FARM.

Nova Scotia Seeding.

Of wheat, White Russian and White Fife are the varieties sown here; of barley, some of the six-rowed varieties; oats, Banner, Sensation, Newmarket, Hazlett's Seizure; peas, Canadian Beauty, Prince Albert. Considerable of the best seed grain is imported from Ontario and P. E. I. We have generally had better results from seed grain that has been grown in this locality for one or two years. Seed grain of any kind should always be run through a "Chatham" cleaner before being sown.

Quantities of seed per acre sown: Wheat, 1½ bushels; barley, 2 bushels; oats, 3 bushels. Peas are seldom sown, except as mixed with other grain. Practically all of our grain is seeded either to timothy and clover, or to clover alone.

We are sowing more mixed grain than formerly, and have generally had very satisfactory crops—generally over 50 bushels per acre of oats, barley and peas. Beside this, we always sow a considerable quantity of oats, peas and vetches for green fodder; or if not all needed green, it is cured as hay. We find it necessary to have some kind of green fodder nearly all summer, after about the first of July.

Our soil being generally rather a sandy loam, and quite rolling, is not hard to prepare for seeding. Land that has been fall plowed is harrowed with spring-tooth and disk harrows, and finished off with a smoothing harrow. Too much importance can hardly be attached to the thorough preparation of a seed-bed.

We prefer first thoroughly fining the surface with spring-tooth and disk harrows, then sowing grain with the hoe drill; a few days after sowing, roll, and follow with a light smoothing harrow. The rolling first presses the particles of soil closely about the small seeds, and, by impacting the soil, aids capilliary attraction, thus giving a greater supply of moisture, while the light harrowing after rolling acts as a mulch and hinders evaporation. We have found rolling especially valuable in securing a stand of clover and timothy.

When seeding for more than one year (that is, where the land is to be left in grass for more than one season), we sow 8 to 10 pounds of timothy, 6 pounds of mammoth red clover, and 2 pounds of alsike. When seeding for one year only, we sow 3 or 4 pounds of timothy, and 10 to 12 pounds of common red clover; then the aftermath is plowed under.

Cumberland Co., N. S. C. H. BLACK.

Seeding Methods.

Some of the varieties of spring grains sown in this locality are: Oats, New Century, One Thousand, Siberian, and Cluster; barley, Mandscheuri, and a variety known as Dakota; corn, for silage purposes, Whitecap Yellow Dent, Northern Prolific, Bailey, and Compton's Early. Very few farmers in this locality are growing peas.

In selecting and cleaning my seed grain, an effort is made to keep the best of the crop by itself, and clean carefully, by running it twice through the fanning mill. The quantity of seed sown depends somewhat upon the variety. In seeding with oats, the quantity is rather better than one and one-half bushels per acre; barley, one and three-quarters bushels per acre. All my grain crop is seeded with clover.

My experience in sowing grain mixtures convinces me that larger yields can be obtained by so doing, and so the bulk of my spring grain is sown in this way.

In preparing my land for seeding, the three-year system of rotation is followed, which rotation does not include pasture. The grain crop follows the corn, root and potato crop, which has been grown upon clover sod plowed in the fall and manured the following winter. During the growth of the corn and root crop the land is kept thoroughly clean by continuous surface cultivation, and after the crop is removed the land is not plowed for the following grain crop. It is cultivated in the fall and again in the spring with the spade harrow. The mode of cultivation in spring is as follows: Cultivate with spade harrow or spring-tooth cultivator, then harrow with iron harrow, sow with seed drill, roll and thin, go over the land with a weeder, used also in corn cultivation. My reasoning is this: When clover sod has been fall plowed, manured in winter, the manure (the straw of which has been all cut) worked into the surface soil in spring, and the land subjected to thorough cultivation during the process of the growth of the corn and root crop, that surface soil which has been constantly stirred during the summer is the best portion of the soil for receiving the grain and grass seeds the following spring, and giving them a ready start; therefore, the surface soil should never be plowed, and thus turned under. Any system of fall and spring cultivation which will enable us to retain the surface soil on top should be adopted. So long as we can get a fine tilth sufficient for a seed-bed, I find the grain crop will stand up very much better if the under soil is comparatively solid.

