

The Dominion Grange.

The Dominion Grange met in London, Ont., on the 10th, 11th 12th of February. A large number of delegates were present. We hoped in this issue to give a full report of the meeting, but could not do so, as we did not receive the official report from the secretary until it was too late.

A full report of the proceedings of the Experimental Union will be given in our next issue.

Varieties and Cultivation of Spring Grain.

BY J. C. SNEILL.

Different kinds of soil require different treatment; also varieties of seed which may succeed well in some sections and on some soils may fail to give good results on other soils. The character of the soil in this county (Peel) is principally clay loam. The land is generally slightly rolling, affording good surface drainage. Very little under-draining has been done; so little, indeed, that it might fairly be said that nothing worth mentioning has been done in that line. Not because the land in this county does not need under-draining—much of it, I am persuaded, would be greatly benefited by it—but it is regarded as an expensive work, and the farmers as a rule feel that they have no money to expend in that sort of improvements. Personally, I am fully convinced, as I believe many others are, that our lands would be greatly benefited by under-draining; yet, like the great majority of my brother farmers, I have to confess to being behind the times in regard to this important work.

There was a time, thirty or forty years ago, when winter wheat was the staple production of this county, and yields of thirty to forty bushels an acre were common, but that day is gone, and though a considerable acreage is still devoted to winter wheat, the preparation for which is almost uniformly a summerfallow, yet it is considered an uncertain crop and is being less cultivated as the years go by.

Spring wheat has only been a partial success with us, and farmers are always timid about giving much land to it. Some years it does remarkably well, yielding from twenty to thirty bushels per acre, while in other years we do not get more than ten to fifteen bushels. Last year spring wheat promised well, as it grew, and we looked for twenty to twenty-five bushels, but many farmers had to report a very much lower average when threshing day came.

The favorite variety of spring wheat for the last few years has been the Colorado, an excellent variety as to quality, and for the past two or three years it gave good returns, but the crop last year was light, caused, we think, by something like a blight, which prevented the grain filling as it should.

Fine samples of White Fife were brought here last spring from Collingwood and from Algoma, and the crop promised well, but the midge and rust shrunk the grain till it was less than half what was anticipated at one time. Wild Goose, a variety which has been cultivated here for some fifteen years and has never been a failure, is still grown to a considerable extent. It is a coarse variety, and the millers and buyers have discouraged its growth, but the farmers have stood by it because it has stood by them, in that they always get a fair crop of it, and the buyers this year have enquired for it, and were willing to pay better prices than usual for it to mix with other sorts to produce a grade of flour for which the millers have found a market. It is very

difficult, however, to find clean seed of this sort, nearly all of it being mixed with oats, and, what is worse, tares, which it is almost, if not quite impossible to separate from the wheat by the use of any fanningmill known to us.

The preparation for spring wheat is generally either root ground of the previous year, or land from which a crop of peas has been taken after sod, or land which has been cultivated for rape to be eaten off by sheep. The land is plowed in the fall, a top dressing of manure is given before the snow comes, and in early spring, the earlier the better, if the land is dry enough to work, is cultivated either with one of the spring-tooth cultivators, now so common, or with a cultivator having rigid hoes with narrow chisel-shaped points. For my own part I prefer the latter, especially for our soil where we have some high knolls on which the land gets hard and baked, and which needs to be thoroughly broken up in order to make a satisfactory seed bed. The harrows follow the cultivator, after which the seed is sown with a drill at the rate of about two bushels per acre, and if the seed is fairly well covered we prefer to leave it so, but if not, a light harrowing is sometimes given to complete the work. If the land gets very dry before cultivating it and breaks up rough, we run the roller ahead of the drill, which makes a very nice seed bed.

Barley has for many years been the principal grain crop cultivated in the county of Peel. The Bureau of Statistics shows that the average annual production of barley in Peel is 895,000 bushels. Indeed this county has had the reputation of raising perhaps more barley, and of better quality, than any other section of Canada, and a few years ago when prices were high many of our farmers made a specialty of this, and grew very little else. In those days the yield was often as high as fifty bushels per acre, and when the price was sometimes as high as 75 cents per bushel, it was such a profitable crop as to tempt men to sow it where their judgment told them it was not wise to do so. The result of continuous cropping with one sort of grain was, in a few years, just what one might reasonably expect, that the yield began to fall off, nearly everything raised upon the farm was being sold off, very little stock was fed, the sheep were all sold as there was no pasture for them. Cattle were not kept, more than a few cows to furnish milk and butter for the family. Barley straw made a poor return to the land for what was taken of it, and consequently the yield dwindled down to about half what it used to be, and now it is doubtful if the average is more than twenty bushels per acre. Since the McKinley tariff came into force, and, indeed, before that, prices have shrunk in about the same proportion as the yield, and our farmers are almost at a standstill wondering and uncertain what is best to sow in order to make the best return for their labor.

