

Eradication of Canada Thistles

By R. S. SHAW, Dean and Director, Michigan Agricultural College



Canada Thistle

The ease or difficulty experienced in eradicating Canada thistles depends on the kind of soil and the character of the crops in the rotation. They propagate readily by root-stalks which run under the ground, they spread more rapidly and are, consequently, more difficult to eradicate in loose, open, porous soils than in heavy clays. In such crops are more favorable for their continuance than cultivated crops such as corn, beans, roots, etc., providing the latter are properly cared for.

I. Canada thistles can be completely eradicated in a single season by thorough summer fallowing, but this is an expensive system and should not be employed unless an entire field has been taken possession of so as to make it impossible to grow a crop.

II. The best method is to follow with two cultivated crops in succession, as corn after corn, with manure applied between the two crops if possible. Cultivate thoroughly, using three sweeps on the cultivator; these are cultivation points with wings and are from eight to ten inches wide, they can be attached to almost any cultivator with sweeps after the corn is too big for a two-horse rig. Check row corn if possible so as to cultivate both ways. If thistles are in patches which are not too numerous, give these spots more frequent cultivation than the balance of the field. The secret of success consists in keeping the thistles underground; this done, they must smother.

If two cultivated crops cannot be grown in succession and if the thistles are not all killed the first year, sow the clean portions of the field to grain and seed to clover or grass.

New Queen of the Dairy World

With a record of 1,068.34 pounds of butterfat produced in 365 days, Bannockline Belle Dekol, a five-year-old Holstein Friesian cow owned by Dan Dumick & Bro., Ohio, produced the new "Queen of the Dairy World." The wonderful cow produced during the year 27,404.4 pounds of milk, testing 1.86 per cent. fat. If made into butter her fat production would equal 1,323.25 pounds of butter or over 3 1/2 pounds per day for 365 days.

During the time that Bannockline Belle Dekol was in test she received nearly, if not all the time, more or less ensilage and alfalfa. When available she received roots and a mixed grain ration, the foundation of which was bran and oats. The grain ration was varied to suit the conditions of the cow; from 25 pounds in as low as 13 pounds per day and the estimated average amount of grain fed was 22 to 14 pounds daily. She was also given green food when it was available during summer season.

This cow is a wonderful example of the importance and value of good breeding. Her pedigree includes a long list of ancestors possessing high records. All Michigan farmers cannot possess animals of phenomenal ability but it is easily within the reach of all to improve their herds to the standard of profitable production by the use of pure bred stock. The bull is one-half the herd and the constant use of bulls of one breed will soon produce

Demands for Draft Horses.
Draft horses are in greater demand than light-weighted, but, for all that, must men prefer the roadsters. It is, however, doubtless, that they may have a few of a trotter among their flocks.

Cannot Raise Themselves.
The raising can be made a profitable undertaking, but it must be remembered that boys will not raise themselves. Nothing in this world is obtained with effort.

Canada Has Sufficient Coal for 6000 Years

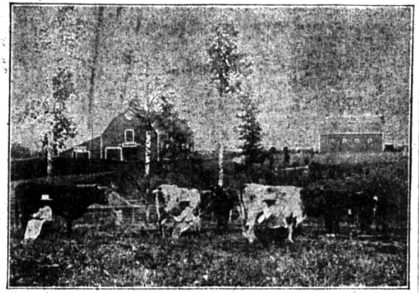
It Has Enough Agricultural Land for the Settling of Millions.

A report dealing with the coal resources of Canada has been issued by the Dominion Department of Mines. The estimates given are only based on what is known. In the western and northern regions, which have been little explored, there may be vast deposits of which nothing whatever is known at present. The officials of the department estimate that of bituminous coal there is in Canada 73 1/2 billion tons; of anthracite 461 million tons; sub-bituminous and lignite over 100 billion tons. The quantity of coal now annually mined in Canada is about 12 million tons. With an estimated quantity of unmined good coal of 74 billion tons, it would require 6,166 years to exhaust the supply. If the inferior grades were included, supply would last for 11,975 years. Of course the coal demands of Canada will keep on increasing, but it will be a good many years before the quantity of bituminous coal mined will equal present output of the United States mines. Their annual output is about 500,000,000 tons. At that rate it would take only 145 years to exhaust the estimated Canadian supply of good coal, and about 350 years to get to the end of the total supply. Along with the increasing population, made up of about four hundred thousand persons a year (and it looks now as if this number would be reached this year), one hundred and seventy-five thousand

the opening up of this rich field of agriculture, and it is a high class of agriculture, carried on by the use of brains, and where energy has not been endowed, it has become in that splendid air a case of inoculated energy.

The rapid advancement of railways makes the situation easy. Today one may be located thirty miles from one of the many branches of the different systems. A year from now, the whistle of the locomotive and the long train of cars may pass the farm, the elevator is but a short drive from the home, a splendid market is established, and all the advantages of an old settled community are at hand.

The prospects this year from an agricultural standpoint are exceedingly bright, and, relieved of untoward conditions, the farmer is already counting his bank roll, planning for more extensive operations for next year, and figuring on paying out for his farm. He is calculating what the increased value of his holdings, as a result of a successful crop, will add to his assets. Already some holds of wheat have been harvested, barley has been cut, and the yield is above his expectation. In fact, the feeling at the time of writing is that never in the history of any country on the continent has there been such a prospect of a large average crop all over the three central provinces of Canada, as will be harvest-



The Dairy Helps the Farmer in Western Canada.

being an estimate of the immigration from the United States for 1912, the consumption of coal will naturally increase. The agricultural districts of Canada have now become so well known throughout the world, and the vacant areas of splendid land is well so great that it may be expected that the numbers mentioned will increase from year to year, and it will not be many years before the immigration figures will reach the million mark.

