

RECORD FOR TWO OR THREE COWS.

Editor "The Farmer's Advocate":

In answer to your letter, would say we have kept milk records of two and three cows for over a year. We do not sell milk, as we have a large household. It takes a very short time to weigh the milk, when it is brought into the house, and we are keenly interested in watching the results of cold weather, late milking, different feeds, and so on. We have found out that the less water the cow drinks, the less milk will be produced. We think it a good plan to keep a record, especially as we have different men to milk our cows each year, and the record tells us which are the best milkers. We think that milk records are a decided benefit, even to a small farmer.

F. W. & A. MUSGRAVE.

King's Co., N. S.

HAVE PAILS A UNIFORM WEIGHT.

Editor "The Farmer's Advocate":

I have kept milk records for ten years, and find it takes from 7 to 15 seconds to weigh and strain each cow's milk. I commenced keeping a record to find how much milk a cow would give in a year, and to learn what to feed in order to keep up her flow of milk. I have one cow giving 7,000 pounds of milk, of which it takes 18 pounds to make 1 pound butter, and another cow giving 6,000 pounds, of which it takes 25 pounds to make 1 pound butter. A man can keep the run of his cows when he sees what milk they are giving daily: he can see at once when a cow is failing, and perhaps find out the cause and remedy it. If you cannot weigh all your feed, you can weigh or measure your grain ration, and note its effect on the flow of milk. In keeping a record, have all the milk pails made the same weight by the addition of a little lead to the bottom of the lighter ones, and let the milker place the gross weight of pail and milk opposite each cow's numbers.

WM. HUNT.

Colchester Co., N. S.

MILKING-MACHINE BULLETIN.

Through the series of articles published in these columns, and subsequent discussions, our readers are familiar with the results of the extended trials of the milking machine in the Dairy Department of the Ontario Agricultural College, the details of which have lately appeared in bulletin form by H. H. Dean, Professor of Dairying, and S. F. Edwards, Professor of Bacteriology. The general conclusions are as follows:

1. In the comparative tests made of hand and machine milking for short periods, the results were in favor of hand milking in all tests except one.

2. When the machine was compared with inexperienced hand milking, there was not so much difference between the results got from hand and machine milking, showing that under certain circumstances the machine might be equal to hand milking for at least a short period of time.

3. The general tendency was for cows to go dry sooner than they were accustomed to do with hand milking. This was more particularly the case with the older cows. However, this is a point not easily solved, as cows vary in this respect from year to year.

4. Some of our young cows have given very good results with the machine, indicating that it may be possible to breed and train cows which will give fairly good results under this system of milking, though they are not likely to be so good as if trained to hand milking.

5. Special care needs to be exercised in the cleaning of the machine; otherwise the milk is liable to be tainted. Simply sucking water through the parts is not sufficient. All parts of the machine that come in contact with the milk must be thoroughly scalded or steamed, at least once a week, and, for good results, this should be done daily.

6. On average farms, where ten to twenty-five cows are kept, we do not believe that it would pay to install a milking machine at present. On farms where fifty to one hundred or more cows are kept, and where labor is very expensive, and difficult to get, and where the owner of the cows is not so particular about maximum yields from individual cows, the milking machine is worthy of careful consideration. However, we do not consider the machines at present on the market as anywhere near perfection, and we look for great improvement in them during the next few years.

The bacteriological summary is as follows:

1. It is possible and practicable for the general farmer, as well as the dairy farmer, to produce milk, either by hand or machine milking.

2. To produce pure milk, by hand or machine milking, scrupulous cleanliness must be maintained about the stable and animals, the person of the milker, and the utensils.

3. Strict sanitary precautions being observed, hand-drawn and machine-drawn milk in our test showed approximately the same average bacterial content.

4. The mere fact that milk is drawn by the Burrell-Lawrence-Kennedy milker is by no means a guarantee of its purity. It may contain many more bacteria than hand-drawn milk under similar conditions.

5. We would not advise the installation of a machine milker, unless the farmer or dairyman is prepared to fill the sanitary conditions essential to the production of pure milk.

AN EIGHT-COW HERD RECORD.

Editor "The Farmer's Advocate":

You will see by the enclosed return from the Warton creamery for last month, that our eight cows are doing all right, with nothing but pasture. Four of these calved before December 1st last, the other four this spring. They are nondescripts.

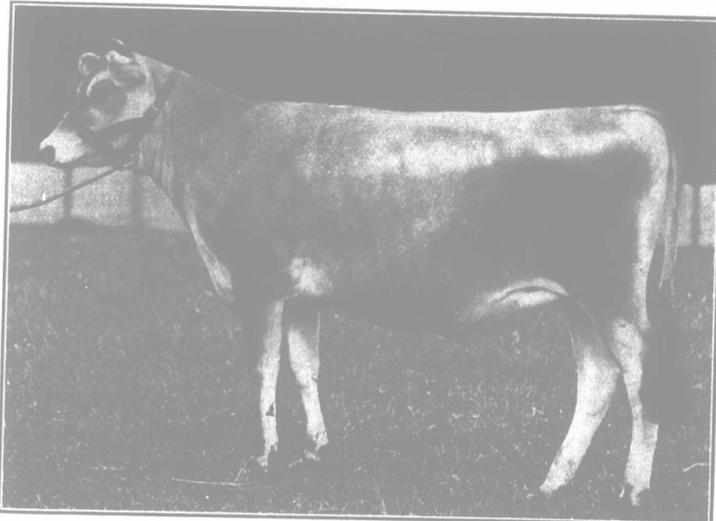
	Cream.		Butter.	
	July, 1907.	Inches.	Lbs.	Ozs.
1.....	16.6		22	9
3.....	12.4		17	3
5.....	13.0		16	9
8.....	20.4		25	5
10.....	12.9		16	2
12.....	12.7		17	2
15.....	18.1		25	3
17.....	10.5		14	4
19.....	12.3		15	4
22.....	19.1		24	4
24.....	10.5		13	6
26.....	11.8		15	3
29.....	16.8		21	8
31.....	11.2		15	4

Total lbs. butter, 261.6.

