

THE DAIRY

Cost and Profit in Buttermaking.

In the dairy department of The Ranch for July 1, 1904, was an article headed: "Butter Prices During May." In the discussion you gave figures and statistics which, to people not knowing the conditions, were misleading, in that they state that the Sunnyside creameries charge considerable more for making up butter than the Seattle creameries. Taking your figures as given, I think we can show you that we do not get as much here as they do.

Seattle creameries' direct charge is 2 to 2½ per lb., an average of 2¼c per lb., six per cent. overrun is 1½c per lb., leaving a gross profit of 3¼c per lb., f. o. b., Seattle.

Sunnyside creameries' direct charge is 5½c per lb., five per cent. overrun allowed is 1¼c per lb., making a gross profit of 6¼c per lb., f. o. b., farmhouse.

You see we must put on teams to gather cream, and then haul the butter nine miles to depot, and ship two hundred miles by express at a cost of 1¼c per lb. net. Then allow us the price f. o. b. Seattle and it leaves us 1¼c per lb. for man and team. We make about one hundred and fifty pounds per day. Remember we have allowed 16 per cent. overrun, which is the highest notch under favorable circumstances and much more than we realize. We actually furnish all labor and material necessary to gather the cream, make the butter and deliver to depot for about 2¼c per lb., and still people are thinking of putting in another creamery.

It costs us 1½c per lb. commission for selling, which Seattle creameries acknowledge it is worth, even though you are located so as to handle it yourself.

—Mountain View Creamery.

Salt Spring Island Dairy Herds.

If any one would like to see how we keep the herds that supply the creamery, that one must mount the wagon beside me, and together we will go creeping over the mountain from the harbor until we reach the summit of the divide. There below us we shall see spread the dairy farm and trout lake belonging to Mr. Socrates Tobias Conery. Socrates has all the wisdom of his namesake and ten times the rustle. When he landel here, he informs us, he had nothing but his brains. As he now keeps a standing herd of sixty grade Jerseys the said brains appear to have been made of valuable material. There is a separator which is run by steam, a number of fine Yorkshire swine, a flock of healthy turkeys—an unusual thing just now—and a great many interesting and beautiful sights to be viewed once we are within the hospitable doors. There is a grand Jersey bull, sweepstakes winner, and a youngster not yet shown that is a picture. The assistant who holds the bulls is also a picture with his long yellow curls. In fact, Socrates himself, his house his family, the cattle and the stranger that is within his gates are all pictures; but like all Americans, there is nothing—with perhaps the exception of Socrates, junior—that would not be for sale if you were to offer enough, only you would not buy Socrates to eat a single scrap of lotus.

—One of the Lotus Eaters.

Canned Cheese.

The canning of cheese is coming to be looked upon by some as solving the problem of making and keeping cheese. Papers devoted to the grocer's trade are giving the new departure considerable attention. An article in the West Coast Trade says there are several reasons why this new departure in the canning line should meet with great success. In

the first place, as the author says, there are a multitude of troubles in connection with cheesemaking, which have not as yet been conquered, resulting in heavy losses to the manufacturers, and in what is still worse the production of a finished article, no two samples of which are alike. The confusion this causes and the losses that must necessarily follow can easily be imagined, so that this new method of canning cheese is as welcome to the manufacturer of cheese as to the canner, if not more so.

The experiments have proven that the cheese may be made up to a standard, and, by hermetically sealing in cans, may be kept at that standard for an indefinite time regardless of the atmospheric changes or temperatures. Another important item or consideration in this matter is that by means of the canning process all possible waste is done away with, for, as Mr. Pernot says, a pound of curd produces a pound of cheese, a thing heretofore impossible in cheesemaking, since there was necessarily formed around all cheese a heavy rind varying in its thickness with the age of the cheese, and the cheese was always subject to a heavy mould, all of which detracted from its net value, and is virtually a waste. By canning, all this loss is obviated, for there is no rind formed and no mould, and thus this new venture works a benefit both ways, improving the product of the cheesemaking, and adding a new and valuable article to the list of canned goods. Not only improving the manufactured cheese, but the canning does away with all the uncertainty and constant change met with in the making of cheese, thus bringing that business down to a more certain basis, and should increase the profits of the maker, even at a decreased price of the finished product, and it will greatly add to the demand, for the cheese will be more wholesome, more nutritious and consequently consumption greatly increased.

The Quantity and Quality of Milk.

M. Lepoutre, agricultural engineer and assistant to M. Roquet, professor of zootechny and animal physiology at the agricultural institute of Belgium, has just made a series of interesting and careful experiments at the laboratory of zootechny and hygiene of the said institute for the purpose of determining the influence exerted by milking upon the quantity of milk, upon its composition, and particularly upon the proportion of its fatty materials, says the Scientific American.

Although our knowledge as to the influence exerted by the nervous system upon the physiological tissues is very meager, the experimenter started from the innervation (nervous stimulation) of the glands in general (to the greater or less excitation of which corresponds a more or less abundant secretion), in order to try to bring about an artificial excitation of the mammary innervation for the purpose of improving the lacteal secretion.

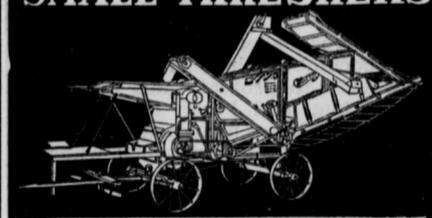
Broadly considered, the operation of milking is a rational massage that has the effect of drawing from the udder a quantity of milk much greater than that which is contained at the outset. It is admitted that the udder of a good cow may, before the operation, contain 3 quarts of milk already formed, while, if the animal is well treated, the udder may yield from 10 to 15 parts. It follows, besides, from the experiments of M. Lepoutre, that milking exerts a great influence upon the proportion of the fatty materials contained in the fluid. This influence is due, according to the experimenter, to the peripheric excitation of the nerves of secretion, which in their turn, by reflex action, bring about a greater excitation of the glandular cells. If we consider the general case of milking from two teats at once, as usual, we find that the effect produced is not the same during the en-

tire period of milking. The milk extracted from the first two teats is generally richer in fat than that of the two milked in the last place, and this richness will be greater if we simultaneously milk one teat of one side and one of the other, and then the two remaining ones—in other words, if we do the milking diagonally instead of laterally. The phenomenon is singular, if not obscure. It seems, however, explainable by the fact that in diagonal milking the excitation extends to all of the nerves of the gland, while in lateral milking it extends only to the side on which the operation is performed, and is consequently stronger. At all events, the influence of milking upon the proportion of fat is shown by the following experiments of M. Lepoutre. The same cow was milked several times and simultaneously by two different persons, who at each operation changed sides. The milk of each side was collected separately. One of the persons performed the operation by exerting a simple alternating pressure upon the teat, while the other performed a downward massage at the same time. The milk collected by the latter person was always markedly richer in fatty matter than that collected by the former. The difference was considerable, since in the first case there was 55 per cent of the total yield, and in the second 45 per cent. The method of milking has therefore a great influence upon the quality of the milk, and this influence is not explainable unless we grant that it bears relation to the excitation produced.

On the other hand, the milk obtained at the beginning of the operation is not so rich as that obtained at the end. Up to the present, this fact has been explained by the statement that a prolonged operation ends by detaching from the lactiferous vessels the particles of butter adhering to the walls. M. Lepoutre is not of this opinion, and remarks that the operation is performed more vigorously at the end than at the beginning. The excitation must therefore be stronger, and the reflex action be greater upon the mammary tissues, thus causing a lactiferous secretion richer in fat.

The experiments of Prof. Roquet's

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