

to Mr. Barnard's full description of the school &c., in the March number A. R. J. F.). As to cows for butter, Mr. Smith's large herd consists of Durhams and Alderneys (*Jerseys and shorthorns* ?), and, as to richness of milk there is not much difference between them. Mr. Clavin said it depended more on the feed than on the breed, and told how, when the Alderneys got ahead, the Durhams were brought up by increasing their ration of meal. The Ayrshires, with their large flow of milk, are behind in richness of milk for butter-making.

Mr. Wm. Greig, M. L. A., said that pease were, and would continue to be, the principal crop in the Châteauguay district. At Ste. Martine, there are fields that have grown pease every year for 15 or 16 years without manure, and still grow good crops. The farms in question were once covered with couch-grass, but pea-growing had cleaned them.

(This is the very reverse of the effect the pea-crop has in my experience. A. R. J. F.)

Mr. Greig disagreed with Mr. Fisher on the hauling out manure in June on to the pasture. He thought top-dressing the most profitable way of applying manure.

M. D. M. MacPherson favoured making cheese in summer and butter in winter. Our farmers salt their butter too much for the English taste.

The general opinion of the meeting seemed to be that, while good butter was to be found here and there, it was pretty rare. Mr. Simpson, of the Valleyfield cotton-mills, said there was no good butter at that place. As dealing largely with the Southern States, he could and would assist the farmers who wanted cottonseed-meal at the lowest price by the car-load.

Mr. MacPherson valued cottonseed-meal at \$45.00 a ton, the real cost being \$26.00 !

Mr. S. A. Fisher spoke of paying for milk at the factories according to its richness. Our milk is richer than that of Ontario, and the Canadian cow gives the best foundation for butter-making cows. "Costing less, butter can be made from them at 12 cents, while butter from high-grade Shorthorns, at 26 cents is an expensive process." (Surely there must be some error in the report in the *Gleaner* of this passage). Farmers paid for experimental farms and agricultural colleges, but how few farmers' sons go to them, and how few farmers, though within three hours of Ottawa, ever visit the experimental farm there ! "Manure is largely wasted ; there are no tanks to receive the urine, and as to spreading the manure on the fields in June, this in despite of what Mr. Greig said, is a wasteful process." A great deal of the *roughage* about a farm, waste stalks, rank grass, and the like could be utilised if accompanied by some concentrated food. Pease-meal, cottonseed-meal, and oilcake are far better than corn-meal. Cattle should be kept, in winter, at about 70° F. (?) and ought to be watered in the barn. Young men ought to stay on the farm, instead of going to the city to become clerks or professionals. The farm gave the greatest scope for intellectual capacity. Every farmer should cut his straw and hay with a chaff-cut, and have a silo. As sweet butter could be made with silage in winter, and as cheaply, as with grass in summer : he had fully tested it.

Mr. Fisher, in reply to a steady stream of questions, said he kept 22 cows, which began to calve in September. He had made from them last week 136 lbs. of butter. He gave them oilcake, but never linseed-meal, which was too rich for cows.

I never found it so, when used with pease. A. R. J. F.) He used a good deal of cottonseed-meal and pease-meal. Sowed White Southern corn for ensilage, which grows about 17 or 18 tons to the acre.

As to wooden siloes rotting fast, that, Mr. MacPherson said was due to the dampness retained in the double wall.

He ventilated by boring 3 inch auger-holes at top and bottom, which were closed with wooden plugs when the silo was to be filled.

Mr. Fisher advised boarding round and round, instead of up and down, to avoid swelling from damp.

Mr. Ed. A. Barnard cut all his hay, and, after watering it, let it lie for 24 hours. The cattle relished it much better. His idea of a silo was to use 8 or 9 inch studs, and fill the hollow with dry earth. Siloes so built had stood sound for 9 years. Had used silage up to the 1st July, and found it perfectly sweet. When the silo was empty, he let the air pass through it freely. It was folly to spread manure on snow : the leaching in thaws must carry off its goodness.

(Wherein I am in accord with the speaker, but top-dressing grass-land in summer is quite a different thing. A. R. J. F.) — For Mr. MacPherson's address see below.

The convention was then declared to be closed.

D. M. MacPherson announced the subject of his address to be the business phase of farming, or how to make farming pay. After a number of general remarks, he came to the point, that the secret of making the farm pay was to have a silo and feed steers, which he illustrated from his own experience. Four years ago, he started with a farm of 130 acres of arable land, much run down. He rebuilt the buildings and added a silo. He put in 25 or 30 animals and grew 10 acres of corn to make into ensilage. Year by year the proportion grew, until last year he had 40 acres of corn and 180 animals. He bought 1000 lbs. steers in the fall at from 2½ to 3½ cents per pound, the average price of each being \$30. During the winter he fed each beast ensilage and a ration of cottonseed-meal at a cost of \$20, and he allowed \$6 for labor, insurance, and use of stable, making a total of \$56. In 6 months, each beast gained from 300 to 350 lbs. when he sold them for shipment to England at 5 cents a pound, or, on an average, \$65 a head. He had a clear cash profit of \$9 on each, and \$10 worth of manure. When he began, there was not an acre that would grow wheat. Now he raised fine wheat and the land was paying handsomely. An acre of corn made into ensilage will maintain 4 steers. To the ensilage he added cotton seed meal, of which too much cannot be said in praise.

L. Simpson : What variety of corn do you plant and how ?

Mr. MacPherson answered that he had tried several varieties and found the Southern horse-tooth best for putting in the silo. The land must be well drained and the drills 3 feet 4 inches or 3 feet 6 inches apart, and a seed dropped every 10 inches. When thus planted thinly cobs will form. Besides large corn for ensilage, each farmer should have a patch of the sweet garden corn to feed green when the pastures fail. Had tried phosphates, but much preferred barn-manure.

W. Fennell : Objection is made by city buyers to milk from ensilage not keeping.

Mr. MacPherson thought the trouble arose from feeding sour ensilage, which was not fit for milch cows. Where the ensilage is sweet the milk will keep as long as any other. His rotation was 2 years in corn, 1 in grain, and 1 in clover, which he pastured. An acre of clover will keep two cows. He made no hay ; ensilage taking its place. When he could not get the quality of cows he wanted he made up in number. He was satisfied he could raise a heifer until she had her first calf for \$15. He did not think farmers kept a quarter enough cattle. He had pastured 70 head on 55 acres of clover, cows averaging 5000 lbs. of milk. Manured at the rate of 20 tons to the acre. His average yield was 40 tons of ensilage-corn to the acre, 60 bushels of oats, and 2½ tons of clover.

Tame-grasses.—The *Dairy-World* says that it is safe to say that one-half of the creameries in Kansas are standing