EFFICIENT FARMING

How Does Your Cream Test?

Does your test ever vary? And what do you generally say when the variance isn't in your favor? Probably you lay the blame on the operator at the receiving station. Now, don't you—sometimes, anyway? Oh, I know how it is. I used to sell cream, and now I am operating a station.

I'll admit that the operator is sometimes to blame—but I'll explain some of his faults later. Butterfat is a very difficult farm product to deal in—that is, always to satisfy the customer. All operators know that; and one to one, when your test drops off, he is tempted to raise it, hoping that you will have a better test next time. But the law doesn't stand for that.

So, what are we operators to do then? I wish you dairymen—every-one of you—would install a Babcock testing outfit. Then you would soon learn, by observation and experience, why your test often varies.

There are a dozen and one causes for your cream to vary in its test. We will assume that you have never touched the regulation screw, changed feed, nor has the engine failed to turn the separator at the proper speed. Moreover, we will take it for granted that you have kept the fresh cream thoroughly mixed with the sour.

Then, why does your test fall short? Well, the condition of your cows may have something to do with it. A cow doesn't give quite as rich milk when she isn't feeling very good. Cows have their off days. Then, too, a rainy spell will lower your test. Even if you are feeding the same feed, that doesn't prove it is always of the same quality.

Another thing: Don't allow your cream to become so thick in the winter months. It is impossible to mix thick cream thoroughly enough to give a fair test. The milk will naturally settle to the bottom of the container. Subsequently the thick cream on top will, in spots, become hardened and lumpy. A thorough mixing is out of the question. So loosen the regulation screw, whatever you do. It's better to have a lower but a fair test. Furthermore, cream that will test 55 per cent. butterfat leaves at least 1 per cent. of the butterfat in the skimmed milk. Therefore, cream testing from 35 to 40 per cent. will in the end net you more money.

Now to the operator: Sometimes, especially when you rush him through with your test, he might get a little careless about the proper temperature. So don't try to hurry your operator through with your cream. Also remember that Saturday is a bad day to bring cream to market, for that is one of the operator's busiest days. Quite a few of my customers are avoiding the Saturday rush by bringing me their cream on Friday.

Another thing about the rushed-through test on a busy day is that the acid used to eat the whey from the butterfat takes effect at once. Consequently, in making at least four tests at once, the operator has to do some moving about to get the test bottles into the tester. It only requires five minutes for the acid to eat up the whey, and the tester is supposed to be in motion all that time. If one of those minutes passes before the tester gets in motion, part of your butterfat is eaten up by the acid, because the motion of the tester gathers the butterfat on top in the test bottle. Then, oo, if the hurried operator happens to get the tester filled above the neck with water at the first turn, some of the butterfat is prevented from coming to the top. Subsequently the acid gets it.

Health and the Poultry House.

A few days ago I was talking with a neighbor who had been having some trouble with roup in his flock of chickens. Some of the hens that he had been depending on as being his heaviest egg producers had died, and the disease seemed to be spreading rapidly. The fowls had free range about the farm, and from all outward appearances there seemed to be nothing that could bring about the disease. The farm has a thrifty appearance, and it is kept neat and attractive. I am sure that the roup did not arise from unclean poultry quarters, a condition that frequently brings it about, and that on this particular farm the trouble had its beginning in the poultry house. This building was a substantial one, and like all of the other buildings on the place it was well painted and kept in good repair, but it contains but one window and is too small for the present flock. In the fall this window is closed, and as a rule is not opened again until spring. The location of the house, too, is not the best, for it is near a slight depression where during wet weather water collects. The house is usually moist inside; this is especially noticeable when the chickens are at roost.

If the owner would move the house out of the depression and place it on a nearby knoll or raised place, reduce the size of his flock by taking out some of the most undesirable birds before all the good ones die, and, above all, if he would cut a large window or two on the south side, he would have no more trouble with roup, and the general condition of the flock would improve. The chickens that are now dying would live to make a profit if plenty of sunlight were allowed to enter the house and it were properly ventilated.

