

Canada Thistles—How I Killed Them.

Three years since we seeded down a very large portion of our farm, nearly 150 acres, and at that time the thistles were so thick that in many places you could hardly put down your foot without treading on them, and that for acres and acres together; in fact, seeding down became absolutely necessary, as spring grain had been grown for some years without summer fallow, and, as a natural consequence, thistles had increased to a most alarming degree. Since that time the land has been in pasture, with the exception of one year, and the thistles have almost altogether disappeared. We were led to follow this course by carefully observing that thistles did not thrive in fence corners, while close beside the line of the rails they were rank and luxuriant to a great degree.

In our land thistles do not go deeply into the sub-soil; it is level, rather wet land, and the sub-soil does not seem inviting to them. Often in ploughing I have chanced to run the plough just over or under a long line of thistle roots, sometimes exceeding ten feet in length. On careful examination I found the roots to strike upward or sideways, never downwards, or rarely so. I also found by transplanting some of these roots, and entirely removing them from their original bed, that the stems died and became rotten, especially when severed from the parent stem; whereas, if allowed to be simply turned over by the plough, and not removed, but severed from the parent stem, they always thrived splendidly and increased wonderfully, especially after fall ploughing. I therefore abandoned ploughing in the fall altogether, as being worse than useless where thistles existed and summer fallow was intended the following spring; and by leaving the ploughing until about the fore part of June, or even later, the thistles had obtained complete mastery and a most rank growth, many of them showing for flower, and all several feet high. I now went at them with a vengeance, my strength increasing as their power of resistance decreased. They had fulfilled their mission, or nearly so, and were in flower and bearing seed, and so far were decreasing in vitality or power of recuperation. The land was rather hard and turned up rough, and one day's ploughing in hot dry weather in June destroyed millions. Some, however, lived on, and the next ploughing (without harrowing) totally cleared a field of 27 acres. I was then quite satisfied that to destroy Canada thistles you must not plough in the fall or early spring, but wait until the thistles were in bloom, and then ploughing as roughly as possible, and never harrowing until after the second ploughing, thus keeping the land as rough, as possible to admit of the greatest quantity of surface of exposed to the sun and dry wind. This course completely eradicated the thistles in that field. Afterwards I grew barley, the year following sowing wheat after the fallow in which I killed the thistles, and to this day that field is clear of these pests. C.

Silver Beet Again.

I have pleasure in informing my brother farmers that the silver beet sowed for seed to test practically the growth of seed in Canada, seems to promise an abundant yield. Frost or snow, so far, and heat, rain or drought, all seem alike to this hardy plant. During the last month of dry weather it never flagged, but kept continually green, and the seed appears to be ripening fast and abundantly. During the spring frosts not a leaf turned brown; nor did rainy, cold weather in the early summer, seem disagreeable to it in the least. If all goes well I shall have succeeded in growing six lbs. of seed from a small row of the plants, not more than 25 feet long, and that, too, without any planting out in the spring, or culture of any kind. Last fall the roots were simply covered with earth as protection during winter, where they grew, and when spring approached they were unearthed and allowed to do all else themselves. My anticipations may be sanguine, but I think this plant is destined to furnish an abundant supply of valuable manure for ploughing under, much better adapted than clover, and at a less expense, and at the same time better adapted for the feed for fall wheat, to force on its growth. I shall be happy to furnish gratuitously a small quantity of seed to any farmer who will sow it and attend to the directions, and take the trouble to write the result to the CANADA FARMER. C.

Forest Culture.

[Extract from an essay on the importance of forest cultivation in the United States, read by D. C. Scofield, at the meeting of the Northern Illinois Horticultural Society, at Rockford, Ill.]

We show by statistical records that the manufactured pine lumber cut from our forests and brought into our markets annually, amounts to several thousand millions of feet; that nearly a thousand millions are brought to the city of Chicago alone, besides vast quantities of lumber of other wood, all of which requires the labour and skill of nearly half a million of artisans.

That the wood industry of the United States amounts to three hundred millions of dollars annually. More than 150,000 acres of the best timber is yearly used for railroad sleepers alone. That the locomotives of the United States annually consume fifty-six millions of dollars worth of the article. That more than half the internal revenue is paid for wood. One-half the gold-bearing wealth of the nation is in her forests. That within the next fifty, if not within thirty years, the last vestige of the pine forests will be carried away, and other timber lands will have shared the same destiny.

Whence then shall we look for relief? From whence draw our supplies of materials

to build machinery, cities and navies, railroads, warehouses and wharves, and all the farm fixtures of a mighty people? Whence then will come the revenue and resources of wealth of the nation? But this is not all. Terrible as are the consequences of these wants, they are of small moment compared with the meteorological influences of climate and soil. The history of timberless countries in Europe, Asia, Africa, and our own country, is a fearful one. From high antiquity Egypt is known; but since the planting of immense forests by Mahomet Ali show-ers have been frequent and the country comparatively productive.

Wherever countries, once abounding with forests yielding all the luxuries and producing abundantly for all the wants of man, have been stripped of their forests, they have become comparatively barren, exposed to terrible hurricanes and tornadoes, to epidemics, famines and pestilences. Such was the unhappy fate of the Cape Verde Islands, once the Elysian of the ocean; but being stripped of their forests by their improvident inhabitants, have been the scene of terrible calamities.

HOW TO IMPROVE MUSTY WHEAT.—A correspondent of *Rural New Yorker* had a lot of wheat get musty in a pile. He says:—"I put it on my hop kiln, dampened it slightly with water, put a fire under it with brimstone on the stove. When it cooled off, I found the mustiness had entirely left it. We tried it for bread, and it made as good as any wheat.

WEED SEEDS.—The seeds of cockle, chess, and other weeds that are mixed with the screenings from the fanning mill, should be carefully prevented from getting mixed with the manure in the barn-yard. We once permitted a neighbour to run a few bags of grain through our fanning mill, and gave him the run of the barn for that purpose. When he had finished, and during our absence, he—doubtless with good intentions—scattered the screenings all over the barn-yard, so that the fowls might get the waste grain. This probably was intended as a sort of recompense for the use of the mill. Alas! we never regretted more than on this occasion the doing of a favour that resulted badly for ourselves. Our manure pile was thoroughly seeded with cockle and chess, and probably ten years of labour will be inflicted on us before those seeds can be eradicated from the field on which that manure was spread. We mention this circumstance as a warning to others, and also as a forcible reminder to all that weed seeds should be consumed with fire and utterly destroyed. Don't feed them to poultry; they won't eat cockle; and the seeds seem to last forever; by hook or by crook they will get into the fields somehow. Put them in the stove and you will have seen the last of them.