creamery. To improve the quality of our cream-gathering creamery butter the patrons must realize more fully the important part they have in producing rich cream, testing at least 130 oil test, or 30 per cent. Babcock test, and that the cream must be kept clean and cool—50 degrees. The creamery men will do well to adopt pasteurizing and cooling the cream; also the use of the Babcock test instead of the oil test.

GEO. H. BARR, Chief Instructor.

GEO. H. BARR, Chief Instructor. Western Ontario Dairy Association Office.

The "Leclair Process" Butter Appreciated in France.

Upon his return from the St. Louis Exposition, Mr. Louis Dupont, proprietor of the large butter-exporting house, of Isigny, upon the re-commendation of Prof. Leze, stopped off at Ste. Hyacinthe, Que., to visit the Dairy School. Apparently being greatly interested in the new process of buttermaking inauguarted by Prof. J. D. Leclair at the dairy school, an offer was made to Mr. Dupont to send to him after his return to France a sample of this butter, so that its keeping qualities might be judged. Mr. Dupont having gladly accepted this offer, three pounds of butter was sent from the dairy school by mail on the 29th day of last December. This butter was made at the school during Christmas week according to the Leclair process, from milk that was more or less old. This butter was unsalted; it was put up in one-pound prints, and wrapped in parchment paper which had been well soaked in a brine preservaline solution. The following are the criticisms of the butter experts belonging to the Dupont firm.

Butter from Ste. Hyacinthe, Que., Dairy School. Received and tested at Isigny, January 14th, 1905. Opinions of the butter buyers:

1. Mr. Jules Lerochais—Body, firm; aroma, neutral; flavor, good butter flavor, without delicacy, but agreeable to the taste. We detected a slightly cooked flavor, due to the pasteurization of the cream, as well as a slightly saline taste, probably due to the handling of the butter in salt water. Keeping quality, very good.

2. Mr. Antoine Jardin—Body, oily; aroma, neutral; flavor, quite agreeable, slightly salt, without delicacy; keeping quality, perfect.
3. Mr. Henry Jardin—Body, firm; aroma,

3. Mr. Henry Jardin—Body, firm; aroma, agreeable; flavor, salt, good, agreeable; keeping quality, good.

Mr. Dupont himself was away when the butter arrived, but wrote on Feb. 1st, 1905, to the secretary of the Ste. Hyacinthe dairy school as follows: "Your sample of butter arrived during my absence, and was submitted upon its arrival to examination by several butter-tasters of our firm, whose criticisms I send you herewith. I tasted the butter myself upon my return, and found the flavor good, but not so delicate as that of our Isigny butters. I discerned plainly that great care had been exercised in its manufacture, and that above all, with regard to its keeping qualities, you have obtained perfect results."

Considering the time of the year when this butter was made, the opinions of Mr. Dupont and his experts must be considered as most flattering. It is not to be expected that in the heart of the winter, with milk from spring-calved cows, stall-fed, that we can produce so delicate a flavor as the Isigny butters possess.

H. WESTON PARRY

The method of sweet-cream buttermak ing, as practiced in winter at the Ste. Hvacinthe creamery, necessitates the use of a ferment. The process may be summarily described as follows: The newly-separated cream is put into a vessel placed in a pan of hot water. It is kept there, being stirred continually until it has reached a temperature of 140 to 175 degrees F. It is then taken out and placed immediately in iced or very cold water until cooled to 50 degrees. The evanoration during the cooling is supposed to purify the cream by ridding it of malodorous vapors. The cream is then noured into the churn and the ferment added. The churning should occupy, in winter, about 50 minutes. In factories the amount of cream is referred to a certain standard, the amount of acidity in cream and ferment being determined by the acidimeter - In the farm dairy a little experience may be relied upon to teach the proper amount of ferment to add to the amount of cream to be churned. In the summer pasteurizing may be omitted, and a smaller percentage of ferment used. On account of the hetter quality of summer milk, pasteurizing is not so necessary as in winter. Naturally, also, on account of some fermentation commencing in summer milk while in the farmers' hands, a smaller quantity of ferment is necessary. -Fd.]

A dairy school on wheels, consisting of a special train of five cars, recently made a tour of Kansas, Nebraska and Missouri, to promote the dairy industry. It embraced a complete outfit of dairy goods, apparatus and lecturers. It was equipped by the united efforts of the St. Joseph and Grand Island R. R., the Blue Valley Creamery Co., and the Kansas State Acricultural College, and was visited by thousands of farmers.

A Psalm of Wealth.

Tell me not in mournful measures
"Holstein cattle are a fake,"
For the dairymen who have them
Are progressive and awake.

Money's wanted! Money's needed By each man in this land now; And the dairy makes it for him If he keeps the Holstein cow.

Not the cow of small proportions,
That will give of milk a gill,
But the cow that fills the bucket
Is the cow that fills the bill.