In selecting a site for a poultry house it is all important to select an elevation. It need not be high, but simply far enough above the level so that there is natural drainage from all sides. If the present house does not occupy such a place it will pay to have it moved, for there is always danger, in a house on a damp location, of an outbreak of disease that will be far more of a loss than would be the expense of moving. A building located on a porous, sandy soil is to be preferred to one on a clay soil that readily retains moisture. As dryness, sunlight, and, in winter, warmth, are essential to the best success; the house should face the south so the sun's rays can shine through the window.

The interior of the house should be as simple as possible, with only the necessary conveniences. The more simple it is the easier it will be to keep it clean, and the more space there will be for the chickens. Roosting platforms are becoming very popular, and they are very convenient, especially where only a few fowls are kept. The platform should be placed in the rear of the house, about three feet from the floor, and the perches placed eight or ten inches above it. A good place for nests is along the opposite wall from the door or under the platform, where they may be darkened somewhat. Several small boxes for sand, grit, beef scrap, etc., placed about the side walls, a few inches from the floor, and a watering vessel should complete the interior equipment.

This arrangement will leave the front and south wall clear so that a number of windows can be put in. There are few poultry houses that have enough southern window space. Sunlight is death to lice and mites, and in winter it furnishes considerable warmth and cheer. It promotes health and encourages exercise. Exercise is important in winter, for, as a rule, chickens are fed too much and are inclined to become fat and lazy. Such a hen will not lay or be healthy. The floor of the poultry house should be covered with clean straw and the chickens encouraged to scratch it. Feed scattered in the straw will not be wasted, for the hens will scratch it out.

The "Weevil Signs."

Many a bushel of beans or peas is destroyed every year by the depredations of weevils. This is not altogether the result of carelessness on the farmer's part, as much as it is ignorance of how to deal with these pests. One should know how to "read the signs" in a sample of beans if he would prevent damage from these insects later in the season. Often in the late winter or early in the spring an examination of the beans will show them to be alive with weevil and full of large holes. This condition could have been prevented had the farmer known, in the late summer or early fall, how to read the "weevil signs."

Many a person would have sworn that the beans that he put away so carefully in a sack in the fall were perfectly healthy and free from both bugs and disease. But upon looking at them early in the spring there was hardly a one of them but what had holes in it. The weevil odor and countless numbers of insects accompanied this condition. Where did the insects get into the seed? The answer is not hard to find. Attached to the beans and unnoticed to the practiced eye were some tiny white eggs that soon hatched into tiny worms that grew and developed into these pests. The holes in the beans were made by the growing worms which develop inside of the seed.

The weevil lays its tiny eggs on the maturing pods of beans and peas where they appear as small white specks. Upon examination these ripening pods will show whether or not there are any weevil present. If many eggs are found to be present the farmer must plan on some means of destroying these pests when the beans are harvested and put in storage. Shortly after the weevils lay their eggs on the pods in the field, the young worms hatch and begin burrowing through the pod into the bean, leaving the egg-shell on the pod. So the first indication of the presence of weevils are the tiny holes in the new crop. When the eggs are laid on the beans in storage, the shells stick to the bean and are easily seen. If the grower will learn to look carefully for both the tiny entrance holes and the shells he will soon have little difficulty in detecting the weevil infestation and will know how to deal accordingly. Of course, these entrance holes are so small that a person with poor eyes or one not looking for weevil signs would pass them unnoticed.

If weevily beans or peas are placed in storage without the weevil having been killed, the eggs will hatch, after a time, into tiny grubs that soon develop into the adult weevils These in turn lay numerous eggs that start another generation that feed upon the farmer's seed. Read the weevil signs and prevent the enormous waste that is taking place annually. An examination of the ripening pods in the field or of the newly harvested beans in the fall will show the grower the clues to the presence of these pests. If they are at all numerous they should be fumigated. This is best accomplished in an airtight tin, or box, with carbon bisulphide. A pound of this material is sufficient for one hundred cubic feet of space, if the container is tight. Measure the place in which the beans are to be fumigated and get the number of cubic feet. Then for every one hundred cubic feet use one pound of the carbon bisulphide. Care should be taken not to expose a flame near these fumes as they are highly inflammable. This gas will kill the adult beetles and worms but may not prevent the eggs from hatching. Another treatment in three or four weeks will be necessary to kill the worms that have hatched from the eggs since the last fumigation.

