

He has sale for his skim and buttermilk in the city; but when returned to the farmers he recommends keeping the evening's milk separate from the morning's, so as to prevent souring before it reaches its destination. Mr. Walton's butter is regarded as a first-class article, or which he receives 30 to 35 cents per pound from special customers in Toronto.

From an educational standpoint, there is an important lesson to be drawn from Mr. Walton's experience. With his customers uniformity is of greater importance than quality. Even the coloring matter must not vary one shade in any day of the year; otherwise a suspicion is at once aroused as to the quality of the butter. He has educated his customers to a certain taste, and the call is therefore for uniformity. Let us now suppose Mr. Walton takes the advantage of later investigations, and resolves upon improving his brand. The result would be that he would lose custom. And so it goes with all other butter-makers who have special customers, although the mode of manufacture in each case may be quite different. Such consumers are not supposed to keep posted in the best methods of butter-making; their tastes cannot follow every step of improvement, and all attempts to elevate the tone of special butter-makers will prove as futile as the attempts made to educate the farmers in the science and art of butter-making.

How to Milk.

The first requisite to good milking is, that the cow be kept where her sides, teats and udder shall be clean and dry, says Prof. Arnold in N. Y. Tribune. The next requisite is, that she shall be where she shall be comfortable and free from any annoyance or excitement. This is essential to her "giving down" perfectly. A cow's bag is interspersed with delicate muscles so much under the control of her will that she can easily contract them and hold back a portion of her milk. There are but few cows which can long "hold back" the milk of a full udder, but it is very easy for them to hold back whenever there is but little in the bag, and at the last end of a milking; and this they are very sure to do if there is anything unusual to disturb or excite them, as loud talking, being milked by a stranger, or even his presence. I had my dairy of twenty cows fall short in their yield a pailful of milk several times one summer, simply from a neighbor's dog following into the milking barn when I was milking, my cows not being accustomed to the sight of a dog.

Assuming that the cow and her bag are clean and dry, and that she is comfortable and quiet, the milker should sit down gently on a firm stool, and with a light and careful motion brush teats, udder, and side of the cow next to him, to free them from any specks of dust, dirt or hairs that would be liable to fall into his pail. A tin pail, with the top wider than the bottom, is the best vessel to milk in. Let this be held firmly between the knees, with the bottom resting on the ankles, as this is the safest and best way to hold a pail to protect it against any sudden motion of the cow. If the bag is much pendulous, and the cow is very gentle, there is no objection to setting the pail on the ground. Let the milker now grasp the teats with his whole hand, and by a firm and rapid but steady pres-

sure crowd the milk out by closing the fingers next to the udder a little in advance of those below, being careful not to hurt the cow by pinching her teat between the ends of his fingers and his hand, or by pressing his finger nails into the teat as his hand is closed. Milk the left hind teat with the right forward one, and the right hind with the left forward, always holding the left wrist firmly so as to be ready instantly to crowd the cow's leg back if she should attempt to kick or step suddenly forward.

The milking should always be done with dry hands, both on account of cleanliness and for the sake of keeping the teats in good order. If the teats are too dry and inclined to crack, they may be wet after milking with a little of the strippings, or with a little linseed oil or other soft grease. The hands should press alternately and not both at once; and when milking is once begun, it should go on as rapidly as it can consistently with the comfort of the cow and the strength of the operator, and without any cessation until the milk is all drawn, otherwise the cow will get out of patience and hold back the last part of her milk.

The milk in the udder is contained in branching tubes and numerous small cavities distributed through it, the tubes coming together just at the upper end of the teat, and forming a single constricted channel, which is inclined to keep closed and nearly equivalent to a valve. Toward the close of the milking, a little pulling, as the teat is pressed, works the milk out of the little cavities by stretching and flattening them, and at the same time pulls open the constricted channel to let it pull through.

This pulling down must be gentle and moderate. As done by the calf in the sucking it is just right. If the teats are pulled too hard, the severe stretching of the walls of the passage at the upper end of the teat causes them to pull up and thicken, so much as to impede the flow into the teat and often to stop it entirely. For this reason the practice of stripping the milk out by pulling down with the thumb and fingers, and letting the teat slip between them as the milk is driven out, is not a good practice. It often causes the passage at the top of the teat to pull up and close, as just described, and to make the thickening of the walls apparent by a hard bunch which feels like a kernel of corn. The stripping method pulls too hard.

To get out the last drop of milk is an important means of keeping up and prolonging the flow. Nothing will dry up a cow faster than to leave a part of her milk in her bag at each milking. It will often aid in getting that important drop to clasp the lower part of the udder, or so much of it as can be taken in, and slide the hand down, gently pressing, so as to help crowd the milk forward till the hand come to the position for grasping the teat and pressing the milk out. All this should be done as expeditiously as possible, as the quicker the milk is got out the more perfectly it can be drawn.

It is not what a cow eats that tells, but what she assimilates, just as much so as a man's prosperity depends upon his margin of profits, not upon the quantity of money which he receives or expends.

Why Salt Shows on Butter.

It is not uncommon to see butter in rolls or prints of good quality and tolerably fresh, with a coating of salt crystals all over the outside, giving it a stale and unpleasant appearance. This may be caused in several ways. If the salt used is of poor quality, and particularly if it is too coarse in grain, it fails to be well incorporated in the butter, and, changing to brine after the rolls have been made up, it comes to the surface and takes the form of a crust. The finest and best salt, not well worked into the butter, will act in the same way. Again, if there is more moisture left in the butter than it will naturally hold, the salt joins with this extra water to form brine; this brine finds its way to the outside, evaporates and leaves the salt covering.

The best means, therefore, of avoiding this difficulty, is to make the butter by the granular method, wash it very thoroughly and allow it to drain and dry off well, while still in the granular form, before adding the salt. Then mix in the salt as thoroughly as possible, having it of the best quality and as fine as can be got; allow it to stand a little while before working and putting into its final form. This gives an opportunity for all the salt to dissolve before the working and then for removing all surplus brine.

All butter, however, contains a pretty large percentage of moisture in the form of brine, and it must be kept in a moist atmosphere or else the water of the brine will evaporate more or less, leaving the salt visible on the outside. Any good butter will show this dry salt if exposed long enough in very dry air.—[Henry E. Alvord, Houghton Farm, N. Y.]

The Aylesbury Dairy Company supplying dairy products in London take for analysis at least one sample each day from the milk of every dairymen farmer with whom it deals; 10,399 samples were analyzed in '84, specific gravity, total solids, and fat being determined in each one. Furthermore, 3,572 samples were taken from the milk carts of the company in the city. The difference between the milk brought from the country and that actually sold to families was insignificant. The average per cent. for the year of total solids in the milk was 12.96, and of fat 3.74. Of cream 600 samples were analyzed, giving an average of 42 per cent. of total solids, and 35.3 of fat. It is easy to see what an excellent system this is, on all sides; it encourages and secures the production of good milk by the dairymen, secures the certainty of the delivery of milk of the same good quality to the consumer at least as effectually as it can be done by any police inspection, and at the same time builds up a great business for the company by building up its reputation for uniformly square dealing.

The low prices realized at the sale of Sir Henry Allsopp's Shorthorns, in England, last week, serve to illustrate the general depression of agriculture in a striking manner. The total of the sale was about \$45,000, which represented a very heavy loss on the original outlay. One cow, for instance, for which Sir Henry paid \$16,000, only fetched \$2,150, and the highest price of the day was \$3,300.