

THICK AND THIN CREAM.

1. I should like some light as to the effect of leaving say a half-inch of the skim milk immediately under the layer of cream, where creamer cans are used, and drawing it off with the cream. The idea is not to lose any butter-fat in skimming, or in case a separator is used, adjusting the machine so as to run out what is called "thin" rather than "thick" cream. What will be the effect in the ripening process, and on the quantity and quality of the butter made? Some say it has a tendency to cause "streaky" butter, or butter with white spots in it.

2. In selling or buying cream, is there any standard of quality? What percentage of skim milk is allowable, or what percentage of butter-fat should good average cream contain? Some city customers contend there must be some rule or standard to govern cream. With deep-setting cans, or a separator, respectively, how will the dairyman produce a fair average cream? Some sell two brands, one at 20c. and the other at 30c. per quart. MILKMAID.

[In answer to Milkmaid's question No. 1, I should say that if one-half an inch of skim milk next to the cream line is left, there is less danger of losing butter-fat in skimming, but this skim milk tends to make the cream thinner, and it is consequently more labor to handle it, and it is more difficult to churn. If the milk stands for 12 hours only, then I would say it would be advisable to leave from one-quarter to one-half an inch of skim milk next to the cream, if close skimming is required and thin cream is not a disadvantage. If it stands 24 or 36 hours, then it is not necessary, and the skim milk may be drawn close to the cream line. In the case of a separator, it is advisable to adjust the machine so as to take off rather thick cream. Cream should test from 25 to 30 per cent. fat in order to give the best results in churning. The effect on the ripening process of having the cream thin, is that it tends to hasten ripening, and also probably to give a higher flavor to the butter; but there is danger, if the milk be tainted, of developing bad flavors; and, on the whole, we would prefer thick cream to thin cream, as there is less loss of fat in churning. I do not think that there is any greater tendency to cause "streaky" butter, or butter with "white specks" in it, if the cream is thin, unless it is put into the churn without straining, in which case there would be more curdy matter in the cream, and a greater tendency for white streaks in the butter.

2. There is no legal standard of quality for cream. Good commercial cream should contain about 20 per cent. fat; and it is customary, where different qualities of cream are supplied, to charge according to the percentage of fat which each contains. At the present time there is a demand in cities for very rich or thick cream, testing 30 to 40 per cent. fat. Then dealers are able to dilute it to the desired thickness, and they are thus saved so great an expense for freight. With deep-setting cans, richer cream, or cream containing a higher percentage of fat, may be obtained by allowing the cream to stand for a greater number of hours. For a separator, it is an easy matter to obtain thick cream or thin cream by adjusting the skim-milk screw or cream screw, whichever method is adopted by the manufacturers of the separator. If it is a skim-milk screw, to make the cream thicker turn the screw out, which allows a larger proportion of the whole milk to come from the separator as skim milk, and consequently there is a smaller proportion of cream which is richer. With a cream screw, to obtain richer cream turn the screw in, which forces a larger volume of the whole milk out as skim milk, and a less volume in the form of cream, thus making it richer, or containing a higher percentage of fat. So long as a separator is not taking less than ten or 12 per cent. of the volume of the whole milk in the form of cream, there is little or no danger of extra loss of fat in the skim milk, if the speed, feed and temperature are correct. H. H. DEAN.

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CORN SPOILING IN THE SILO.

Would you please tell me the reason that some people have corn spoil in the silo, as I intend building one this summer? N. T.

Peel Co., Ont.

[To have good silage, several conditions are necessary. The silo must be practically air-tight, the corn must be put in just at the glazing stage, soon after being cut, and very firmly packed, either by its own weight or by pressure in some other way. It should be well tramped around the edges of the silo. When corn is cut up and put in just right, it at once commences to heat up, reaching a temperature of 150 degrees Fahr. in a few days. This seems to cook the corn, stopping all decomposing fermentation, provided there is no further admission of air. It is here that a tight silo counts in preserving the corn, similar to the preservation of fruit by the canning process. If air is admitted in any considerable quantity, the silage molds or becomes sour. Sour silage is also due to the corn being too green when put in, by reason of its not having heated up sufficiently to destroy the acid fermentation organisms. Moldy ensilage is frequently due to the corn being overripe or too dry when put in, which prevents it from packing sufficiently close to exclude the air. Corn in this condition should be moistened with water as the filling is in progress. There is seldom any complaint of silage spoiling in a round silo, in which the settling and pressure is uniform. It is in the corners of square silos that spoiled silage is generally found, the result of insufficient pressure.]

LAYING OUT A LAWN.