Sallie May's Clothes.

"I'm tired," Sallie May declared, "of being pieced out! It seems to me that if once, just once, I could be new from hat to shoes I'd never grumble again."

"That's a mighty becoming hat, anyhow," Pa declared.

"Yes, and just look at my gloves! I've mended them and mended them and mended them. I hardly dare touch anything with the tips of my fingers for fear they'll come through. And last fall, when I got a new pair of gloves to go to that reception to Mrs. Marsh, I had a hole in my shoe. Oh, of course it was in the sole, but you know what shoes look like by the time they come to holes in their soles. And if, by any almost impossible chance, I have new gloves and hat and shoes at the same time, it's because I'm making last year's suit go over."

"You poor little Pa Wilfer!" Pen sympathized.

"Who's Pa Wilfer?" asked Sallie May. "I don't want to be him. But gloves like that make you feel as if you might be anybody disagreeable."

"Pa Wilfer," Pen enlightened her, "was one of the creations of a certain Charles Dickens. And his modest ambition was to have a complete new suit of clothes, hat and boots included, at one time. He achieved it finally. So will you, some day."

"Not if things keep on happening," Sallie May grumbled. "It isn't because I'm one of those sacrificing heroines you read about, because I'm not. Only there's always something happening, like Betty's sickness last winter and mother's accident last week, and prices going up till they hit the sky, and people getting married and you having to give them presents. I don't see how in the world you contrive it, Pen."

"It's a secret," Pen declared. "If I tell you, will you promise never to breathe it to a single soul?"

"Cross my heart, hope I may die!" Sallie May promised.

"Well, then, the first part of the secret is, I don't!"

"You don't! Why you always look——"

"And the second part is," Pen pursued, "I hypnotize people."

"Hypnotize them!"

"Exactly. Myself first of all. I won't allow myself to think about the shoes that I can't have, but I keep reminding myself how becoming my hat is. And I hold my head with such an air that people all have to look at that hat to see what makes me so puffed up about it. And so they forget to look at my shoes. Conversely, if shoes are my strong point, I subtly draw their attention from my face to my fortunate and highly decorative feet."

"I might have known you were teasing," Sallie May protested. "Yet," she added thoughtfully, "I don't know but what there's something in it, after all."

"There's heaps in it," Pen assured her. "Especially if you keep your own thoughts well hypnotized first of all. Try it, Sallie May."

Combat Cabbage Diseases.

Would you spend a nickel to save five acres of cabbage? If you would, treat your seed next year, for less than five cents worth of poison will suffice to treat a pound of seed, which will grow cabbage plants enough to plant five acres of cabbage.

The poison to use in this treatment is corrosive sublimate, sold by druggists as bichloride of mercury tablets. Dissolve the poison in the proportion of one part to one thousand, or one gram of poison to one quart of water. The seed should be soaked in this solution for twenty minutes.

This solution should be made up in a stone jar or wooden pail, because it corrodes metals. Immediately after the seed has been treated, spread it on a clean cloth in a warm room to dry quickly. When thoroughly dry, return the seed to a clean sack, not the one that the seed was in before, for it still contains the spores of the diseases which were killed on the seed. It is a good idea to use sacks which were dipped in the solution.

Disinfecting the seed will do no good if it is planted in an infected soil. A field which has had infected cabbage on it the year before will still contain the disease-producing germs, which will reinfect even healthy plants. Therefore a clean seedbed is as essential as a clean lot of seed.

Poultry

The greatest handicap in the commercial poultry business is the fact that the market price of eggs is determined by the thousands of flocks of mongrel hens which are running on the farms and producing eggs without the owners knowing anything of the cost of production. The bright spot in the poultry business is the fact that the farmer poultryman can beat the record of these mongrel flocks, which are often poor layers, by improving his stock and raising quality birds and then striving to keep them well fed on the home-grown feeds and waste products which has enabled the farm flock to turn out eggs at a fairly small cost of production compared with the commercial poultryman.

