

THE DAIRY.

What a Jersey Heifer Has Done.

Brampton Central Princess, a junior two-year-old Jersey heifer, developed and owned by the Experimental Farm, Ottawa, has recently completed a year's test in the record of performance. She made a very creditable showing and has established a new Canadian butter-fat record for junior two-year-old heifers of the Jersey breed. A summary of her record, the cost of feed, forwarded by E. S. Archibald, Dominion Animal Husbandman, proves this heifer to be an exceptional producer and capable of giving big returns for the feed consumed. She freshened at two years and 137 days, and produced in 365 days 9,241.5 pounds of 5.3 per cent. milk, or a total of 490.185 pounds of fat. In this class she replaces her half-sister, Brampton Bright Kathleen, which produced 442 pounds of fat in one year. Brampton Central Princess was sired by Viola's Bright Prince, a bull which has a very large number of official record daughters of outstanding individuality. Her dam is Brampton Rosa Bonheur, a cow owned by the Experimental Farm, that produced 9,250 pounds of 5.09 per cent. milk in 328 days, as a five-year-old, and freshened again in 335 days. This heifer consumed the following feeds during the two months before freshening and the twelve months on test:

3,300 lbs. meal, composed of a mixture of bran four parts, linseed oil meal one part, dried distillers' grain one part, gluten feed two parts, and ground oats one part, which at \$25 per ton has a value of.....	\$41.25
2,186 lbs. hay, at \$7 per ton.....	7.65
11,435 lbs. silage and roots, at \$2 per ton.....	11.43
1,350 lbs. green feed, at \$3 per ton.....	2.02
One month's pasture at \$1.00 per month.....	1.00
Total cost of feed.....	\$63.35

Valuing butter at thirty-five cents per pound and milk at twenty cents per hundredweight, Brampton Central Princess made a profit of \$156 over the cost of feed. If her milk had been sold at eight cents per quart, which is a very conservative figure at the present time, this heifer would have made a profit over and above cost of feed of \$232.37. The feed cost of milk was 68.5 cents per hundredweight, and of butter 10.98 cents per pound. The illustration shows this heifer to be a big, strong, typey individual.

Leading Holstein Cows.

From January 1 to January 31, 12 cows and heifers were reported in the yearly Record of Performance test. In the mature class Duchess of Burnbrae Farm was first with 12,526 pounds of milk, making 441 pounds of fat. Lady Sybil of Appledale was first in the four-year-old class. She made the exceptionally good record of 19,072 pounds of milk, and 647 pounds of butter-fat. The three-year-old class was headed by Buttercup Segis, with 11,590 pounds of milk and 403 pounds of butter-fat. Hillcrest May Echo Pietertje was first of the two-year-olds; her record was 16,213 pounds of milk and 582 pounds of butter-fat.

During the month of January 51 cows and heifers were accepted for entry in the Record of Merit. Seventeen mature cows were headed by Zarilda Clothilde 3rd De Kol, with 3,331.7 pounds of milk and 97.79 pounds of butter-fat in thirty days. Bessie Lynn in the senior four-year-old class gave 558 pounds of milk, yielding 22.97 pounds of butter-fat in seven days.

Manor P. H. Belle was first in the junior four-year-old class. Her seven-day milk record was 528 pounds, which produced 22.41 pounds of butter-fat. The senior three-year-old class was headed by Calamity Snow Mechthilde 2nd., with 570.2 pounds of milk and 20.92 pounds of fat in seven days. Pontiac Artis Sara, as a junior three-year-old, gave 436.4 pounds of milk and 17.35 pounds of butter-fat. The senior two-year-old class was headed by Manor P. H. Beets, a heifer which gave 387.3 pounds of milk and 16.10 pounds of butter-fat in the seven days. Queen Bos De Kol was first in the junior two-year-old class with a record of 288.39 pounds of milk and 16.08 pounds of butter-fat.



Brampton Central Princess.

Two-year-old Jersey Heifer owned by the Experimental Farm Ottawa.

Farmers in Western Provinces Keep Cows.

Ontario is conceded to be the greatest dairying Province of the whole Dominion. The Western Provinces have afforded a large market for Ontario creamery butter. Many have been inclined to think of the Western Provinces as being capable of producing grain only, but during the past few years, the farmers of that great West have begun to realize that they have been shipping the fertility of their soil away in bags, and that the production of bumper crops of wheat and other cereals is a much more difficult problem than it was when the soil was virgin. They are beginning to keep live stock to consume the roughages grown, and are finding it a profitable venture. Five years ago fifty carloads of butter were imported from the Eastern Provinces to supply Winnipeg's butter requirements alone during a single winter, but since that time the Manitoba creamery industry has made rapid strides and now no butter is being brought in from outside. This winter for the first time Manitoba is exporting creamery butter. On January 26 a carload of Manitoba creamery winter-made butter left for Vancouver at a price somewhere about 40 cents f.o.b., Winnipeg. It is stated that Manitoba butter is giving good satisfaction on the Coast market, but the grade is being steadily improved in most of the creameries. These shipments will take the place of New Zealand butter, formerly imported to supply the demand on the Coast as well as the interior cities of the Dominion.

