

be stabled. A windmill cuts straw and crushes grain.

About 20 years ago Mr. Vann came West and for several years was a farm laborer. Now, he has three quarters, the greater part of which was covered with trees, and over 200 acres are under cultivation. Oats and barley are his main crops, although last season a field of wheat returned him at the rate of about 40 bushels to the acre. He had 1,100 bushels of barley, and 3,500 bushels of oats. Barley is his specialty. Last winter he won the championship cup at the grain show at Manitoba Agricultural College.

But the size of the barn shows that live stock are not neglected. Twelve to eighteen horses and about half a hundred cattle are found. Mr. Vann has over a dozen milch cows. He keeps a Babcock test, to ascertain the productiveness of those that are doubtful and weeds out the boarders. Cream is shipped to Winnipeg. In the winter attention is paid to fat cattle with satisfactory returns.

### Corn Grown in Manitoba

On page 665 of our issue of May 4 appeared an illustration, showing corn grown on the farm of E. F. Lewis. A letter to Mr. Lewis regarding the production of this valuable fodder crop brought the following reply:

EDITOR FARMER'S ADVOCATE:

The land on which the corn photographed was grown was run down and weedy. It wouldn't give half a crop of wheat, and we had decided to summerfallow it. We concluded it would be wise to plant part of it to corn and see which would raise the best crop of wheat the following year, that summerfallowed in the ordinary way, or that planted to corn and cultivated often to kill the weeds.

First we hauled manure on this land and then plowed it about 5 inches deep early in June, and harrowed it to get a fine seed bed. Then we drilled the corn with an ordinary grain drill in rows three feet apart, stopping up the other spouts, and harrowed it again before the corn came up to kill the small weeds that started. Later, we used the weeder for the same purpose, i. e., to kill the weeds and keep the surface of the land fine until the corn was several inches high. From that on we cultivated with a two-horse corn cultivator, going through it perhaps about once in ten days, until it was too tall to go through any more without injuring the corn.

The crop was cut in the last half of September. The best plan is to allow it to stand until there is danger of quite a frost. A light frost doesn't seem to hurt a field of thick corn much, and the fodder will be the better by its being as nearly matured as possible. An ordinary grain binder was used, cutting two rows at a time and binding it in bundles the same as grain.

It was heavy work for machine and horses, and if much corn is grown it would pay to have a corn binder. The bundles lay on the ground a few days to dry, and then were put in large shocks, tying the tops. We stacked some of it about November 1, but made a mistake in doing this, as it heated in the stack, while that left in shock kept in fine shape up to March 1, when the last was fed. The biggest trouble was to keep the stock away from it. It certainly is an ideal feed for all kinds of stock. Horses leave their oats to eat it.

We planted two kinds, North Dakota White Flint and Longfellow Yellow Flint, and didn't see much difference between the two kinds as to amount of fodder and time of maturing.

Longfellow seemed to ear the best, but not much of it got ripe enough for seed.

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A grower in southern Kansas, who harvests about one thousand tons of alfalfa per year, and is working with it nearly every day from the second week in May until November 10, insists that alfalfa, under the same conditions of rainfall, is much easier to save in fair feeding condition than red clover. He finds the side-delivery rake especially excellent for turning over the green or wet windrows to the sun and air with the back of the rake, and cured thus, after being wet, the natural color is better preserved. "That

alfalfa hay has a higher feeding value than almost any other, even when saved under the most unfavorable circumstances, should be impressed upon the inexperienced."—From Coburn's *The Book of Alfalfa*.