There is no reason why the pure-bred flock of bred-to-lay fowls should not be maintained as cheaply as a flock of mongrels. The difference in the returns to the owner is worth considering. A farmer can grow a crop of potatoes, raspberries, tree fruits or corn on every acre of range used by his poultry. All the waste products of the farm can be used to produce eggs. The gravel pit will furnish the grit for the hoppers in the poultry house. The necessary green food can all be raised in the garden and in the clover field. The day of the well managed farm flock has arrived as people are beginning to appreciate the value of fresh eggs as never before. Meat is scarce and high and eggs will probably follow the trend of meat prices. There is a good future for well managed poultry flocks in the hands of practical farmers, but the man who buys all his feed and sells eggs and poultry meat at market prices is not apt to stay with the business under present conditions, if he figures closely the cost of production of eggs and meat.

Hogs

Before the fall litters come on and fall feeding begins is an excellent time to start preventive measures against hog cholera. Here again the old adage that "an ounce of prevention is worth a pound of cure" is doubly true. Sanitary measures before the hog is put in the house will largely prevent epidemics of disease.

Other diseases than cholera are often caused by unclean conditions in the hog house and pen. Some of these are sore mouth, bull nose, necrosis of the ears and tails, and the swine plague, or contagious pneumonia, which often develop in suckling or weanling pigs.

A few hours spent cleaning out old litter and manure may save you a good many pigs later on. A reliable disinfectant should be applied to the walls of the houses, troughs, fences, and any other place where germs might be lurking. Creolin is efficient for this purpose, and lime is good. Do not be afraid to apply plenty of the disinfectant, and see that all the corners, especially, are well treated.

The same sterilizing process is used by many successful feeders in the feeding racks which they use for their sheep and cattle. Many times there are disease germs lurking around that cause serious losses which might have been prevented if proper sanitary measures had been taken.

Hammertoe.

This is a deformity of one of the toes that consists of flexion of the middle joint so that it projects above the level of the other joints, and the toe itself rests on its tip instead of on the padded under surface. Looked at sidewise, it is suggestive of a tack hammer; whence its name.

Any of the toes may be thus deformed, but most frequently it is the second one; the trouble is caused by the big toe being deflected outward. This displacement of the big toe, called in medical Latin hallux valgus, is usually the result of wearing pointed shoes. The inner side of the shoe, instead of being straight, as it should be, bends toward the centre, and so forms a sharp point that is supposed to give beauty. The shoe may be regarded as beautiful, but the foot incased in the shoe is in process of becoming deformed.

The deflection of the great toe is not necessarily painful, but it results usually in the formation of an enlarged joint and a bunion, and also displaces the second toe, which rides over the great toe or bends into the shape of the hammertoe. The bending makes three prominences—the tip of the toe, the ball of the toe, and the top of the middle joint—which are exposed to friction of the sole and the upper of the shoe, and become the seat of corns; the middle prominence is also sometimes afflicted with a bunion beneath the corn.

The treatment of hammertoe is not usually satisfactory, for by the time the physician is consulted the flexed joint is usually stiff. If it is still movable, a cure may be effected by strapping the toe down to a splint made of a thin, flat piece of wood or gutta-percha or padded tin. That, of course, can be done only when the big toe, if that is the cause of the trouble, has been straightened and the patient has been persuaded to wear a proper shoe. Usually, however, the only thing that brings complete relief is to amputate the offending toe. Another operation that has been proposed with a view to saving some of the toe consists in excising the middle joint and in uniting the severed ends of the two bones to make a short but stiff toe.

The Sunday School

INTERNATIONAL LESSON
SEPTEMBER 14.

The Future Life—Matt. 25: 31-46; John 14: 2, 3; 2 Cor. 5: 10; 1 Peter 3-5. Golden Text, 2 Cor. 5: 10.

A Parable of Judgment.—Matt. 25: 31-46. The parable represents the consummation of Christ's Kingdom, when He shall "sit on the throne of His glory" to judge the nations. There will then be a separation between the sheep and the goats, between the good and the bad. The good are invited to "inherit the Kingdom" and enter "into eternal life." The bad go away into eternal punishment.