This growing industry in the West is bound to affect Ontario dairymen as one of their large markets for creamery butter is being supplied locally. Consequent-

ly, it will be necessary for Eastern dairymen to go farther afield to find a market. Ontario butter has stood high on the markets of the world, but it is believed that it can be improved by greater uniformity of quality. The foreign markets are inclined to be a little more exacting than the home markets. In order to guarantee uniformity and meet the demands of exclusive markets, it is necessary for Ontario dairymen and creamerymen to adopt a system of grading of both cream and butter, and to be particular that no No. 2 quality butter gets mixed up with No. 1. A very large percentage of the cream used in butter-making in the Western Provinces is purchased on a graded basis, and the product competes favorably with butter of other countries. The system of grading at present being worked out by dairy authorities of Ontario will tend to still keep Ontario butter to the front.

In 1915, 7,000,000 pounds of winter butter were made in Alberta and 96 per cent. of this was purchased on a quality basis. In 1916, 79 per cent. graded specials, 16 per cent. firsts, and only a little over 4 per cent. seconds. This gives some idea of the class of butter being manufactured in one Province of the great West. The grading standards adopted in Alberta are based largely upon the preferences of the trade and of the consuming public. At the beginning of the season of 1916 the following standards as to points of description were adopted: "special grade," score 94 to 100 points, with a minimum for flavor of 41 points. Butter scoring 92 and under 94, with a minimum of 39 points for flavor, was classed as "first" grade. Butter scoring 87 and under 92, with minimum of 37 points for flavor, was classed "seconds", and all under 87 points, "off" grade. In order that creamery butter may qualify for a "special" grade certificate, it must be made from pasteurized cream and otherwise closely conform to the following description, which represents in a general way the requirements of the markets in which the greater bulk of the Alberta product is consumed: Flavor—fine, sweet, mild and clean; texture—firm and fine; clear, but not excessive, free moisture; color—uniform and of a pale straw shade; salting—about two per cent. thoroughly dissolved and incorporated; package—well made box of export type, clean, and evenly coated with paraffine wax on the inside surface and properly branded. Good quality of parchment paper lining neatly arranged. The butter is to be solidly packed, full weight, and of a smoothly-finished surface. The market for Ontario butter may demand slightly different requirements than that outlined for Alberta. The fact remains that if the highest-quality butter is to be produced it must be made from high-quality cream. Consequently, the control of quality is very largely in the hands of the producer. It is well known that the consumer will pay several cents a pound more for first-grade butter than he will for that which is a little "off" in flavor, texture, or salting, and it is only fair that the man who delivers high-quality cream which makes first-grade butter should receive this increased price. So long as all grades of cream are paid for on the same basis, it cannot be expected that dairymen will put themselves about to look after their cream in the most approved manner, but, pay them according to quality and we believe there will be very little second-grade cream delivered at the creameries, which in turn, will mean very little second-grade butter placed on the market. The time has arrived when grading of cream and butter should be in general practice throughout Ontario.

A 21,000-lb. Ayrshire Cow.

Canadian Ayrshire cows are proving their ability to produce a large flow of milk. It was welcome news to Canadian breeders when Jean Armour, a cow bred and developed in Canada made the first Ayrshire record of 20,000 lbs. of milk in a lactation period. A new Canadian record has now been made by Grandview Rose, a five-year-old cow owned by Shannon Bros., Cloverdale, B.C., that has completed her year in the R.O.P. with the record of 21,422 lbs. of milk and 900 lbs. of fat. She is due to freshen again early in April. She is a large cow of true Ayrshire type and form, and is backed by blood from the most productive strains in Scotland. Records are showing Canadian cows of all breeds to be in the front ranks of production.

HORTICULTURE.

Know Varieties Before You Buy.

EDITOR "THE FARMER'S ADVOCATE":

Your article of January 11, describing some suitable varieties of apples for setting in Ontario, was very timely and should be widely distributed and read. The writer of this letter can call to mind many instances where apple growing has resulted in considerable loss and disappointment to the grower, owing to the lack of knowledge on the part of the purchaser and the misrepresentation and substitution of varieties by the seller. In most instances the fault is not with the nursery company but rather with the agent, who, as a rule, knows too little about the hardness or adaptability of the varieties which he offers.

The moral is obvious. First get in touch with someone in your locality who has the required knowledge, and deal direct with some reliable nursery company. Everything else being equal, deal with someone whose climatic conditions are nearly similar to those where you purpose planting the trees.

The writer wishes to direct your attention and that of your readers to a bulletin issued by the Department



Segis Fayne Johanna.

The world's record cow that produced 730.5 lbs. of 5.51 per cent. milk in 7 days, making 50.65 lbs. of butter.