

THE DAIRY.**MILKING QUALITIES.**

A copious flow of milk, sustained through many months, is a quality which has been produced by art in domestication. Wild cattle rarely provide more than enough milk to rear their own offspring, and the flow of it is of comparatively short duration. Small in volume, the milk is rich in quality, but the lacteal organs soon dry off again. This, of course, is in harmony with the requirements of the young animals in a wild state, and is a correlation of the roving life and the hap-hazard feeding of the dams. More milk than the calf requires under such conditions would be waste of material energy which nature does not encourage. It would, moreover, be an incumbrance to the mother. Wild cattle are neither good milkers nor good fatteners, and in parts of England where calves are allowed to run with their domesticated dams generation after generation the breed of such animals is not famous for milk-giving. Like that of the mare and ewe, the milk is smaller in quantity, rich in quality, and of short duration. The desultory and irregular sucking of a calf, or foal, or lamb is not conducive to the development of a large flow of milk, and it distinctly tends to shorten the flow. Hand-milking of a similar character has the same effect. Young people are allowed to learn to milk on cows which are going dry for calving, not on those which are still in full flow. New beginners soon dry up a cow's milk, and bad milkers do the same. Heavy milking properties, then, are artificial, in the sense that they have been developed under domestication and by careful breeding for a given end; yet, like many other qualities, which are little more than mere germs in nature, they become hereditary by long usage. Few sorts of animals, if any, are more susceptible than cattle of being moulded into what we want; no physical quality is so easily trained and developed as that of giving milk. It is a function, which, constantly varying of itself, can be dwarfed or extended at will. By means of intelligent training, kind treatment, and intelligent breeding, it can be developed and made hereditary; an opposite system keeps it in a state of nature. The habits of a cow and the food she receives have a great deal to do with her milking powers; quick and silent hand-milking does the rest. The practice of hand-milking cows has all along tended greatly to the development of the lacteal glands, and this development has become hereditary in our best milking breeds. The ewes of the Larzac breed of sheep, from whose milk the famous Roquefort cheese is made in France, have been hand-milked for generations so that their milking properties are now considerable and inherited. By repeatedly exciting the teats it is even possible to cause an animal that has never borne offspring to yield a small quantity of milk, and a cow sometimes remains barren several years after having had a calf, giving a profitable quantity of milk all the while.—*London Live Stock Journal*.

REGULAR CARE OF COWS.

In summer the farmer has not very much trouble about feeding his cows, except in rare instances, when it becomes necessary to soil,

and then the farmer can easily see the necessity of feeding at the same hour each day, giving a like quantity at each feeding—not feeding in the morning of one day and the afternoon of the next, not feeding one day and missing the next, or giving a half ration one time and a surfeit the next. Several farmers of my acquaintance have remarked that when cows are soiled, they look for the extra feed and do not graze as well as before. This is very much aggravated by the manner of feeding. If the cows are fed at evening each day and have access to water during the day, they will do the best they can on pasture, and the feed they get at night is so much extra.

There are many pastures not supplied with water, and the only means that stock have of quenching thirst is by drinking in the yard night and morning. A great many farmers make the mistake of thinking that if stock have free access to water night and morning, their duty to their cattle has been done in this respect. I have found that cows do much better when having access to water in the pasture. In order that cows should do their best at the pail they must be kept quiet and contented. No cow will do well when she is suffering from thirst for at least half of the time. With free access to water during the day cows will drink only a small quantity at a time, feed a while and again drink. They do this many times during the day, and do better in consequence. Stock that have been deprived of water during the day drink large quantities when they come to the yard at night. The cows come to the pasture gate three or four hours too soon in the afternoon, simply because there is no water in the pasture.

In one other particular it pays to be regular with the dairy. Some farmers vary sometimes as much as two hours from a regular hour of milking, and on Sundays even more. This is unwise, and an injury to the dairy. Cows should be milked at the same hour every day, and as nearly as possible at times equi-distant apart in the day. A dairy of good cows should have plenty of sweet, nutritious food, free access to water in the pasture at all hours, a few shade trees in the pasture, and regularity in milking. The farmer who does all this well, certainly has intelligence enough to attend properly to other details and make his dairy pay him a good profit.—*F. K. Moreland, in Country Gentleman*.

RETENTION OF AFTER-BIRTH.

The retention of the after-birth is quite common when a cow calves prematurely. It is not at all rare that a cow should calve two weeks before or after her time. The range varies from 240 to 300, and the average period being about 283 days. But when the period is abnormal there is frequently some trouble of the kind above mentioned, but generally without serious results. If the after-birth or foetal membranes are not expelled, they may be removed by careful detachment from the adhering cotyledone with the fingers inserted, but sometimes it is not easily possible to enter the organ, and its tight closing may even hold the membranes so that they cannot escape, although loose within. In this case it is well to tie a weight of two or three pounds to the protruding parts, and this may, in time, effect a

release. The treatment recommended in case of retention is to give an infusion of camomile or savin leaves in quart doses, with one and a half ounces of carbonate of potash dissolved in each. Generally when these resources are ineffective the membranes decay and pass off without serious trouble.—*Orange County Farmer*.

CHEAP FEED FOR THE COWS.

A member of the Oxford (Ohio) Farmers' Club claims that it is no trick to raise five hundred bushels and even one thousand bushels per acre of mangold wurtzels, in a good season on good land, with the same labour needed to raise an acre of potatoes. The roots should be pitted just as winter closes up the ground, and kept in the pit until March. Then they are ripe, the saccharine matter is abundant and the fibre tender, and the cows ready to appreciate the change from any feed. He thinks mangold wurtzels the cheapest green feed for that season that can be produced, but feeds ground feed and hay with them. He prefers to pit them till March and remove them, a cart-load at a time, to his bank barn, and has no trouble about freezing. As to pumpkins, they are the cheapest fall feed. The good wife always delights in the abundant flow of milk and rich, golden butter, after the cows get the pumpkins twice a day. He feeds them with bran and corn-meal and flavours with salt. In reply to the inquiry if he took the seeds out, he said no. He had, as carefully as he could, in his poor way, without scales to weigh offal and urine, fed with and without the seeds, and he could see no harm from feeding seeds.

MEASURE OF VALUE FOR MILCH COWS.

As a rule, a beef animal that weighs 1,000 lbs. is worth twice as much as one that weighs but 500 lbs; but this rule does not work with milk cows. That is, a cow that yields 100 lbs. of butter a year is not worth one half so much as a cow that yields 200 lbs. a year, for the simple reason that while the first or 100-lb. cow barely pays her keep, and, if highly fed, absolutely costs more than she makes, the latter or 200-lb. cow makes a profit. Too much care cannot be taken in weeding out the unprofitable members of the herd.—*Breeder's Gazette, Chicago*.

GOATS' MILK.

A goat dairy farm is conducted on the Surrey Hills in England. Goats' milk, and butter and cheese made from it, with goat and kid-skins as minor products, are supplied by the farm. There are thousands of acres of poor land in Surrey, and these may be utilized just as land is made profitable in this way in various continental countries. On this Surrey farm is a herd of 120 milch goats, and the milk, which is prescribed by physicians, and is now comparatively difficult to obtain in London, will find a ready market.

THE price of cheese has not advanced as was expected during the drought last summer. In most parts of the country the fall was very favourable for pasturage, and the expected high price of cheese induced dairymen to continue making as long as possible.