

test quickly, with the greatest accuracy, and in an inexpensive manner, the real percentage of butter fat contained in milk. The principle of this method is briefly as follows:—To the milk which is to be tested is added concentrated acetic acid, and 5 per cent concentrated sulphuric acid, which dissolves the casein and leaves the butter fat alone undissolved; by means of centrifugal force the butter fat is afterwards extracted, in specially constructed test boxes, so that its exact quantity may easily be noted. The machine in this dairy tests twelve samples at once, and gives the quantity of the butter in each sample, as well as the chemical analysis.

In addition to the above modern and novel methods, the old system of chemical analysis is practised daily by Mr. Cheesman, of Toronto.

A number of small churns are run by steam power in the dairy, to correct the scientific tests for the benefit of any that may be sceptically inclined concerning them.

All the tests in the model dairy are made under the superintendence of Messrs. Painchaud & Côté, Government Dairy Inspectors, and it goes without saying that they elicit marked attention from a large proportion of the sight-seers upon the grounds.—*From The Quebec Chronicle.*

Notes on The Provincial Exhibition.

Many people, among whom I must reckon myself, thought it rather a rash act on the part of the authorities to attempt holding the provincial exhibition at Quebec; and this for several reasons: 1, the great distance of that place from the main breeding districts; 2, the novelty of the site, and its doubtful convenience for the purpose; and, 3, the improbability of the exposition being successful, considering the numerous provincial and other shows all announced to be held about the same time. I am happy to say, however, that we, the dissidents, were agreeably deceived: the exhibition, in spite of some contretemps was fairly successful, and, judging from the faces I saw of men who had clearly no previous conception of what a Hereford, a Jersey, or a Polled Angus, when brought to perfection, really was, I should say that the opening of their eyes to the difference between their own homebreds and the finished products of such herds as those of Messrs. Reburn, Vernon, Pope, and Judah, was alone worth the entire cost of the exhibition.

As a matter of course, the entries were postponed to the last minute, and consequently the carpenters employed by the committee had hard work to complete the cattle-stalls in time; and, as usual, the different breeds of stock were not divided into separate lots, but a Hereford lay between two Shorthorns, and the Jerseys, though in point of fact there was only one herd exhibited, were stalled in two distinct lots, far apart from each other. Sheep were thrust here and there without the slightest discrimination; for in one pen I remarked three ewes and two lambs; and under the same roof wore pigs and sheep in juxtaposition!

A dark brown 3 year old Stallion, from the St. John district, seemed very popular among the crowd. A splendid mane and tail, with a showy carriage, were his chief attractions; but he wanted one most important point: he had no carcase at all. I understood that his owner asked \$1,000 for him! A great price for a thirteen hands pony! Well, sentiment goes a long way, even in horse-dealing. (1)

Talking of Lake St. John, I was told by a well known liberal member of the Quebec House that, with the exception of some land round St. Raymond, the general quality of the

soil through which the railroad runs is very inferior. As the gentleman in question assisted in the late visit paid to the district under the auspices of the government, I presume he had a fair opportunity of judging.

About the best Shorthorn dairy-cow I have seen for a long time was Mr. Mairs' of Richmond, which won the first prize for dairy cows. Strange to say, she was passed over without even a commendation at Sherbrooke. Mr. Mairs thinks we do not take enough pains with our hay, and I agree with him.

I wish to call attention to the opinion drawn up by Messrs. Brown (Guelph), Tarte, and Couture, on Mr. Ed. Barnard's herd of Canadian and Canadian-Jersey cows. I need add nothing to what they say, except that Mr. Reburn, who is not often guilty of indiscriminate praise, seemed very much struck with the merits of the Jersey bull at the head of the herd. Two of the cows reminded me strongly of Brittany.

The model dairy was very attractive; it was crowded all day and every day, and great interest was taken in the centrifugal skimmers.

Mr. Fuller, of Lennoxville, had some fair Downs, in good order but badly shorn. I could have made them look 20% better in an hour or two. Sheep, to look well, must be prepared for the judges' eye. Mr. Fuller complains of the damage caused to his flock by dogs. A sad thing indeed, and one which has almost cleared off the sheep from the Island of Montreal.

Some decent white pigs of a small breed; but, as a whole, the swine were not much. Pigs ought to fetch money this winter, as the crop of pork in the States must be short. Economy is absolutely necessary this year, as there is no doubt that the yield of everything grown by the farmer will be below the average. Wheat in Ontario will not turn out more than ten or eleven bushels an acre; pease are better; but there, as well as in this province, the barley is scalded and will weigh very light.

There were very few agricultural implements on the show-ground: one or two self binders, and a good hay and sheaf loader, an engraving of which has already appeared in this periodical. Mr. Latimer, of McGill Street, Montreal, was the chief exhibitor.

The Beet-sugar factory, at Berthier-en-haut is about to open in the Spring under the management of my friend Mr. Wilfrid Skaife, late of the St. Lawrence sugar refinery. Now, here is a wonderful thing: Professor Brown and Dr. Hoskins I heard at Quebec asserting that deep-ploughing at once was frequently the ruin of land; Mr. Skaife, however, is at present hunting everywhere for a plough that will cut a furrow twelve inches deep!

Did any body remark Mr. Selah Jedediah Pomroy's French coaching Stallion? I could not find it, but I congratulate the Compton farmers on having at last got a chance of breeding carriage horses with second thighs, and good hocks. The Hambletonians had a long reign in that fine district, and it will take some years to eradicate the weeds they grew.

Bravo, Mr. George Reburn. Your brave behaviour with the savage St. Foy bull is another proof that quietness of manner and courage oftener go together than pluck and bravado. No more thoroughly gallant action has fallen under my observation since I saw Lord Faversham's great red bull

(1) I am told that his owner refused \$500 for the pony!