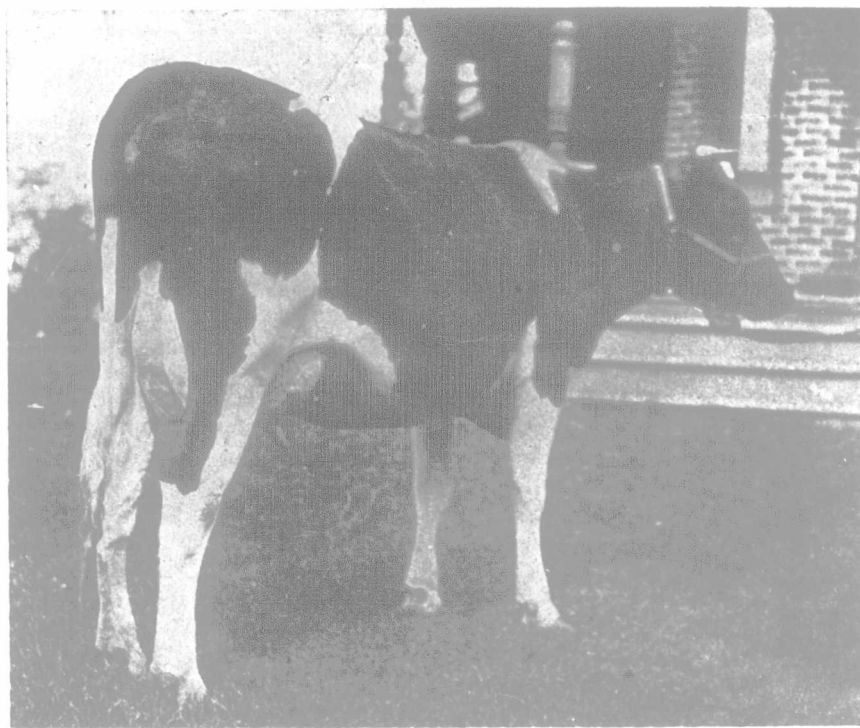
## DAIRY

### Why Cream Tests Vary

Variation in tests has caused much dissatisfaction in the selling of cream. When the cream is from the same cows, which have been fed the same ration and milked by the same man, and when the same separator is used, the farmer naturally thinks the per cent. of fat in the cream should remain the same.

Errors are often made in making tests, especially in taking the sample, but variations constantly occur that are due to other causes. The most common causes of these variations, as pointed out in a circular, No. 37, by Prof. C. H. Eckles, of the Missouri Agricultural Experiment Station, Columbia, Mo., are as follows:

1. Variations in the speed of the separator.
2. Variation in temperature of milk separated.



TWO-YEAR-OLD HOLSTEIN, JENNIE BONERGES ORMSBY—365 DAYS' RECORD: 16,849 POUNDS OF MILK AND 832.90 POUNDS OF BUTTER

3. Rate the milk flows into the machine.
4. Amount of water or skim milk used in flushing out the bowl.
5. Change in the richness of the milk separated.
6. Adjustment of the cream screw.

Change in the speed of the separator is the most common cause of variation. The greater the speed of the separator, the smaller the amount of cream and the higher the per cent. of fat.

Again, the temperature of the milk separated varies on the farm from day to day. If cream tests 30 per cent. when the milk is separated at 90 degrees, it may test as high as 40 per cent. when separated at 70 degrees. Under average conditions on the farm, however, the variation in fat due to change of temperature will not amount to more than 3 or 4 per cent.

A third cause of variation is found in the rate at which the milk flows into the machine. If less than the regular quantity flows into the bowl, the tendency is to increase the per cent. of fat in the cream.

The richness of the milk separated affects the richness but not the quantity of cream. The richness of a cow's milk depends on inheritance and can not be changed permanently by feed.

Small variations are likely to occur from the other causes suggested by Prof. Eckles. By the use of an ordinary Babcock testing ma-

chine and by measuring the sample of cream into the test bottle with the same pipette as is used for measuring milk, any farmer can make a test of his cream that will satisfy him as to the accuracy of the test he receives from the cream buyer.

### Irish Butter Trade

Considerable interest attaches to the voluminous report, just published, containing the findings of the departmental committee on the Irish butter industry. The value of our exports amounted to well over £4,000,000 in the year. Next to Denmark, Ireland is the largest supplier to the British markets, but whereas the Danish trade is constant, the Irish output is practically confined to six months of the year. For geographical reasons it can be understood that most of the Irish butter goes to the big towns and cities in the western districts of Great Britain. Merchants in England state that some of the Irish butter is superior to that from any other country, but what is at fault is the regrettable irregularity of the supplies both in quantity and quality.

The committee hold that it is creamery butter that must be relied on to raise the reputation of Irish butter to the first position, and they believe that creamery proprietors as a whole have not yet attained as great proficiency as is within

their power. Combined action among the creameries for the ruthless rejection of unsuitable milk is strongly recommended. Pasteurization is also suggested as a means of securing uniformity of flavor in creamery butter. The evidence also would indicate that the texture of Irish butter could be made more even, there being complaints that sometimes it is too soft and open. Packing is another essential point to which attention is directed, but in this matter a great improvement has been effected since a conference, in 1905, drew up a standard specification for the 112-lb. kiel and the 56-lb. pyramid box.

Next to creamery butter, factory and dairy butter are the principal features of our export. They also are adversely affected by irregularity, and to improve them, efforts must be put forth at the farmstead, and owners of factories are urged to encourage improvement by discriminating between good and inferior samples offered by farmers, and paying a remunerative price for the better qualities.

Of course, covering all classes of butter, is the strong appeal presented by the contents of this report, on behalf of winter dairying. I make bold to say that if this appeal were heeded and responded to properly, the greatest of all obstacles in the way of advance would be removed. We have had numerous experiments carried out to demonstrate the profitability of winter dairying, and unless Irish farmers rise to the occasion they will, by their inactivity, only continue to nullify the many natural advantages which the country possesses for dairying. With its adoption, irregularity would be removed, tillage would increase, and the cow stock of the island become more numerous.

The report suggests additional powers of creamery inspection and authority to make regulations for the department of agriculture, and these have created some controversy. It is also proposed to arrange, in conjunction with local associations, a scheme for the establishment of a special governmental brand for Irish creamery