

cultivator in the spring and the grain sown immediately thereafter.

It is not usually advisable to disturb the soil with a harrow after the seeder has gone over the field in the spring, especially is this true if grass or clover seed has been sown with the grain, as should almost always be the case in Eastern Canada. If the soil is very dry, rolling immediately after seeding is advisable, and even more satisfactory results may be anticipated if, after rolling, the ground is scratched with a light, slant-toothed harrow. If, however, the weather is rather uncertain or if the land is of a character somewhat heavier than what might be called light loam, it is usually advisable to delay rolling until the grain and grass seed have made a fairly good start, when the rolling may be done. This should be done when the surface is hard or when no rain has fallen for a week or ten days. Passing over with a roller breaks the crust, makes a mulch on the surface, and very materially benefits the crop both at the time of doing and for some time thereafter. This, of course, is the last cultural operation that can be performed on the grain crop where grass seeding is followed regularly with every cereal crop as it should be.

Ottawa, Ont.

J. H. GRISDALE.

Making over Machinery.

Editor "The Farmer's Advocate":

There are plenty of farmers who could save themselves many dollars and many hours' hard work, if they would turn old machinery into something useful. For instance take an old seed-drill which has not been worn too much. It is mostly the gear of a seed-drill that wears out first, the cultivating part is generally in fair condition. Take off the grain box, and all the parts that do not interfere with the cultivator parts. Fasten an old seat on it, take off two hoes and divide the rest up for cultivating two rows of corn. Buy new points for the teeth, six-inch ones for the two centre ones and three-inch ones for the outside. By using the narrow ones on the outside you will not be so apt to cover the corn. Take the teeth to your blacksmith and get him to drill the holes to suit the points. When your corn gets up high, raise the double trees up to the tongue and make a neck-yoke with the ring for the tongue on the top side, instead of on the bottom, as they generally are, so as to tilt your machine up high in front and it will allow you to go through your corn a few times longer. The common ten-hoed drill can be made to cultivate two rows of corn planted from 30 to 32 inches apart, which is the width we plant our corn. I don't mean to say that this cultivator will be as good as the regular corn cultivator. But it can be made do for a while.

When the cultivator is ready, make a marker for planting corn in hills to suit your cultivator and attach it at the back of the cultivator, so that the old seed-drill may be used as a corn cultivator and marker. It will be much easier riding doing the marking than walking. Help is so scarce, one has to scheme all he can to save all the steps possible, and with all his scheming, if he runs a farm to make it pay as all farms should he will find he has plenty to do.

I give this experience for those who desire to get started in the corn business, and haven't the money to buy all necessary implements at the start. In my opinion if corn growing is started rightly, it will not be long until the grower will have the money to equip his farm with all necessary machinery.

Dufferin Co., Ont.

C. M. HAND.

Spreading Manure.

A correspondent advises those who do not own a manure spreader to dump the manure from the wagon in very small piles, and spread it by means of a very heavy set of drag harrows. We have seen this done many times, sometimes with success and others with failure. The piles must be very small, close together and many strokes of the harrows are often necessary, and it is generally required to use the fork to some extent. However, harrowing does good where practiced on manure spread from the wagon or from the heap with the fork, and, of course, the harrow may be used to some advantage in spreading from small heaps.

The Dual Purpose M.P.

By Peter McArthur.

The parliamentary discussion of Mr. Burrell's "Dairy Industry Act" has offered a surprise as well as new light. I was surprised that one of the great arguments against free wheat was not used against the proposal to permit the manufacture of oleomargarine. It was urged that if Canadian wheat went across the border, we would be short of bran and the thought of cows without their bran mashes almost brought some legislators to tears. But if we allow oleomargarine to take the place of butter what shall we do for butter-milk? As an exhilarating beverage butter-milk is both moral and nutritious and "In the cold grey dawn of the morning after" many prefer it to the insidious John Collins. I am surprised that no statesman urged the claims of buttermilk when supporting the bill. But the most interesting thing about this excellent measure was the light it cast on the dual-purpose member of Parliament. The character of the opposition to it demonstrated clearly that although the dual-purpose cow may be a possibility the dual-purpose member of parliament is a flat failure. After he has been elected he goes to Ottawa feeling proud of the fact that he knows every farmer in his constituency by his first name and it is his honest intention to represent them vigorously as far as is consistent with a broad and statesman-like view of the affairs of the country at large. But presently some promoter comes along with a scheme that is rich in campaign fund butter-fat and he promptly hustles around to the cream spout of the government separator and as Wordsworth so beautifully sang in the old Second Reader:

"He takes his little porringer
And eats his supper there."

Observant farmers are about convinced that the dual-purpose member of parliament is of no use to them.