An experience of three years' trial in plowing a part of my corn and root ground in the fall, and just cultivating the balance of it in the fall and again in the spring, as above indicated, has shown me that the grain yield is better; it does not lodge so readily, and a much better stand of grass seeds is obtained by surface cultivation than by plowing in the fall.

It may be added that, although in a general way the three-year system is followed, yet I find I do not require one-third of my cropping land in hay, so I sow the whole field to clover all the same, and after harvest allow the stand of young clover to grow right along till fall, when it is plowed shallow and sown to a grain crop the following spring, by cultivating the surface with the spade and iron harrow before sowing. I find, however, that upon the quite loose soil which the fall plowing gives, the grain crop lodges to a greater extent than that which is sown upon the corn land prepared by surface cultivation. To my mind all grain crop does better upon fall plowing than if the land is left till spring before being plowed.

In sowing clover and grass seeds for a single crop of hay, to be plowed afterwards, I sow a mixture of six or seven pounds red clover, two of alsike, and four pounds timothy per acre; or in place of the timothy, what is better, four pounds orchard grass. Sow the seeds with the seed-drill, depositing in front of the drill shoes (I use a shoe drill, with three links dragging behind each shoe), after which the grass seed is buried, by rolling first, and then going over the field with the corn weeder. In sowing the orchard grass, it must, of course, be done with a grass-seed sower, as the attachment for seeding on the seed drill will not sow it.

THOS. McMILLAN.

Huron Co., Ont.

W. W. Hubbard.

Corresponding Secretary New Brunswick Farmers' and Dairymen's Association.

New Ontario Problems.

To the Editor "Farmer's Advocate":

Sir,—I have to thank you for the interest you have taken in our district. As regards difficulties to be faced up here, in my opinion spring and fall frosts are the greatest. Guided by my experience of last year, I shall this spring take care that all delicate crops—such as tomatoes, squashes, early potatoes, etc.—are so placed that the early sun cannot reach them. I found that where crops were equally exposed to the frost, those which were sheltered from the direct sun rays in the early morning were little damaged, whereas those upon which the sun's rays fell direct were ruined. The frost must be thawed out of the foliage by the warmth of the atmosphere before the sun touches it. I shall, therefore, protect from the east side as well as the north.

Our troubles are flies, bad roads and speculators. The late Government did a great deal for us as regards the road question, but were not, I think, discriminating enough. For example, it is a fact that there are settlers within two miles of New Liskeard who have nothing but a "jumper" trail! In my own case, although only five miles from Liskeard (the business center of the district), it is a full day's journey to Liskeard and back, one way empty and one way loaded, although the load rarely exceeds 500 pounds. The alternative is to carry stuff in on one's own back.

The fly question will, of course, partly settle itself as the country is opened up and drained; but the prospects of an early riddance from the pests are at present somewhat gloomy, owing to the vast amount of land held by speculators.

In my own township, only six miles square, there are over 30 farms known to be held by speculators, who, of course, are doing no clearing or cultivation. These untouched farms not only harbor the flies, but perpetuate the danger from fire; apart from the fact that bona-fide settlers are kept out, being unable to obtain land.

Then there is the old difficulty of stumps. Cannot someone invent a suitable stump-puller, which will be cheap enough for the average settler, and strong enough to pull, say, a fifteen-inch stump? A small fortune awaits the inventor. GEO. W. WEAVER.

Temiscaming District.

Treatment of Mucky Land.