I have noticed, at different times, in your valuable paper, articles on beautifying lawns. Will you please let me know, either directly or through your paper, if I can obtain plans and directions for laying out a lawn? I wish to have mine overhauled, and do not know what will suit my situation. P. M.

Wentworth Co., Ont.

[Some make the mistake of planting trees on the lawn in rows. These are all right in an orchard where cultivation is to be done, but it makes a lawn look stiff and unnatural to have trees all over it in rows. Trees and shrubbery on a small lot should be selected with a great deal of care, for nothing is more common than to see a small village lot with trees on it too large for the place, and then we are obliged to trim them up like avenue trees. Trimming a tree to a tall stem is necessary on streets, but lawn trees should be allowed to take natural shape, and only be pruned to keep them somewhat regular. A coniferous evergreen should be allowed to sweep the turf with its branches and rise in pyramidal form and make an object of beauty instead of the trimmed-up monstrosities we see all around. In preparing a lawn for the grass the preparation of the soil should be very thorough. All you need is plenty of Kentucky blue grass and red-top, and sowing should be very thick. Four bushels of the mixture, half of each grass, is none too much if a good lawn is wanted at once. The red-top comes up at once, while the blue grass is slower and keeps coming up for months after sowing. The red-top soon gives way to the blue grass, but protects the slower blue grass in the start. Start the lawn mower as soon as the grass is tall enough to give it a bite, and during growing weather cut weekly at least, and never use a grass catcher or rake the cut grass off the lawn. If cut as often as it should be there will be nothing unsightly about it, and the cut grass will form a mulch that will thicken up the lawn and protect it from drought. In planting trees and shrubbery, plant so as to conceal boundaries, by irregular groups of shrubs and trees. Never plant a dark evergreen right in front of a deciduous tree, but use them as a background against which the winter spray of the deciduous tree will have a lace-like effect. Have groups of shrubbery along the road front if the lawn comes to the road or street, to secure privacy. Always understand that roads and walks and fences are mere matters of utility and not part of the ornamentation. Hence they should be as few as are absolutely needed. Filling a lawn with walks breaks up the beauty of the grass, which should sweep up to the house in unbroken green. Always strive to have from the front a view of unbroken grass, without tree or shrub, all of which should be grouped to make the frame of the picture. A curved road or walk is more graceful in outline than a perfectly straight one, but it should never curve in a meaningless way, nor curve so much as to present a constant temptation to cut across the grass. If pedestrians habitually make a path across the lawn, it is evident that the walk is in the wrong place. Therefore, while making a curved line to a road or walk, make it reasonably direct. Do not have too many trees right about the house. For health, the sun should shine on all parts of the house at some time of the day, and a smother of trees is not desirable. Plant out of view all disagreeable objects, and provide plenty of open grass and vistas towards fine views. Plant for the comfort of your family and the beauty of your home, and no matter how much time you spend in beautifying a place it will pay in a money way. This has been proved time and again, and there is no better investment a man can make in increasing the selling value of his farm than in the proper lay-out and keep of the ornamental grounds. Grass kept in good order is more pleasant to walk upon than gravel, and walking on the grass does no harm if not continued in the same place so as to make a path. General rambling over the grass is rather a help to it than otherwise.]

ENSILAGE OF CLOVER—PEAS AND OATS.

1. Will clover do for putting into a silo for ensilage? If so, at what stage of growth is it best to cut it?

2. Would peas and oats, sown at 2 bushels of oats and 1 of peas per acre, cut green and put into a silo, keep? If so, at what stage of growth would it be best to cut them?

3. In what proportion would you mix clover ensilage, pea and oat ensilage (if it will keep) and corn ensilage to make a well-balanced ration for cows, or will it be necessary to add a little bran and meal? Lambton Co., Ont. J. A. G.

[1. An article in this issue by Mr. Grisdale, of the Central Experimental Farm, Ottawa, supplies an answer to this question. There is, we believe, no question about the practicability of preserving clover in a silo, yet we do not recommend it as being nearly equal in value with corn for winter fodder. It may serve a good purpose for summer feeding, and be fed out before the corn harvest.

2. We have no experience and no record of experience in siloing green peas and oats, and would not recommend it, as we feel sure that, being so full of sap, it would make sour ensilage, and certainly we think there would be more economy and profit in cutting and curing the crop in open air when nearly ripe, when it makes excellent fodder, and if run through straw-cutter would mix well with cured clover cut in the same way, or the whole mixed with corn ensilage would make a fairly well balanced ration, which would be improved, of course, by the addition of a little bran and meal, which, in the case of milking cows or fattening cattle, would be amply paid for in the product.]

STANDARD WHITE LEGHORNS.