At the Pan Am. Exhibition, In that general dairy test, The Holstein was the milker, And in profits proved the best.

Trust no Jersey, howe'er pretty,
Let her not your stanchions grace;
For the cow that calls the cash in
Doesn't show it in her face.

Now to dual-purpose Shorthorns
Do not give a passing thought;
For the man who counts the profit,
He will tell you, it's all rot.

Records of the famous Holsteins
Show us what this breed can do;
And the cow that makes the record
Is the paying cow for you.

Farmers! then be up and doing, Buy a Holstein sire now, For if you will make the money, You must milk a Holstein cow.

Russell Co., Ont.

G. A. McCULLOUGH.

Some Aspects of Canadian Dairying.

It is always interesting, if in some cases, embarrassing, to be suddenly confronted by an out-and-out scathing criticism of our theories or methods of doing work. Such criticism may not, it is true, exactly confer upon us the "giftie to see oorsels as ithers see us"—there are usually two points of vision, and a certain amount of

Wood Baronet -255- (9066).

Hackney stallion. Winner at Canadian Horse Show, Toronto, 1905. Property of Truman's Pioneer Stud Farm, Bushnell, Ill.

prejudice on one side, or both. At the same time, criticism is often wholesome, and whether it arouse in us amusement, embarrassment, or pugnacity, according to circumstances, there will always be the shadow chance of reaping profit from it; and profit, even from adverse criticism, is not to be despised. The case in question relates to our dairy industry, which has certainly met with its desserts, or more, at the hands of one, Mr. W. S. Shepperson, F. C. S., chairman of the London, Eng., establishment of Keeps, Ltd., who, it seems, paid a visit to Canada with the express purpose of looking into our butter and cheese methods, and whose exposition of the

subject, as it appears in a recent issue of the Dublin Farmers' Gazette, will not tend tremendously toward recommending the Canadian produce to the Old Country market. Many of Mr. Shepperson's critisisms, however, are racy, and in so far as they are just, it may be hoped that from the thorns may grow figs.

In regard to our creamery methods, Mr. Shepperson says: "The whole system of manipulation seems to be on a wrong basis," the result being that "fully one third of the entire make fails to reach the finest grade." Our best butter, he considers, is exported from Quebec. cream-gathering system, he contends, and possibly in many cases not without point, is faulty, the cream often being driven too great a distance to the creamery, and not being collected frequently enough during the week to give the very best product in butter. Another defect is that, in preparing butter for long-distance exportation, too few precautions are taken, "nobody appearing to have any direct interest in the butter when once it is sold." All the operations, too, he says, are conducted on too cheap a scale, the paper being poor, thin stuff, "made of the cheapest material, frequently wood chips, with a tendency to mould." As a result, when the hutter dency to mould." As a result, when the butter arrives in the Old Country it is frequently moulded, and thus "a most unfortunate prejudice against Canadian butter has been established." The boxes, too, instead of being made of 4-inch well-seasoned wood, properly lined with paraffin wax, are "inferior."

The preservatives also come in for their share of censure. Powdered borax, or a mixture of boracic acid and salt, were the preservatives used in several samples which we saw tested. To quote further: "It is not necessary for me to deal here with the results of using materials of this kind, but of one thing I am convincedthat if salt is to be omitted from the butter, some reliable substitute must be used. It must also not be overlooked that, whereas one-half per cent. is the limit of borons allowed, it may be that 2, 3 or even 4 per cent. of common salt has been left out, to take the place of this, by substituting a harmless preservative in the proportion of, say one-fourth or one-sixth of the amount of common salt used previously. It will be admitted, upon reflection, that there is a very grave danger, indeed, in using another salt of sodium. say horate in the propotions named, and expect it to do the increased work, unless that article

has got the condentrated power expected of it: and when we consider that borate of soda, or ordinary borax, carries with it approximately not less than fifty per cent. of moisture, half per cent. of this does not equal the 0.5 borons allowed."

comes in for its share of ridicule, although he acknowledged that our, cheese exportations astounded him: "To see the drayloads of boxes of cheese being taken to the warehouses of the large merchants," he says, "you would think that there was nothing but cheese in the country." When he examined it he was "aghast at the striking and varying colors exhibit-ed." The first sample was of an "apricot tint, which, I presume, was meant to resemble our good old Ch ddar; but it was a poor attempt." On asking

to see a highly-colored cheese, he was shown some that reminded him of "a brightly-dyed fabric." He should have thought that there would have been a restriction placed upon the sale of such cheeses, "because it is quite obvious that these tints are not produced by a pure annatto coloring, but by pigments or aniline dyes." In New York State, as well as in Canada, he had cheeses cut open for inspection, and found there, too, the same "varying, and fading, and patchy appearance."

Mr. Shepperson's criticism, on the whole, seems scathing. We are not prepared to admit that such butter and cheese as he describes is typical