

gets rid of that trouble. Clover, pease and oats, rye, &c., have done well. His crop of corn has never been less than 20 tons, and he has grown 35 tons to the acre. Three tons of corn are equal in his opinion to one ton of hay. (Therefore if hay is worth \$8.00 a ton, as it usually is, a ton of ensilage corn is worth \$2.66, which I respectfully but firmly deny. A. R. J. F.). He sowed his corn in drills,  $3\frac{1}{2}$  feet apart, and 4 to 6 kernels to the running foot, and out it when the cars were in boiling order. After planting, the smoothing harrow is run across, and the slant-tooth follows when the weeds begin to show. Afterwards, the corn is horse-hoed until the whipple-tree interferes with the corn. Cost of cultivation of 4 acres, taken from Mr. Fisher's regularly kept diary :

Plowing, 4 days, man at \$1 and team at \$1 50 a-day.	\$10 00
Harrowing, $1\frac{1}{2}$ days, man and team.....	3 75
Drilling, 1 day .....	2 50
Planting, 2 days, 2 men. ....	4 00
Covering with harrow, half a day, 1 man and team ..	1 25
Harrowing .....	1 25
Cultivating, $1\frac{1}{2}$ days, man and horse.....	2 62
4 barrels of superphosphate.....	19 20
Rent of land, 5 per cent. on \$75 value per acre.....	15 00
Seed, 5 bushels at \$1.60 .....	8 80
	<hr/> \$68 37

The expense of harvesting the crop was .

1 Man's labour 29 $\frac{1}{2}$ days.....	\$29 50
1 Horse's " 19 " .....	14 25
	<hr/> \$43.75

Thus, according to Mr. Fisher, the cost of the corn-crop for ensilage, from the first ploughing in the autumn to the silo amounts to :

Labour on crop...\$37.37 (allowing \$10.00 for the	
Superphosphate... 19.20	fall-furrow.)
Rent of land, &c. 15.00	A. R. J. F.
Seed..... 8.00	
Harvesting, &c... 43.75	

$123.32 = \$30.82$  per acre about \$1 55 a ton.

The only fault I have to find with this calculation is that the land is supposed to be perfectly clean before the corn-crop is sown, no allowance being made for cleaning operations. Mr. Fisher speaks of only one ploughing, but I have added to his charges \$10.00 for ploughing the stubble in the fall. About the superphosphate: I should like to know its composition, and whether it is really phosphate of lime dissolved in sulphuric acid, or the mixed fertiliser generally sold under that name. At any rate, if ensilage can be secured at from \$1.50 to \$1.60 a ton, there is, no doubt, an end, as Mr. Fisher says, "to the bugbear of the Canadian farmer: that the winter eats up all he makes in the summer."

Mr. Holdsworth's experience had been that roots, as white carrots and mangels, were satisfactory; to which observation, Mr. Fisher replied that roots were equal to, perhaps better, than ensilage, but Canadian farmers are unable to get the labour to raise them in sufficient quantity. His roots cost him \$2.30 a ton (1) to grow. The cost of a cow's keep was

Morning, 25 lbs. ensilage .....	$1\frac{1}{2}$ cents.
5 lbs. composed of bran, 2 lbs., ground.	
oats, 1 lb., oil-cake 1 lb., cotton-seed meal 1 lb. 6	"
15 lbs. of hay in 2 feeds, none and evening. 6	"

$13\frac{1}{2}$  cents a day.

Mr. Fisher gives his cows, as I always advise, both linseed-cake and cotton-seed, and yet his butter is "of very fine quality, as the price it brings proves." Now, in the Amherst, Mass., creamery, I find these two feeding-stuffs forbidden:

Patrons must not feed any cotton-seed, linseed, or gluten meal, &c., &c." "Almost all creameries forbid feeding cotton-seed, and brewers' grains are generally prohibited. R. N. Yorker. These prohibitions are absurd, on the face of it, for many of them include cabbages, the very best of an food for milk-cows! I have many a time fed cows on cabbages, with meal containing 2 lbs. of linseed a day, and the butter has been all that could be desired. By the bye, if the creameries are so particular about the food given to the cows of their patrons, how comes it that the butter they turn out does not keep as well as that made by the better class of private dairies. Messrs. Ayers' buyer told me of this their weakness at Frelighsburg, some eight years ago, and now Mr. Henry Stewart confirms the above statement: "Winter dairying," says he, "is now an indispensable need because of the poor keeping qualities of the average creamery butter. And again: 'There were farmers who used, before there were any creameries, to sell their ten, twenty, or fifty tubs of summer-made butter in the fall and winter, and such butter as, after having been kept in the sweet, fresh, cool dairy for four or five months, had all the fine qualities of the best grades of butter, which the butter of the creameries cannot retain a month.' Precisely so; I am now eating—or rather my family is eating, for I have never touched butter since that I mentioned in the Journal last spring, made by Mr. Gylling, of Sorel—butter, made at Petit Métis last September, that is as fresh as a dairy; whereas all the creamery butter, they tell me, has a *goût fade* after being kept a few weeks."

But to return to the Huntingdon people. Mr. W. H. Walker, after Mr. Fisher's address, read a paper on mixed grasses for pasture which is so instructive that I shall reprint it entire. In reply to questions put to him, Mr. Walker said. "I have not the least doubt that if our clay land were under-drained, we could have permanent pasture. The grasses held well where the snow lay deep."

"What I am going to give you is my own experience in sowing mixed grasses for hay and permanent pasture. The spring following after Professor Brown gave us his experience of permanent pasture here at our convention, that is the spring of '86, I thought I would try for myself and see how mixed grasses would suit our soil here. I had a 3-acre field which had been well manured and plowed in the fall, which I thought would be suitable for the experiment. Hearing at our convention, from Mr. Drummond, of Petite Côte, that he paid at the rate of \$10 per acre to his seedsman in Montreal, for seeds to sow for permanent pasture, I thought I would try Toronto, and sent for list of prices, and catalogues were sent in reply. I chose that of Steele Brothers, a reliable house, in which prices were quoted at \$4.25 per acre. The 3 acres which I was going to lay down sloped considerably to the south, and had 3 different kinds of soil. The first acre at bottom of field was a heavy blue clay, the second was a lighter soil with a yellow clay subsoil and the top acre was a loam. I sent for 3 different mixtures to suit the 3 different kinds of soil. The land was grubbed, harrowed and water-furrowed before sowing and rolled after. I sowed across the ridges. It was sowed the 1st day of May. In a short time the seeds came up, and I thought, perhaps a little thick, for I think all grew. About the end of June I mowed it and allowed what was cut to lie on the ground as a mulch. It looked very well, more especially the meadow fescue, which is a most luxuriant looking grass, having the appearance of looking damp the driest day in summer. I thought to myself, well, now there is going to be a reaction in farming, and