Please give standard of perfection for Rose-combed White Leghorns? W. C. PLUMAS.

[The Male.—HEAD: Short and deep. BEAK, yellow. EYES, full, bright, red. FACE, free from folds or wrinkles, bright red.

COMB: Single or rose; bright red. ROSE: Square in front, firm and even upon the head, tapering evenly from front to rear, without inclining to one side; the top comparatively flat and covered with small points or corrugations, and terminating in a well-developed spike at the rear.

WATTLES AND EAR-LOBES: WATTLES, long, thin, pendulous, bright red. EAR-LOBES, smooth, thin, free from folds or wrinkles, fitting closely to the head, and white or creamy white.

NECK: Long, well arched, with abundant hackle, flowing well over the shoulders.

BACK: Of medium length, with the saddle rising in a sharp concave sweep to the tail. SADDLE FEATHERS, long.

BREAST: Round, full, and carried well forward. BODY AND FLUFF: BODY, of medium length, tapering from front to rear, and closely feathered. FLUFF, rather short.

WINGS: Large and well folded.

TAIL: Large, full, and carried upright. SICKLES, long and well curved. COVERTS, abundant.

LEGS AND TOES: THIGHS, of medium length, slender. SHANKS, long, and in color bright yellow. TOES, yellow.

COLOR OF PLUMAGE: Pure white throughout.

The Female.—HEAD: Similar to that of male, but smaller. BEAK, yellow. EYES, full, bright red. FACE, free from folds or wrinkles, bright red.

COMB: Single or rose, bright red. ROSE: Similar to that of the male, but smaller.

WATTLES AND EAR-LOBES: WATTLES, thin, well rounded, bright red. EAR-LOBES, smooth, thin, free from folds or wrinkles, fitting close to the head, and white or creamy white.

NECK: Long and well arched.

BACK: Of medium length, slightly cushioned.

BREAST: Round and full.

BODY AND FLUFF: BODY, of medium length, deep and plump. FLUFF, rather short, but more fully developed than in the male.

WINGS: Large and well folded.

TAIL: Long, full, and carried upright.

LEGS AND TOES: THIGHS, of medium length, slender. SHANKS, long, slender, and in color bright yellow. TOES, yellow.

COLOR OF PLUMAGE: Pure white throughout.]

SAWDUST AS MANURE—PROLIFIC LAYERS.

H. H. H., King's Co., N. S.:—"I thank you very much for your attention in answering my question on the sore eyes in my hens. Will you kindly advise, through your valuable paper, on the use of sawdust for bedding, thus putting considerable of it in the manure? Will it produce scabby potatoes if the manure is used on potato land? Is it also safe to use it in the orchard?"

"2. I have a pen of White Wyandottes, four pullets and one cockerel. In the last seven days the four hens have laid twenty-eight eggs, each hen thus laying every day. I think this is as good as usual, don't you?"

[Sawdust in moderate quantities along with yard manure will do no harm, and little, if any, good, in ordinary soil, as it contains very little fertilizing constituents. An excess of sawdust plowed into land does harm on all but very heavy clays, as it leaves the soil too loose and open, and therefore more liable to dry out. On clays, it tends to prevent baking. We have never heard sawdust blamed for causing potatoes to be scabby. Sawdust as a top-dressing in an orchard should do no harm; but plowed in, its effects would be the same as on other land. These are our views. What have our readers who have manured with sawdust to say about it?

2. Yes; one egg a day for a week is all that should be expected from any hen, and more than most of them produce.]

LEG WEAKNESS IN HENS.

F. H. R., Stormont Co., Ont.:—"What is the matter with my hens? They are in fine condition, and I have been getting a few eggs all winter. I feed them buckwheat and occasionally a little corn and cooked meat once a week. I have had four of them lose the use of their legs; they were all right at night, and the next day they could not walk at all. I had two the same way last winter. They seem to eat all right, but cannot walk. There are fifteen in a house 13x24 feet, with a ground floor; roosts are about 2 feet from the ground, which is always dry, as it is sand."

[I am inclined to believe your subscriber has been feeding too heavily of corn and buckwheat, both of which are inclined to make birds overfat. If he were to give his fowl as much exercise in the open air as possible, and reduce the amount of whole grain fed, I think he would overcome the difficulty somewhat. Those that are weak in the legs will be benefited by giving half a teaspoonful of Epsom salts, and feeding very little of grain foods, but more vegetable foods, such as mangels, cabbage, etc. Leg weakness among hens that have been forced for winter egg production is not at all uncommon, and I have found the above treatment to give fairly good results.

W. R. GRAHAM, Manager.

Poultry Dept., O. A. C.]