In looking over a recent issue of the "Farmer's Advocate," I noticed on page 329 an article entitled, "Preparing for Seeding." The latter part of this article gave me encouragement to relate some of my experiences with black or muck land. I have a piece of muck peat land that is from three feet to twenty feet in depth. After working hard to clear it up from soft maple, elm, and tamarack, and then prying up immense quantities of black ash trees out of the muck, I could not succeed in getting a crop that paid me. I found that by seeding down to timothy, I could get a fair crop of corn the first year (if the frost did not catch it), or beans, but the second crop of anything that was sown did not pay expenses. I tried seeding down with timothy after the last time of cultivating the corn, but some years the season was too dry, and I did not get a catch.

After putting in a tile drain, I noticed that where the clay had been thrown up and become mixed with the muck the hill of corn that was on it was always far better than on any other part of the field. This led me to try an experiment. In the fall of 1900, having a little slack time, I got the township two-wheel scraper, and put the hired man and team drawing clay from a hill that happened to be close by. I plowed the hill before scraping, and put on one large scraperful to about every six or eight feet of muck land. This was a lot of work, but mostly for the horses, but I believe it will pay me. I sowed it that fall to Dawson and Clawson wheat, and got a return of forty bushels to the acre, then seeded to clover and timothy, getting two to three loads of hay to the acre. The following spring I broke up the meadow, and planted it to beans, which turned out forty bushels to the acre, for which I received $1.25 per bushel. Again I seeded to wheat, but the wheat was badly winter-killed. On account of having a good catch of timothy I let it stand, and I cut 1½ tons of hay to the acre.

To follow up with this rotation of wheat, hay and beans would seem pretty hard on the land, but I had to work hard for this land, and I intend to make it work hard for me. Do not be afraid of putting on too much clay, for I notice that it has a tendency to conserve the moisture, and that there is far less risk of frost. If the clay is put on pretty thick you will not be troubled with so many weeds. If you can get the clay within a quarter of a mile I think it will pay well to haul it, and the work for man and team is not too hard. Hoping this will help someone who is situated as myself.

EASTGATE HUMPHREY.

Protect the Producer.

To the Editor "Farmer's Advocate":

Sir,—The recent references in the Canadian Associated Press despatches to the adulteration of Canadian goods offered for sale in the British market, deserve more than passing notice. Careful inquiry elicits the information that such adulteration actually takes place, and, further, that canned goods offered are frequently not up to the sample offered. The Government has prosecuted in a number of cases, but the Ministers confess themselves helpless in the matter (the evil being so widespread) unless the Canadian people as a whole declare their practical earnestness in the matter. Such a state of affairs is simply deplorable, and the producers of this country must be up and doing, or see the labor of many years come to nothing.

Those whose business it is to look into such matters simply must "find a way or make it," to protect the toilers in this matter. Clearly it is useless for the Canadian producer to produce honest meat or fruit or tomatoes, or goods of any kind, if a few exporters or middlemen have the opportunity of polluting his goods, or of misrepresenting him on the market. Inevitably the producer's eye must be on his financial returns. Few can afford to produce for mere amusement, and in this instance we have a condition of affairs whereby Canadian products have been condemned in the world's greatest market. The British buyer refuses to be cajoled. He knows what he wants, and no singing of loyal songs or sentimental declarations on our part can persuade him to buy what he doesn't want.

Our duty is plain. It is to see to it that every can of goods and every ounce of maple syrup, etc., and every pound of cheese or butter sent out is up to the standard it is sold for, and to see that our goods on the market are given a fair field. Common sense demands this much at least. Let inspectors be appointed in some such way as treasurers are appointed for large concerns. Let each mistake on their part mean financial loss to the parties making it. This is not a matter of mere politics, but a matter involving the living and honor of the ten-thousands who compose our working and producing classes. Let this matter be discussed at every gathering of farmers. Let petitions be drawn up and signed by all parties interested, demanding that the authorities take stringent measures to eradicate this violent moral disease, and the day will not be distant when no one will dare to misrepresent the producers of our country. There are difficulties in the way, but it is the business of statesmen to overcome difficulties.

J. M.

Microscope and Reading-glass.

I have received the reading-glass and microscope (premiums), and would say that I am well pleased with them. Wishing you every success.

Peterboro Co., Ont. J. C. MANNING.