

and straw the milk from these cows may produce just as much butter per 100 lbs. of milk, providing you can get it all out, yet it will be sorry looking stuff—white, hard and tallowy and you have got to have it almost at the melting point before it will spread, while the other butter is tough and waxy and at an ordinary temperature will spread like September butter. There are three kinds of fat in our butter: palmatin, stearin and oleine. The oleine is an oily fat while the other two are tallowy fats and where cows get most of their winter living from the straw stack their butter contains very little, if any, of the oily fat and is white and tallowy, but if cows are fed liberally upon silage, clover, hay, mangolds, bran, oat and pea meal or oil cake their butter will have a good proportion of the oily fat which makes it worth several cents per pound more than the tallowy butter. We may get milk from different patrons testing just the same, yet one man's milk may be, and often is, worth a good deal more than his neighbors, all on account of the different methods of feeding, and if we are to send first-class butter out of our creameries we must have milk made from first-class feed.

CLEANLINESS AND CARE.

A cow is a clean animal and her surroundings ought to be kept reasonably clean. One of the regular things to be done every fall should be to sweep down the cobwebs laden with dust festooning the whole ceiling which are often left to accumulate from one year to another, and why should not a stable be whitewashed once in a couple of years at least? It is a comparatively easy matter where a farmer has a spray pump. When the cows are first taken in in the fall the hair should be carefully clipped from their thighs and udders and cut off the switch, then your cows are in a shape to keep clean if you give them half a chance, and when you go and sit down to milk them you have an opportunity of cleaning the udder pretty well before commencing to milk. No one should ever go to the stable to milk in the winter time without carrying some warm water and have an old pail and a good sized cloth at the stable for the purpose of washing and drying the cow's udder. Sometimes they are not so dirty but they should always be wiped with a damp cloth if not washed. But do not commence at one end of a row of cows and clean the udders of the whole row before commencing to milk because the moment you commence to handle the udders the cow begins to let down her milk and if you do not go on and milk her you do her an injury. Milkers should not milk a cow with dirty hands any more than they should milk a cow that has dirty teats and udder. A great many stables throughout the country are not fit places for cows to dwell in if we are to expect pure milk from them. They are dark and dirty with no attempt whatever at ventilation. I have seen 50 or 60 ft. stables with just one window in the whole length, just as if the owner was afraid that a little light was going to injure his stock. I was in a stable last winter in Western Ontario where the owner has changed his stalls from the old fashioned drop behind the cows and the ordinary feed box to an arrangement similar to the "Hoard" stall, and his cows were as sleek and clean on their thighs and udders as if they were running in clover. What would the farmers of our province think if our Government should appoint inspectors to visit the cow byres of patrons who supply milk to creameries in the winter time and condemn the milk as unfit for butter-making unless there was a reasonable amount of care and cleanliness bestowed upon its production? The authorities in our large cities have the power to send men to inspect the sources of their milk supply, and if they find unsanitary conditions around the premises they will prohibit the milkman from selling his milk in the city for human consumption, and why should not the consumers of butter be accorded the same protection?

Milk should be taken from the stable as soon as possible after milking and strained into the can. Always strain your milk summer and winter. Some actually do not think it necessary to strain it because it will be strained at the creamery. They would leave the hairs, bits of manure,

scales off the cow's udder and straw ends to make an infusion of stable odors and expect the factory strainer to take it all out, odor and all. Do not keep your can where the milk will absorb kitchen odors, for they are as fatal to good butter as stable odors. Do not put warm milk into the can and then shove the cover down and imprison the animal odor, for there is no surer way of spoiling milk and giving it that old half bitter flavor which we find in so much winter milk.

The proper aeration of milk, either by the use of the aerator or by dipping or pouring, is the great secret of keeping milk sweet and of good flavor, and we find in our creamery work that the better the milk is cared for the more uniform and satisfactory will the test be and as you are paid by the Babcock test it is to your interest to take the best possible care of your milk. A good many by neglect allow a thick coat of cream to rise on their milk which will not mix again with the milk, but floats around on top and is often churned on the road to the creamery which takes just that much butter fat out of the milk and the test is lowered accordingly, and if this occurs a few times during the month, then there is dissatisfaction and the Babcock tester is blamed for what is purely the patron's own fault.

Proper Way to Feed Lambs

Peter Jansen, the great Western sheep feeder, says:

From a very small beginning, some twenty years ago, the business of fattening sheep for the butchers has become a gigantic enterprise. The most important point in starting to feed sheep is to buy the right kind and at the right price. The three important things in feeding sheep are a dry feed lot, pure water and plenty of good feed; and, as a fourth essential I would add regularity and good common sense. With these anybody can make fat sheep. Whether he can make money in feeding them is not quite so sure. After getting the sheep they should be thoroughly dipped for scab, and where a long feed is contemplated they should by all means be dipped twice, from ten to twelve days apart. The operation of dipping is now so well known that it is not necessary for me to enter into the details, but it should be done thoroughly. Opinions differ as to the dip to be used.

I am careful to start my sheep very slowly on grain, giving them about a quarter of a pound at first, with all the roughness they want, gradually increasing the grain and decreasing the rough feed. It takes about thirty days to get them on full feed, and I believe it is a good plan never to overcrowd their appetites, especially when they are to be fed four or five months. When on full feed grown wethers will eat from one and one-half to two and one half pounds of grain a day; lambs somewhat less. If it is possible, a mixture of oats, shelled corn, bran or oil makes a splendid ration. But this is often not practicable on account of the high price of some of these ingredients. I have made very fat sheep on nothing but clear, shelled corn and wheat straw. It takes from three to four bushels of grain to fatten a sheep, and we figure on ten tons of roughness for 100 sheep during the average feeding season. I feed them grain three times a day, and roughness twice—morning and evening. Of course, they must have plenty of good, clear water. I keep salt before them always.

CORRESPONDENCE

Commercial Fertilizers

A Reply to "Veritas" in November 7th Issue.

To the Editor of FARMING:

In your issue of FARMING, November 7th, "Veritas" desires to know something of artificial fertilizers in their special value for applying to a grain crop in order to get a