

Swindlers Amongst our Farmers.

During stringent times the incentive to obtain money under false representations becomes specially strong, and the classes of the community which are least organized to protect their interests are most liable to become the greatest dupes. In earlier times, when wealth was mainly confined to the great centres of population, swindling in rural districts was little known; but now, our wealth being more widely distributed, the temptation to ply nefarious trades outside the suburbs of cities becomes proportionably great.

The country is now swarming with agents in all departments of trade, some being reputable and others disreputable, and it is not always possible for the farmer to draw a sharp line between the two extremes. In the absence of organization, his best plan is to become acquainted, through the press or otherwise, with the reputable suppliers of all his wants, dealing directly with them, and refuse to enter into any transactions with those who are not duly credentialed as their representatives. It is the policy of many smooth-tongued agents to complicate matters beyond legitimate bounds, and then attempt to force the farmer's signature to documents which he does not clearly comprehend. Such is the character of many documents signed by farmers, being sufficiently verbose to guard the agents or their supposed principals from liability under the bonds.

Canadian Grains at the Colonial Exhibition.

Prof. John Macoun, the distinguished Canadian botanist, and author of a work on "Manitoba and the Great North-west," is at the Colonial Exhibition and is in charge of the botanical and natural history department. He has been interviewed on various questions relating to the department under his control, and the following observations of his appear in the Farmer's Gazette:

"It is unquestionably the display from the Dominion. The grasses and grains are excellent. You will see here some first-rate samples of the hard wheats of the North-west. And people should know why they are hard. It is not due to the variety, but entirely to climatic influences. If you sow a soft variety of wheat in the North-west, you will find it turn out a flinty grain, for the absence of moisture and general dryness of the autumn necessarily make it so. You will notice also in the North-west samples as many as three and four grains to the fascicle, and if we had samples from as far north-west as latitudes 56 to 59, you would find five and six to the fascicle. In Ontario samples you will find but two. Hence in the North-west the wheat yield of a fair field rises to so high an average. Ontario, Nova Scotia, Eastern Canada generally, and British Columbia, have also a good collection of their wheats on exhibit. Some of the Quebec samples—especially those from Little Metis—you will find wonderfully like the wheat growth of Manitoba; indeed I find that the wheat grown in Nova Scotia and Northern Quebec much more largely partakes of North-western characteristics than the growth of Ontario. Then we have good winter wheat from Nova Scotia, New Brunswick, Quebec, and Ontario, but not from the North-west, for practically none is grown there."

With regard to the possibility of great development in the export trade in Canadian wheats, the professor thinks that depends upon circumstances. "If it can be shown beyond question (he said) that wheat can be sent across the Atlantic without imbibing moisture on the voyage, then there is; but that has to be proved. The very essential feature of the North-west grain is, of course, its hardness, and the admission of any moisture must lessen, if not destroy its superior value. I have my fears as to the possibility of excluding moisture, unless, of course, the grain were shipped in hermetically sealed tanks, and I am therefore inclined rather to look to the export flour than to the export wheat trade, the grain being ground in the North-west itself. There is no question as to the possible milling facilities there. Look at Rat Portage, on the Lake of the Woods, midway between Port Arthur and Winnipeg. It is directly on the main line of railway from the North-west to the seaboard, and possesses water power and natural facilities second not even to those of Minneapolis. As to the demand for the flour here, there can, I think, be no doubt whatever on that score. It is flour of great strength, and will take therefore a great deal of water. This is, of course, of great importance to the baker, for he can obviously make so many more loaves to the sack of flour.

"The barleys and oats of Canada are also well represented. We have specially fine samples of barley from Eastern Canada, whence the Americans get large quantities for their malting. They prefer it, indeed, to their own, from the fact that it is grown farther north, where we find in happy combination the two great essentials to good barley—moisture and coolness. Hence, a large part of the North-west is, I think, too dry for first-rate barley growth. You will see that most of the samples shown from the North-west are poor as compared, for instance, with the growth of Eastern Canada. But, in addition to the North-western wheat lands, to which this remark applies, there are at least 100,000,000 acres in the North-west outside the limit of successful wheat growth that will yield enormous crops of barley. The barley of the Peace River district, in latitude 58, will weigh 57 lb. to the bushel, and was declared by the American authorities at the Philadelphia Exhibition to be 'as fine as the fattest of English barley.' Then there is the Saskatchewan Valley, and round Prince Albert, and away to the north—this is the real home of the barley. Much the same applies to oats, which are grown all over Canada, but in better form towards the north than the south. There is a fine collection of oatmeals in this minor trophy, prepared by one Canadian firm; and it is very clear that the use of the meal is largely extending among the people of Canada. Then the peas shown are excellent, particularly those from Ontario, where we have limestone soils well suited to their growth. The North-west will also, I believe, be noted for its growth of peas; for the ground there is full of lime and gypsum, and well suited therefore to leguminous plants.

"Then we have also good samples of flax here from the North-west, and I maintain that this is prospectively one of the best products of the North-west; for its possibility of growth is practically inexhaustible. Its culture is ex-

tending, and will, I hope, extend even more rapidly in the near future. The fibre of the plant is of the very best quality for the making of paper and other material, and its growth will, I firmly believe, open up a great manufacturing future for parts of the North-west in the supply of such hemp as now comes to England in such quantities from Eastern Russia, to which the Canadian North-west is climatically similar."

Harvesting and Storing Potatoes.

Potatoes cannot be dug too soon after the tops wilt, providing the weather is favorable; but if the weather is damp, it is better to let them lie a while than to harvest them. A plow or a potato digger is the best harvester in ordinary field culture, where 150 to 200 bushels per acre is considered a good average crop, but under a more intensive system of culture, where 500 to 600 bushels per acre are frequently obtained, nothing surpasses the potato fork for clean and quick harvesting. One special advantage of the fork is that, when a good hill is found containing a large number of medium-sized potatoes, these can easily be set apart for seed. Very few farmers are aware of the immense advantages to be derived from selecting seed potatoes in this manner.

Of the two methods of storage, the pit and the cellar, each has its advantages and disadvantages. Potatoes stored in the cellar are handier and safer, as a rule, than those stored in pits; but when success is completely attained in the pit, the potatoes come out fresher and better flavored than those kept in the cellar. Potatoes should be put in the cellar if the weather does not permit their being thoroughly dried after harvesting; but care must then be taken that they secure thorough ventilation and a low temperature, being also turned occasionally, especially if they are placed in deep heaps.

In preserving potatoes in pits, various points should be observed, amongst which may be mentioned the prevention of dampness, frost, heat, and premature germination, and the method of pitting which will secure these ends will be the best. Dampness, in the first place, is prevented by putting them away in a dry condition, and secondly by preventing the ingress of moisture. The latter is secured (1) by thorough drainage about the pit, and (2) by warding off the rain. Heat and moisture cause germination, fermentation, and rot. Sprouted potatoes are neither so nutritious nor palatable for food, nor so productive for seed. The direct heat of the sun should not descend upon potatoes, while being harvested, for any considerable length of time; this impairs their flavor, but improves them for seed. Potatoes for sale or for table use should therefore be placed in small piles shortly after being dug, and covered with straw or potato tops. Here, in favorable weather, they will be kept in the best condition for pitting.

It is very improbable that the common practice of covering potatoes is the best method. Even being placed in heaps when dry, potatoes give off heat and moisture which are absorbed by the straw that is usually placed over the pile. It is true that this heat and moisture can be carried off by proper ventilation, but it is questionable if this is the best method. Based upon these principles, three experiments