Summary: By 261.6 lbs. butter, at 16c., \$41.85.

Bruce Co., Ont.

CECIL SWALE.



Frolic.

Yearling Jersey heifer, of ideal type. First and champion, Bath and West Show, 1907.

POULTRY.

STAMPING EGGS.

Editor "The Farmer's Advocate":

The question of stamping eggs, raised by Mr. Henry, and upon which discussion is called, is both an important and a timely one. Hitherto almost anything with a shell on it has passed for an egg. For this the grocer has not been altogether to blame, as he has found those who have supplied him with eggs sensitive about being asked regarding the freshness of their produce. Then, again, he has not always found his sellers honest or truthful, with the result that eggs purchased by him in good faith have proved to be immature chickens or bundles of compost when opened by those to whom he has retailed them. If, however, he purchased the eggs with the distinct understanding that the seller was to make good the loss consequent upon unfitness for use, the probabilities of his buying undesirable hen fruit would be reduced to the minimum. Of course, this would have value chiefly in the case of honorable grocers who cater to the needs of honorable and steady customers. The class of consumers who are bound to have a cheap thing may as well rest content to keep on buying cheap eggs, with the accompanying wastefulness and loss.

Further, all fresh eggs are not equally well flavored, and, in these days, when eggs are being used as a delicacy, a grocer should see to it that the eggs he sells his customers are produced under the same cleanly conditions that the milk vendor demands for the dairy cow. The picture drawn by Mr. Henry, of the hen who procures her living by picking over every foul thing, and by drinking from every loathsome pool in the barnyard or slaughter-house is none too vivid, and should

be reproduced for the delectation of some of our refined ladies who daintily declare that there is no difference in eggs. The producer who feeds his fowl on clean wheat and fresh-ground meat and bone, who sprays his poultry-house regularly, who keeps his hens clear of vermin, and who sees that every drinking vessel where his hens drink is kept sweet and clean, furnishes his fellow man with a product that is infinitely superior to his indifferent but greedy neighbor, who lives in the faith and practice that anything is good enough for the hens. And the careful poultryman will never receive the reward that is his due till he is paid a higher price for his eggs than that received by his neglectful neighbor. The marking of eggs seems to suggest the way of securing the recognition of the worthy. A. M. Wentworth Co., Ont.

GARDEN & ORCHARD.

HORTICULTURAL PROGRESS.

Prepared for "The Farmer's Advocate" by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

THE USE OF FRUIT AS FOOD.

There is no doubt of the popularity of fruit in Canada, as enormous quantities of it are consumed annually. Its relative place as a food, however, is not, we believe, generally known. The appetizing and agreeable character of fruit is admitted by everyone, but most kinds of fruit are considered in the light of delicacies, or adjuncts to the regular diet. A bulletin recently issued by the Department of Agriculture, Washington, D.C., as Farmers' Bulletin No. 293, prepared by C. F. Langworthy, in charge of Nutrition Investigations, was written for the purpose of giving information on the "Use of Fruit as Food." At a time when

there is so much ripe fruit in Canada, a review of this bulletin should prove interesting.

The use of fruit by man began in very primitive times, and its continued popularity is good evidence of its wholesomeness. For a time the wild fruit was depended upon by the people, but as civilization advanced and population increased, improvement took place and the fruits were cultivated to obtain greater supplies and better quality. Among the great variations in climates in the world the kinds of edible fruits which are produced are very numerous. In recent years the much-improved transportation facilities have made it possible to send fruits long distances in good condition, hence even in countries where a large variety of fruits can be grown the number which it is possible to obtain is increased still more by fruit shipped from other countries.

Some examples of such fruit sent to Canada are the orange, lemon, grape fruit, banana, raisin and fig. The season also of such fruits as can be raised in Canada is much extended by importations from further south. It will probably not be many years before other fruits not yet found on our markets or seen at present but rarely will become quite abundant, owing to better means of storage and transportation. There are, then, fruits at all times of the year which suit every taste.

Results of experiments tried in California, North Dakota and at Harvard University in feeding human beings of different ages on a fruit and nut diet showed that in some cases at least: "The persons living on a fruit and nut diet apparently maintained their normal health and strength, and it is only fair to conclude that if for any reason such a course seems desirable it is perfectly possible to select a diet made up of fruits and nuts, which, for long periods at any rate, will supply the body with the requisite amount of protein and energy."

Analyses of fruits, a table of which appears in the bulletin, show that there is a marked difference in the food value of the fruit when fresh and dried. The apple, for instance, when fresh contains on an average 84.6 per cent. of water, but when dried only 26.1 per cent. of water. When fresh, one pound of apples has a fuel value per pound of only 200 calories, while when dried it has 1,350, and red raspberries 255 and 1,705, respectively. Of fresh fruits, bananas, grapes and figs are among the highest in food value, one pound of the edible portion of fresh bananas having a fuel value of 460 calories; of grapes, 450; and figs, 380. The persimmon, which is not used much in Canada, is higher than any of them, having a fuel value per pound of 630 calories. It is interesting to compare the fuel value of a few of the staple foods. Potatoes have per pound a fuel value of 385 calories; high-grade wheat flour, 1,650 calories; white bread, 1,215; butter, 3,605.