

Cheese Factory Question.

(To the Editor of the CANADA FARMER.)

SIR:—Your reply through the CANADA FARMER to the following queries will oblige myself and other farmers in this locality: What do proprietors of cheese factories pay farmers per gallon for milk delivered on the farms? Who pays for the bucket or can in which the milk is conveyed to the factory—the farmer or the manufacturer? Is it more profitable to sell the milk than to make butter, raise calves, &c.?—I am, &c.,

ARTHUR, Ont.

[Where the proprietors of cheese factories purchase milk of farmers, the farmers generally deliver the milk at the factories, and sell it by weight at a price equivalent to from 7½ to 9½ cts. per gallon according to the price of cheese. But few factory men purchase milk at the farms, and when they do so, they deduct a fair consideration for hauling the milk. The price of milk is based upon its delivery at the factory, where the manufacturer or proprietor can pay for 10 lbs. of milk, two cents less than the price of a pound of cured cheese delivered at the factory boxed. The factory man will generally require a little more margin than this to cover losses by accidents and liability to variations in price. Milk has sold for the three last years past at 90 cts. to \$1.20 per hundred pounds. The price at which cheese is now selling would make it worth \$1.25 per hundred, but it is not likely that it will remain at present prices long. As a gallon of milk weighs 231 cubic inches, weighs 8½ lbs., it would make a gallon worth 10½ cts., but estimates for the season could not be based on any such price. As weighing is so much more convenient and accurate than measuring, that mode of estimating milk is adopted at nearly all the factories.]

The carrying can always belongs to the party at whose charge the milk is delivered.

Whether it is more profitable to sell milk than to make butter or raise calves, &c., depends very much upon the relative prices that can be obtained for each. Generally, it is more profitable to sell the milk than to make the butter at home, because the factoryman has his superior facilities and better skill, can make a better and larger product from a given quantity of milk, and at less cost, so that he can afford to pay the farmer more than the latter could realize by working up his milk at home. This remark is based upon the supposition that the milk is handled and the butter made by the farmer in the usual way, and that the factory is convenient. If a farmer has a small dairy and is remote from a factory, and could not unite with others in the delivery of his milk, the cost of delivering his small mess of milk alone at a long distance would, very likely, be more than counterbalance the enhanced value it would receive at the hands of the manufacturer, so that he could only be moved at a loss.

Where a dairyman has running water and other facilities for taking care of the milk and making superior butter, especially if he avails himself of the modern large pans, each of which is large enough to hold the whole of the milk at one working, the labor in caring for the milk and making butter, saying nothing of the improved quality, is much reduced, and it is generally estimated to be as easy to take care of the milk and make the butter as to deliver the milk at a factory one mile distant. Where such facilities exist or are obtainable, it could be more profitable to make butter at home than to sell the milk for cheese-making, unless there is an unusually wide difference between the price of butter and cheese.

In regard to raising calves, though it always pays for a dairyman to raise choice heifers, to replenish the annual depreciation of his herd, dairymen are pretty well agreed that it does not pay to raise ordinary calves on milk for the prices they usually bring. But dairy farmers are becoming quite expert in raising calves cheaply and successfully without much milk,

by substituting oil meal, or oat, corn, pea or bean meal cooked, and fed in the form of a gruel. Thus by exercising a little care and skill he can use his milk for butter or cheese and raise calves too. In all the older dairy districts of the States there may be found dairymen who raise nice thrifty calves by using milk from ten to fifteen days and gradually changing to gruel or other food as a substitute.—L. B. ARNOLD, Rochester.]

Loss of Teat.

The N. Y. Times thus answers a question which had been propounded by a farmer whose cow had lost a teat, probably from its being trodden upon by herself:—

"The loss of a teat results in the loss of the milk glands connected with it in that quarter of the udder. In this case there is no reason for the teat to be closed, which at any rate would be injudicious, although it may readily be done. We would suggest the use of an India-rubber band, the pressure of which would close the orifice. Leaking teats have been closed by the application of collodion to the teat immediately after milking. To apply it wipe the teat perfectly dry, and with a small brush or camel's hair pencil paint the end of the teat over with three or four coats of the collodion. It dries instantly, and contracting as it dries, closes the orifice. Collodion is gun cotton dissolved in ether."

Buckwheat and Wheat Bran.

It used to be thought if anything grown on the farm was worthless as feed, it was buckwheat bran. The following experiments, by the careful superintendent of the Eastern Pennsylvania Experimental Farm in Chester county, John I. Cutter, seem to indicate, however, a decided value in this bran, and also to some extent the advantage of steamed or cooked corn:

"During the first trial, commencing January 28th 1874, 16 cows were fed with 5 pounds of cut fodder and 5 pounds of cut hay, twice a day, and 5½ quarts of corn meal and 5½ quarts of wheat bran, mixed, per day, fed to them at two feeds. The wheat bran costs \$26 per ton, and the buckwheat bran costs \$22 per ton. The wheat bran weighed 16½ lbs. per bushel, and the buckwheat bran 19 lbs. In these experiments an equal value of the two brans was used, and of the product, sufficient of the new milk was used for a family of two persons, and does not therefore appear in the yield of butter:

| Date. | Time of Milking | Lbs. of Milk | Temperature |
|---------------------|-----------------|--------------|-------------|
| January 28, morning | | 109 | 45 degrees |
| " 28, evening | | 71 | 46 " |
| " 29, morning | | 109 | 30 " |
| " 29, evening | | 71 | 35 " |
| " 30, morning | | 118½ | 32 " |
| " 30, evening | | 77 | 34 " |
| " 31, morning | | 111 | 32 " |
| " 31, evening | | 72 | 31 " |
| February 1, morning | | 115½ | 20 " |
| " 1, evening | | 56½ | 32 " |
| " 2, morning | | 101½ | 11 " |
| " 2, evening | | 70 | 20 " |
| " 3, morning | | 99 | 22 " |
| " 3, evening | | 71 | 32 " |