It is beginning to look as if Mackenzie & Mann had stolen a march on the people of Canada. They have placed the nation in a position where the government must give financial assistance or the people will suffer losses and all kinds of calamities. There are many instances in American finance where shrewd promoters managed to involve banks or financiers so deeply in their schemes that they had to support them to the end or lose all they had already advanced. But I have never heard of a case where the scheme was worked on a government. But that is what appears to have happened to Canada. The country is so deeply involved that it must help to carry through the Canadian Northern. And neither political party can take a "holier-than-thou" attitude in the matter. Provincial governments of both political complexions have guaranteed the bonds of the railroad and in Ottawa both parties when in power have given assistance. And neither party when in opposition has made an effective protest. Both parties are to blame for the present situation, and the best thing they can do is to get together and find some way out. They will both have to do some ingenious explaining when the next general election comes around. Our dual-purpose members of Parliament have been trying to serve both the people and the corporations and the result is far from satisfactory.

One suggestion that is being made by papers on both sides should be stamped out at once. It is suggested that the true solution of the difficulty is public ownership of the C.N.R. I am a believer in public ownership and for that reason I do not want to see a start made with a railway that is in difficulties. If we are going to take over a railroad let us take over the C.P.R. which produces both dividends and melons. In its present state the C.N.R. would be an intolerable burden to the country—especially since the Railway Commission has ruled that freight rates must be governed by the service rendered rather than by the amount invested in the railway. It would be many years before the C.N.R. could be made to pay and it is just possible that the papers that are advising public ownership are unconsciously playing into the hands of Mackenzie & Mann. Having taken their profits from the work of construction they may be quite willing to unload the railroad on the public. But the difficulty that the city of Toronto is having with this firm in trying to arrive at a purchase agreement for the street railway,

shows what we might expect if the government tried to take over the C.N.R. The "intangible assets" would be placed at a fancy figure and a true valuation of the property would be almost impossible. No matter how you look at it, the C.N.R. situation seems to have many sides to it—all bad.

Perhaps the most amazing statement ever made by a Canadian member of Parliament is that which Levi Thomson, M.P. for Q'Appelle, Saskatchewan made in a recent number of a Western publication. Speaking of campaign funds "used for legitimate purposes" he said:

"I fancy the public generally do not understand what a large amount is required for that purpose. I would estimate the amount at \$10,000 for each ordinary rural constituency in a Dominion election, that is \$5,000 for each candidate. The question now comes up, by whom is this amount to be paid—by the candidates, by the electors, or by outsiders? I am afraid that a very large percentage of the electors expect the greater part of that amount to be paid by outsiders, and I fancy that the general public expects that the amount so contributed will be made up by those who have axes to grind."

You will notice that he speaks only of "legitimate expenses." What would the amount be if the illegitimate expenses were added? I own that Mr. Thompson's statement gives me a shock of surprise. I had heard the expenses of a candidate estimated at \$3,000 and although I was convinced that the amount was well within the mark I refrained from mentioning it for fear that no one would believe me. But here is a member of the present parliament, who has been through the mill, who places the figure at \$5,000. If that "legitimate" money is contributed by outsiders do you wonder that we have dual-purpose members of parliament? They would not be human if they did not show gratitude to those who made their election possible. And as that gratitude usually takes the form of legislation granting special privileges of some kind it is easy to trace all our ills to the swollen secret campaign funds of the political parties.

But I am unable to see how the "legitimate" expenses of any candidate can amount to so much. If they do something must be done to simplify our electoral system. As matters stand no laboring man or farmer can afford to represent a constituency in parliament. It would cost a farmer candidate the price of his farm if he wished to pay his own expenses, and if he did not pay them he should not be in parliament. Most people imagine that a few hundred dollars cover all expenses of a candidate, but Mr. Thomson's statement to the contrary is very explicit. If these expenses are legitimate they should be paid out of the public funds for our government is a farce unless every man of ability has an equal opportunity to serve his country. It is beginning to look as if campaign funds and the management of campaigns should be investigated thoroughly. If we were rid of this means of securing secret influence we would soon be rid of the whole incubus of special privilege. And we would be rid of the unsatisfactory dual-purpose member of parliament.

Avoid Mixing Malting Barley.

Most of the barley which is grown in this country at the present time is used for feeding purposes, and we believe this is as it should be. The more grain fed on the farm the greater the chances for profits at the end of the year, but for those who still grow barley for malting purposes a few short rules as laid down by the United States Master Brewers' Association might be of value.

For malting purposes mixing and blending of two or more distinctly different types of barley for improving the color, increasing the weight, or any other purpose should not be practiced, nor should the mixing of the same types of barley from different localities where, due to different climatic and soil conditions, changes have been created which are often responsible for an uneven growth during malting. Brewers also object to the mixing of light-weight, immature barley with a heavy, well-matured barley of the same or different type to improve the color of the latter, or to get a better price for the former. They also object to the mixing of all barleys in any stage of unsoundness with the sound barley in order to cover up the deficiencies of the former. It is also bad practice to mix barleys grown in different seasons, and never should the mixing of seeds, screenings, skimmings or other foreign substance be practiced with malting barley for any purpose whatever. Malting barley should be mature, sound, of good color, should germinate 92% or more, should not contain more than 6% screenings, and not more than 13% moisture.