

The Messrs. Simons recommend manuring for mangels with farmyard dung and bonedust, but not with nitrate of soda. The idea is that nitrogen produces a large crop, but that the quality of the roots is not so good as when they are less forced. Now, I want to grow the largest possible quantity of food on an acre of land, and I will compound for a slight diminution in the per centage of food constituents, *sc.*, I shall go on recommending nitrogen in some form to be added to the manure for the mangel.

*Coffee*—No wonder beans are dear, considering what a lot of their extractive matter must be swallowed in our country under the guise of coffee. Mr. Macfaulane, the Chief Analyst of the Dominion, has kindly sent me *Bulletin No. 29—1891: Coffee*; and from it I make the following deduction: there is very little ground coffee sold in the Dominion in a pure state. The dealers in this business seem to be almost worse than some of the patrons of the cheese-factories. One hundred and forty samples were analysed, with the following results.

Sold as "compound" .....	31
Genuine .....	54
Adulterated .....	55

140

If you like chicory (I don't), you can buy "compound," and you will get plenty of it, and some grain beside, sometimes; as, for example.

No. 10718	Coffee, compound...	Adulterated with grain and chicory.
" 10719.	" " ...	Adulterated with starch and chicory.
" 10720.	" " ...	Adulterated with roasted grain and chicory.

Out of 9 samples from Quebec, only one is ticketed "Adulterated"; but, I regret to say, out of eight samples from Montreal, not one was found to be pure, the whole being described as "mixed with from 20 <sup>1</sup>/<sub>10</sub> to 30 <sup>1</sup>/<sub>10</sub> of roasted pease, grain, &c., and 20 <sup>1</sup>/<sub>10</sub> to 30 <sup>1</sup>/<sub>10</sub> of chicory." I need hardly say that none of these adulterated samples were taken from the stock of the leading grocers of St. James' Street and Ste Catherine Street. As usual, the poorer the purchaser, the less chance he stands of getting pure goods. The coffees tested having been bought in St. Lawrence and St. Antoine Streets, and the far western part of St. James' Street.

Why buy ground coffee at all? A small mill does not cost much and is a very durable machine. I get my coffee, fresh roasted, every fortnight, and make it in a very simple way: a common saucepan, with a tight fitting cover, is kept on purpose for coffee-making, into this are put 3 heaped *dessert-spoonfuls* of fresh-ground coffee, mixed Mocha and Government Java, with one pint of water and the same of milk. When it boils, the whole is raked off—grounds and all—into an ordinary coffee-pot, two or three cupsful are poured out and returned, and after standing in a hot place for about ten minutes, the *café au lait* is fit to drink. This, with a couple of biscuits and a little fruit, has been my breakfast for the last twenty years. The saucepan must be taken off the fire the very moment the coffee boils, and the cover must be kept closed.

For *café noir*, I add a good teaspoonful of burnt-sugar colouring and either a little *soleskin* (*isinglass*), or the shell of an uncooked egg, broken up and mixed with the ground coffee before adding the water. As to tea, I find the *Indo Ceylon*, or *TAMIL-KANDE*, at 50 cts. a pound, far superior to any black-tea I can buy. It is also more profitable in the ratio of 3:2.

*Price of milk.*—The Experiment-stations in the United-

States seem to have generally agreed upon the following principles as a guide to the payment for milk at creameries and cheese-factories: 1. Payment for milk on the basis of the fat contained in it is the best method yet proposed, mainly for three reasons: (1) The milk fat appears to exercise a greater influence upon the composition and yield of cheese than does any other constituent of milk, and therefore forms a just basis for estimating the cheese-producing efficiency of factory milk. (2) Payment for milk according to its fat encourages and induces dairymen to produce a better quality of milk. (3) Payment for fat in milk removes any temptation to adulterate milk.

Now here is a case in which science has really been useful to the farmer: Yes, to the farmer, as well as to the proprietors of the factories, since it has taught the patron of dishonest proclivities that he cannot go on cheating, and the honest patron will no longer be robbed of a share of his fair returns to raise the average of the poor trash that is sometimes sent to the factories.

*Useful horses.*—I saw, one day last month, coming out of the stone-yards in Ste. Catherine Street, West, a pair of dark mottled-brown carthorses that took my fancy mightily. They were from St. Jérôme, and had brought a heavy load of stone from the quarries there; but the moment they were unloaded, off they walked home at the rate of nearly if not quite 4 miles an hour. A rare useful lot: half-bred Clydesdale and Canadian, I should think; and weighed about 1,400 lbs. each. No excuse for skimming over the land five inches deep with such a team before one. Wasn't the driver proud of my admiration of his horses?

*Maize on sod.*—A very intelligent young man from Métis, who, tired of the do-nothing life of that very dull district, has joined one of Mr. MacPherson's creameries at Trout-river, asked me, yesterday, if I thought it wise to sow maize for a crop on sod, or, as I should say, on lea. I could not answer in the affirmative for the simple reason that maize being a hoed-crop, and being almost invariably heavily manured, it should take the same place in the rotation as that occupied by roots where such are grown, *viz.*, the first limb, as thus:

Maize.....	1
Grain with grass-seeds....	2
Grass for three or four years.....	3, 4, 5, 6
Grain .....	7

*Pace* Mr. Fisher, I should top-dress the grass the fourth year, which would divide the "mendments" pretty equally, and give the grain crop in the sixth year a fair chance of being a full one.

*Artificial manures.*—At Liverpool, *nitrate of soda* is worth, for best qualities, \$36.00 a ton of 2,000 lbs.; here it is offered at \$60.00!

*Kainit*, is worth about \$11.00, same weight and place. *Basic slag* of the very best quality, 80 to 90 per cent, passing through a sieve of 10,000 meshes to the square inch, guaranteed to contain 30 to 35 <sup>1</sup>/<sub>10</sub> phosphate (14 to 16 <sup>1</sup>/<sub>10</sub> phosphoric acid) is worth \$7 00 a short ton which makes insoluble phosphoric acid cost 3 <sup>1</sup>/<sub>2</sub> cents a pound. No wonder the reports of the Liverpool markets for fertilisers say that "it sells very freely"; since, according to general statements, the phosphoric acid in basic slag is as available to plants as the same constituent in bonedust.

*Sulphate of ammonia*, 24 <sup>1</sup>/<sub>10</sub> gray, is quoted at \$43 40, the short ton. So nitrogen at 11 cents a pound, and in nitrate of soda at 12 cents, is the price the English farmer has to pay, while it costs us 18 <sup>1</sup>/<sub>2</sub> cents in nitrate of soda, quite 60 <sup>1</sup>/<sub>10</sub> of advance. How are we to grow wheat, &c.,