Total 1252
Whole weight of cream..... 117
" " butter..... 57½

SECOND EXPERIMENT

The cows were fed as in the first experiment, with the exception that an equal value of buckwheat bran was substituted for wheat bran:

| Date. | Time of Milking | Lbs. of Milk | Temperature |
|---------------------|-----------------|--------------|-------------|
| February 4, morning | | 103½ | 22 degrees. |
| " 4, evening | | 91 | 29 " |
| " 5, morning | | 99 | 29 " |
| " 5, evening | | 76 | 30 " |
| " 6, morning | | 111 | 15 " |
| " 6, evening | | 77 | 19 " |
| " 7, morning | | 107½ | 19 " |
| " 7, evening | | 71 | 20 " |
| " 8, morning | | 111 | 20 " |
| " 8, evening | | 73½ | 26 " |
| " 9, morning | | 105 | 16 " |
| " 9, evening | | 75½ | 30 " |
| " 10, morning | | 98½ | 24 " |
| " 10, evening | | 77 | 23 " |

Total 1262½
Pounds of cream..... 121
" " butter..... 59½

In the two experiments it will be seen that the buckwheat bran increased the flow of milk, and the amount of butter, notwithstanding the lower temperature and the shrinkage of the milk incident to the advancement of the season and the drying off of the cows.

TEST BY WETTING THE FEED.

The same amount of feed was given the cows as in the last experiment, and fed similarly, excepting that the meal and bran was mixed with the hay and fodder, and wet with hot water, lying so mixed for 12 hours before feeding:

| Date. | Time of Milking | Lbs. of Milk | Temperature |
|----------------------|-----------------|--------------|-------------|
| February 11, morning | | 111 | 23 degrees. |
| " 11, evening | | 79 | 36 " |
| " 12, morning | | 114 | 20 " |
| " 12, evening | | 78 | 32 " |
| " 13, morning | | 111 | 34 " |
| " 13, evening | | 87 | 45 " |
| " 14, morning | | 117 | 40 " |
| " 14, evening | | 75 | 43 " |
| " 15, morning | | 120 | 34 " |
| " 15, evening | | 71 | 40 " |
| " 16, morning | | 94 | 32 " |
| " 16, evening | | 75 | 44 " |
| " 17, morning | | 105 | 25 " |
| " 17, evening | | 81½ | 32 " |

Total 1318½
Pounds of cream..... 140½
" " butter..... 60½
—Practical Farmer.

Opening of Cheese Factories in New York.

The *Utica Herald* for April 23 publishes reports from 123 factories which have commenced work in that State this spring. Of these 38 began work in March; 15 before March 20. The earliest date was March 1. Of 29 reported from Herkimer County, 21 began in March, and none later than April 9. Of 9 reported from Madison county but 1 began in March. In several counties all that have reported began work in April.

Of the 123, 16 commenced work with 200 cows or over—375 being the largest number for any one factory; 56 had less than 100, and 20 report, in round numbers, 109. As to average number for the season, 12 make estimate at less than 400; 23 at 600 or over; 5 only reached or exceeded 1,000; the smallest number reported is 100. The total number of cows expected for these factories shows a fair increase over last year, although in a number of cases a less number is expected.

These figures furnish a basis for some comparisons with the north-west. It should be borne in mind that the number reported is only about one-tenth of the total number in New York.

Even with this borne in mind, it is evident that many factories in New York commence cheese making at an earlier date than is common in the North-west. A large majority of the factories in Wisconsin do not commence work before May 1.

The factories in New York are generally larger than those in the north-west.—*Western Farmer*.

A WESTERN paper says dealers in butter classify it as wool grease, cat grease, soap grease, variegated, tassellated cow grease, boarding-house breakfast inferior tub, common tub, medium roll, good roll, and gilt edge roll. The terms are strictly technical.

CALIFORNIA butter was recently on sale in Springfield, Mass., having made the 3,000 mile journey in 14 days. The *N. E. Farmer* speaks of it as beautiful in color and of excellent flavor, and embraces the opportunity to read a mild lesson to dairymen at home.

BUTTER AND CHEESE RECEIPTS AT NEW YORK.—During the first four months of this year, 220,816 packages of butter and 119,092 boxes of cheese were received at New York. During the same time 167,571 boxes of cheese were exported.

PRIZES FOR ESCUTCHEONS.—Prizes will be given at the Fair of the Royal Jersey Agricultural Society, to be held in the Island of Jersey during the coming summer, for cows having the best escutcheons or milk-mirrors. This is the first time prizes were ever offered for escutcheons.

SCARCITY OF FODDER IN NEW YORK DAIRY REGION.—There is a great lack of hay or any coarse fodder in parts of Madison, Herkimer, Oneida, Otsego, and Fulton Counties, N. Y., hay being \$40 a ton in many places, with none to sell. Much meal is being fed. The lack of fodder and the late spring will very perceptibly reduce the early make of cheese. As a rule the dairy herds are not filled up to the usual number.