THE DAIRY.

A Daily Milk Record the First Step to Progress.

To the Editor "The Farmer's Advocate":

In reply to your question, "Does the Daily Milk Record Pay?" I answer yes. By weighing the milk regularly, you know exactly what each cow gives, and then you begin to wonder what is wrong with some of your cows. Take two cows in one stall—both renewed at one time. After milking some little time, one cow increased in weight of milk per week, the other lost; one rose in test also, from 3.8 to nearly 4, the other did not; both fed the same. Where was the fault? By change of the feed we improved the other cow. Take figures for three weeks:

147½ lbs.	141½ lbs.	145 lbs. Fat test rose also
181½ lbs.	182½ lbs.	182½ lbs.

The one cow has been lowering her record for some time. Now we have changed her feed, and she is improving; the other cow still holding her own on the same feed. Another point is, when you see a difference of pounds of milk some days to others, you want to know the cause, then try to remedy. We have raised our milk standard and have improved our cattle, also our barns, since keeping records.

We test our milk regularly for cream. As our milk is sold every day, we have only tested our milk for butter-fat once or twice. We use a tube tester I got in Wisconsin, and find it useful in testing. A butcher's balance scale hangs in the barn, with pencil, putting up a number of papers, one for each week, say enough for ten or a dozen weeks, with the name of each cow. We weigh pail and all, putting all down, and at the end of the week take a sheet off, and you can reckon up in a few minutes: Gross, 257½; tare, 42; net, 215½ lbs. It takes less time in the end, and we do not make so many mistakes. Since keeping records each milker uses his own pail and milks the same cows, and we have found that by keeping regular time our tests are better. We have also found that grooming our cows gives good results; cows in milk should be well brushed every other day, and, better, every day where possible. We notice that when we start to clean our cows they will all rise up if lying down, and after cleaning they will lie down and hardly stir until night. The keeping of records is only the start, but the sooner the man who keeps cows for milking purposes starts, the better for himself and his herd.

Middlesex Co., Ont. LOUIS DAY.

Silo for Winter Dairying.

To the Editor "The Farmer's Advocate":

My experience is that winter dairying is much more profitable than summer. In winter dairying you have all the year round dairying, provided you feed and care for your herd as you should during the winter. I like to have cows fresh between October 1st and January 1st, then with plenty of good ensilage fed twice a day, and good clover hay and bran, gluten or some other protein feed, according to the price in the locality, letting the cow be the judge as to the amount she will digest properly, you can look her in the eye and say, "You pay for your board or you will go to the butcher." If she is a dairy cow she will comply with your requirement every day through the winter; will go on grass in good shape, and will do nearly as well through the summer as a cow that is fresh in the spring. She will take her yearly vacation in the fall, when the pasture is dry, while her spring freshening sister will shrink in her milk. Then a dairyman has more time to take care of his calves during the winter than in summer, and with good, light, comfortable quarters they will do better in winter than in summer, and by spring will be ready to go to grass, and will stand the hot sun and flies better than a young calf, and you can have the skim milk during the summer for pigs. Whenever your cows are fresh, feed them so as to keep them doing their best; do not think you can let them shrink on their milk for a week or a month and then have them make up for lost time, for they will not do it. They must do their work every day or they will run you in debt. I have 30 milk cows, and I feed them silage all winter, except in the extremely cold weather, when I let up some, as the silage is frozen hard, and to feed it is like giving the cows icicles. But when the weather gets milder the silage thaws out, and I go to feeding it again. Winters differ greatly in that respect. The winter preceding this the silage remained unfrozen, and I fed it continually. We used to sell our milk for shipment to the city, but the shipper that was buying it changed his location to another road, and dropped the men that were supplying him milk. Then I went to making butter, and I figure that it pays better to make butter than to sell milk for shipment to the city. I estimate that I make at least 50 cents more on a can of milk by keeping it myself, making butter from the cream, and feeding the skim milk to pigs. Moreover, I save the disagreeable duty of daily hauling my milk two and a half miles to the railroad station. Not only was my time taken by that, but I had to keep an extra horse for the purpose. If I did not do that I would have to keep a team from working in the field when I was driving to the station with one of the horses. The farmer that has clover hay to feed with his silage will not have to buy much grain, as the protein in the clover balances the excess of starchy matter in the silage. Last winter I fed a good deal of gluten feed, because the hay I had was timothy and not clover. With the gluten feed I also fed some oil meal, which I find is good.