It may be asked what is there to warrant this large immigration? With millions of acres of land, capable of producing twenty-five to forty bushels of wheat to the acre; or, if in oats, from forty to ninety, and even as high as a hundred bushels per acre, or the same splendid yields of flax or barley. There is ample inducement to attract these hundreds of thousands who are filling the present agricultural settlements and pushing forward into the newer settlements year by year, and leave room still for the hundreds of thousands who will follow. There remains not only the agricultural wealth of the country, but there are also the social advantages, the home-making privileges, apart altogether from the financial opportunities, there is the life and the energy born from the knowledge that the settler is more than a unit in the upbuilding, in the making of a country that will soon rank amongst the first in the nations of the world. There is no desire on the part of the writer to dwell upon the success that has followed the American settler in the Provinces of Manitoba, Saskatchewan and Alberta and the coast Province of British Columbia, or to speak of the thousands of individuals whose hundreds of dollars have made them thousands, but attention must be paid to the fact that these people have done well. They are following the path of their ancestors and their friends, who also are doing well.

Where, a few years ago, seemingly only months ago, there was nothing but the open prairie, or we speak of the more central portions of these provinces, the park districts, there are now well tilled and cultivated farms, large farms, too, and the herds of cattle. Cities and towns are the result of

the year. The railroads are adding to their already large mileage and have got ready for handling the crop thousands of box cars. The government agents and the railways are making arrangements for from fifty to six thousand extra farm hands in order that the crop may be successfully and quickly harvested, business men are laying in larger stocks than usual, real estate men are active, preparing for the rush of business that is sure to follow, and everywhere there is the note of optimism, which seems to be perfectly justifiable.

There is, as has been said, a vast area of the country still open for settlement and homesteading lying in the center north. Speaking of this part a writer, who made the trip when the crop was in its green stage, said: "Just now, the whole country is a beautiful bit, as it presents itself in full dress of living green, varied in shade, many places elegantly fringed and interspersed with plantings of shrubbery and patches of sweet scented flowers in rose, yellow, white, pink, scarlet, cardinal and purple. In traveling over the virgin soil, I have seen some of the most charming rolling prairies, sloping hills, deep green, mirrored lakes, aromatic flower fields, and natural parks that one could wish to hold the title is more than a unit in the upbuilding, in the making of a country that will soon rank amongst the first in the nations of the world. There is no desire on the part of the writer to dwell upon the success that has followed the American settler in the Provinces of Manitoba, Saskatchewan and Alberta and the coast Province of British Columbia, or to speak of the thousands of individuals whose hundreds of dollars have made them thousands, but attention must be paid to the fact that these people have done well. They are following the path of their ancestors and their friends, who also are doing well.

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Willing to Wait for Good Time.
A woman who for twelve years has conducted a boarding house in Chicago, and who would have been called the "boarders usually stay until they get married and then send some one to fill the place made vacant by matrimony, says she has never been disappointed because of smaller portions of meat by placing a neatly written note in the dining room which stated that the plate had never been used. There has never been a complaint among my boarders, and I hope there will be none. I am doing the best I can and complaint will do

no good. So please be patient. There's a good time coming and I want you here when it comes. The boarders are, taking the reduced rations and are "waxed," one of them says, "with shortened belts, for the good time."

Fits the Text.
"Johnnie," asks the teacher, "what do you think may be meant by the text, 'Into him that hath shall be taken away even that which he hath'?"

"I think Bill says it means fat, teacher," says one of the boys. "He says fat folks keeps a-gettin' fatter 'n' thin ones keep a-gettin' thinner, in spite of all they do."—Judge's Library.

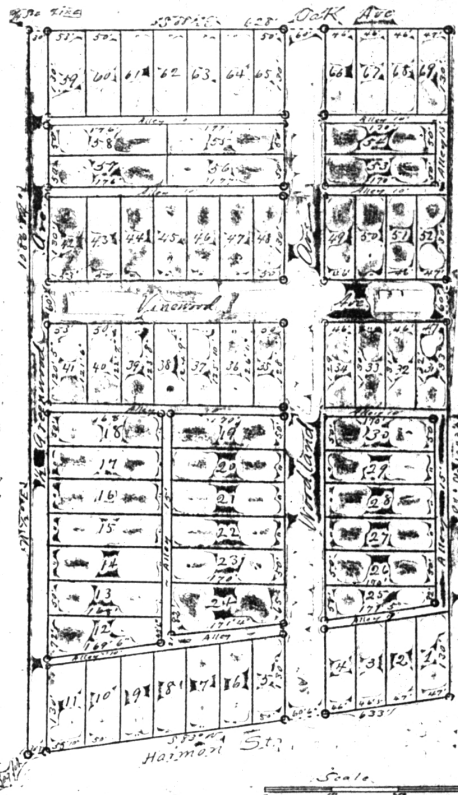
Never an Arbor worth showing to his kind.
Then up and spoke another member, who, prior to attaining the height of his civic ambitions, had been a petty official of the 'Varsity. "What do you 'ob, what 'arven't, 'arven't we? And 'ob about 'sawntun' 'arbor'!"

Technically Discussed.
"That statesman says he wants harmony." "Yes. But he is no musician. His idea of harmony is permission to do a perpetual wolo."

The Top o' the Mornin' Bir'gham Heights

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See A. Whitehead or George H. Mitchell for Particulars