I am of the opinion that a comparatively large area will yet be devoted to barley and that to a limited extent it may yet be profitably cultivated; but in order to do this there must be better preparation of the soil by the application of manures or the plowing in of clover, and the ambition of the farmer should not be to get as large an acreage of barley as he can, but to so treat his land as to get a larger return per acre from a smaller acreage.

The common six-rowed barley is the only sort that has been grown here, except that a few have tried the samples of two-rowed sent out from the Ottawa Station; and while some of these in the hands of good farmers on good soil have produced a satisfactory yield of excellent quality, in most cases the barley has proved too light in weight to meet the demands of the English market, and in my humble opinion it is very doubtful whether we can expect to raise this variety in sufficient quantities of standard weight to fill the bill for the market for which it is intended. I would not discourage the trial, however, but would advise our farmers in this matter at least to go slow and not try it on a large scale until it has been demonstrated on a smaller scale that two-rowed barley suited to the English market can be successfully grown here. There is some satisfaction in knowing, however,

that if it does not suit the market for malting purposes, it may be profitably disposed of by turning it into beef and pork, fit for the English or any other market, and no doubt it will make good manure, which is as good as money in the long run. The preparation of the soil and the cultivation practised is identical with that described for spring wheat. Where wheat is not grown, the root ground and that on which peas or oats, or even fall wheat has been grown the previous year, is considered a good place to sow barley; the land is always plowed in the fall, and though the crop need not be so early sown as wheat, yet many of our most successful barley growers sow it as early as they can get upon the land, if it is dry enough to work right.

I am fully convinced from experience and observation of all the circumstances and surroundings of the Canadian, at least the Ontario farmer, at this time, and I would like to emphasize it with all the force of words, that the sheet anchor of farming in this province for the future is to be the raising and feeding of live stock, and to this end I hold that our attention ought to be mainly devoted to the raising of such grains as oats and peas for feeding purposes, and if we have a surplus to sell there is generally a market for these at paying prices.

To my mind there is no grain so safe for feeding to all kinds of stock as oats, and for developing bone and muscle in young and growing stock it has no equal, while as a mixture, combined with peas, it makes the very best fattening ration we have. Let us, then, cultivate more land for clover and grass, more oats and peas, and less wheat and barley, and we shall be more independent of government tariffs and better off every way.

The varieties of oats which have been most successful of late in this county are the Egyptian, the American Banner, the Australian and the Probestier or German oats. All these have done well for us, though the Banner has had only one year's trial, but it showed a better yield in weight than the others. The first named is a very plump grain, without any long tail ends, and should be ground or chopped before being fed to horses, as they fail to masticate them and will in large proportions pass through the animal whole, and will germinate and mix with other grain where the manure is applied or drops in the fields. They are excellent for grinding into meal, being so full of meat, and, I think, on the whole, it pays to grind oats for all stock except sheep. The preparation for oats may be more varied than for any other grain. As a rule I think the plowing should be done in the fall and the sowing as early in the spring as the condition of the land will permit. The cultivation may be very similar to that described for wheat or barley, but we have seen splendid crops of oats on sod that has been plowed in the fall and the seed sown either broadcast or with the drill and covered with a chisel-tooth cultivator—a sharp toothed diamond harrow. The spring-tooth harrow no doubt would do good service in this case, and as a rule we count on a fair crop of oats with more certainty than on any other grain.

Peas are grown in this county to the extent of about 275,000 bushels annually, and are considered a very valuable crop, one that is not exhausting to the land and that has a good effect upon the soil in keeping it clean and leaving it in fine condition for the succeeding crop. As a fattening ration I think we have no grain to compare with peas, and I do not think even Indian corn is its equal in this respect. As to varieties, I believe that what is called Golden Vine has stood the test of years better than any other, though some of our farmers claim that the Prince Albert gives a better yield, but the straw of this is coarse and not so valuable for feeding purposes. Peas are almost uniformly sown here on sod plowed in the spring, which may be pastured with sheep till the other seeding is done, and we often have good crops of peas sown as late as the 20th of May, but we have seen extraordinary crops that were sown early in the spring on sod that was plowed in the fall. The only cultivation given in either case is to sow either broadcast or with the drill and cover with a spring-tooth cultivator or the harrow.