Some farmers have conceived the idea that the silo is too expensive a structure for them to have on the farm. The men that hold such an opinion have not investigated the matter. A well-built, permanent silo can be put up for about $1.50 per ton of capacity. That is a cost of $300 for a silo that will hold 200 tons of feed. This amount of feed will supply 20 cows

R. S. Stevenson, Ancaster, Ont

President Canadian Holstein-Friesian Cattle-breeders' Association.

with all the silage they should have, even if they are big cows and are fed the year round. If the farmer is to build a barn that will hold hay for twenty cows even for a winter, can he build it for $300? Not at all. He would have to invest very much more than that sum in a barn to hold the hay for that number of cows. So we see that silage is the cheapest thing possible to feed, if we are to consider the cost of the structure that contains it. The farmer who intends to largely increase the number of his cows will have to put thousands of dollars into a barn structure if he intends to confine himself to the feeding of hay for roughage. It will be far easier for him to extend his stables and build a silo than to construct a stable sufficiently high to hold the hay. When one is freed from the necessity of providing for bulky feed, he can then construct his dairy stable with the one object of securing cleanliness and light. He can build his stable long and low, and secure a flood of light from three sides. His structure does not have to be heavy, as it must be if it is to sustain a heavy superstructure. A silo is thus not expensive, and, moreover, it is a great encourager of the development of dairying. It solves the problem of how a dairyman can make a living off 50 to 100 acres of land. That is going to be the great question in the not distant future, for the farms are already being cut up into smaller ones. If any man doubts whether or not it will pay him to build a silo, let him look into the cost and the benefits, by getting estimates on the cost of construction.

J. P. FLETCHER.

Fulton Co., N. Y.

Registered Ayrshire Heifers.

In the dairy herd of Hon. W. Owens, Montebello, Quebec. (See Gossip.)

Feed, Breed, Weed, to Improve the Dairy Cow.

II.—BREEDING.

The foundation upon which all improvement has been made in improving the different breeds of stock has been good care, and there is no use trying to make progress without this foundation. Just from not realizing this very important point thousands of dollars have been wasted by people starting in to breed pure-bred stock and to improve their herd. Good care and proper feed are absolutely essential to success. The characteristics of different breeds of stock have been further developed by judicious mating. If a man wants to get a fast horse he does not breed to heavy drafts, or, as an old neighbor well said, you can't expect rats from mice. If we want to improve the milking qualities of our cows, then we must breed from milking strains, and from those cows, also, that develop that particular trait. The different dairy breeds have gotten their different characteristics from the system upon which they have been handled and the peculiarities of their environment. The speed of trotting horses has been brought to a greater swiftness by breeding for speed, and in the same way, when seeking to develop a superior milker, we must breed for that. It is not enough alone to know that the animal is registered, or of a breed that is noted as great milkers, because amongst all breeds there are animals that are not so good, and there are pure-bred registered cattle that have lost all their superiority from the way they have been handled. The work of many years may be lost in a very few years by lack of care and feed. It is, therefore, of first importance what the immediate dams of that particular dairy animal have done. The longer and further back, of course, the better it is, but if the closest dams are not good, it shows that the system under which the cattle have been kept has degenerated them. A cow in her natural state does not give a very great quantity of milk. The large productions are acquired by feeding and breeding for that end, and can be very easily lost. It seems to me that, with proper care, we should make a good deal more progress in breeding high-class animals than has been done, because, with the many records now being made, especially if those records are official and absolutely correct, we can know for a certainty what we are breeding from. I think that we can, by systematic work along right lines, breed up a herd of cows that will give from 10,000 to 15,000 pounds of milk a year. Of course, there are cows that will make over 20,000 lbs. of milk a year, but that is rather high-class work, and those animals may be considered as something in the nature of "sports." Perhaps fifty years hence they will not be considered so much "sports" as now.

Whilst I am strong on breeding for performance from performers, I find from my very heavy correspondence that some do not properly realize what these great records mean. A good many seem to think that they should have a bull from a cow that has a record of about twenty-five lbs. butter a week to breed on a grade herd. Such are very scarce, and are required for the pure-bred herds at long prices. Because a man cannot get such, he should not run away with the idea that something else offered him will not do him any good. A cow that will make from 16 to 18 lbs. butter a week when fresh, is a very good cow, and a long sight better than the general run of cows. Possibly there is not one herd in the county that has one such cow in it, outside of the pure-bred herds. A cow with a record of from 17 to 18 lbs. butter a week would equal a cow with a record of 12,000 to 15,000 pounds milk a year. These letters are written especially to be a help to the general dairymen. The man who is breeding high-class stock now does not want any help, and I want to say to the general run of dairymen that if they get a young bull from a cow that will make a record of from 16 to 18 lbs. butter a week, or from a heifer that will make a correspondingly good record for her age, and when they get that animal keep him growing well and in good thrifty condition, also breed him to their best cows, and keep them in good condition at all times—then they are working to progress. A calf so born into this world is more than half raised, and its ancestors should not only be good performers, but they should be in good condition, so that they shall be able to transmit this performance in the way of vitality to their unborn progeny. This I consider of much greater importance than how the calf is reared afterwards. Unless it is born right, it never will be right. Having, then, the dairy