of Deanston, so celebrated in Scotland as a drainer and a subsoil cultivator, told me that he once attended a meeting of the Witham Agricultural and Laborer's Friend Society, and strenuously urged the draining of these clays, but in vain; there was a want of belief, and he was coolly invited to come and try it at his own expense if he so pleased, but he indignantly declined the offer. This must have been more than ten years ago. Nov. 10.—Again torrents of rain, and at last the drains discharge (the first time this season) from the steam-plowed land, but no surface water is visible, even in the furrows or water-furrows.

Is Drainage Needed?

What are the effects of drainage? Thorough drainage deepens the soil. Of what use is it to plough deep and manure heavily, while the soil is full of water? The roots of plants will not go down into stagnant water; the elements of plant food are not all on the surface, many of them have been washed down by the rains, some of them are found in the decomposing rocks themselves. Take away the water and the roots will find them.

Drainage lengthens the seasons. In our climate this is an important point to be gained. If by drainage one or two weeks could be gained, it would be quite a relief in our backward springs, when there is so much to be done in a short space of time.

Drainage increases the effect of the application of manure; the soil being dryer is more easily worked fine, the manure is also more evenly distributed. The water also passing through the soil, carries fertilizing matter down to the roots of the plants. Where there is stagnant water, manure must decompose slowly if at all, but let the water pass off, the air is admitted, and decomposition takes place.

What observing man is there who does not know that his crops are improved in quality by drainage? Sweet English grass and clover take the place of sedge and rushes.