The parable makes it clear that the determining factor in judgment is to be what men have done or neglected to do to and for each other. Even where they have not known that they were serving Christ their ministry of kindness to those who were in need receives its reward, and their failure to exercise this ministry, its punishment. To feed the hungry, give drink to the thirsty, entertain the stranger, clothe the naked, visit the sick and the prisoner—this is to serve Christ and qualify for the eternal reward. Not to do these things is to merit condemnation.

The Bible unmistakably teaches salvation by faith, but it is a faith that works. See James 2: 14-18 and 2 Cor. 5: 10. True faith finds expression in all good works, and it is thus that faith is tested. The judgment of God, we may be very sure, will take account of what men do in their relations with each other, and no profession of faith will ever be complete in itself without the doing, or the will to do, deeds of mercy and kindness. On the other hand, a latent, unexpressed faith will be a source of comfort to troubled hearts. Be not troubled in deeds of self-sacrifice and self-forgetful kindness, or in heroic devotion to some great and worthy cause, as we have seen again and again in the experiences of the great war. Surely many men and women who, in an hour of high devotion, putting aside life and what life had to give, offered themselves upon the altar of freedom and humanity, will be found among those surprised by the recognition of Christ and His saying, "Ye did it unto Me."

The Father's House.—John 14: 1-2. This is Christ's great word of comfort. We commit our spirits into the hands of God. A place is prepared for you in the Father's house. There is plenty of room, room for each and every one, a place prepared by our Lord and Saviour, Jesus Christ. And He who has prepared the place will come again and take us each to be with Him. Therefore we look forward to that last event of life without fear. Like our Master Himself, we shall commit our spirit into the hand of God. We shall go to dwell in the Father's house.

"After all," as one great man has said, "immortality is a dreary prospect if our Father is not in it." W. Adams Brown (The Christian Hope) says truly, "If we wish to make faith in another life credible we must fill this life with value. And the one sure way to do this is to discover with Dr. Rainy that "our Father is in it"—the Father whose loving purpose for us and for all mankind Jesus has revealed, and in whose service, which is at the same time the service of our fellowmen, we find our freedom and our peace."

An Incorruptible Inheritance. 1 Peter 1: 3-5. The apostle gives thanks to God for the "living hope" to which we have been brought through our faith in Christ, a hope based upon the resurrection of Christ from the dead. Because He is risen we believe that we, too, shall rise again. Because He has entered into the glory of the life eternal we also shall enter and live with Him. Richer than any earthly inheritance is this inheritance in heaven, "incorruptible, and undefiled, and that fadeth not away." For this we wait in steadfast hope, and "by the power of God are guarded through faith." The full significance of it is not yet revealed, but it will be revealed "in the last time."

Dull Weather Plants.

Well grown geraniums, stocky, well shaped plants are excellent for window gardens or conservatories. The foliage is attractive and the plants bloom with little sun, making them desirable for winter use, and no gardener need be ashamed of good geranium plants in the collection under glass.

Cyclamen are also good dull weather subjects. The plants should be started in growth about the first of September.

Speedy Ice Cream Freezer.

An ice cream freezer of English invention, in which ice and salt are packed in a cylinder that revolves inside the cream delvers its product in a continuous stream half a minute after a crank is turned.

"My new hired man seems to delight, so to speak, in putting his best foot foremost," related honest Farmer Hornbeak; "but I never saw a feller so reluctant about letting his other foot catch up with it."

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Save the Wheat.

The arch enemies of stored grain are dampness and rodent pests—rats and mice. An elevator with a leaky roof is only a little worse than one allowing free entry to rats and mice. The present price of wheat makes a telling appeal for ratproof construction of wheat containers. Now is the time to fill rat holes with cement or cover them with sheet iron and to build new mouseproof granaries of either concrete or galvanized sheet iron.

Where rats and mice have plenty of food and are unmolested they multiply overwhelmingly. For example, in Australia during the war sacks of wheat stacked in high piles awaiting shipment became infested with mice which riddled the sacks and destroyed a large part of the contents before preventive steps were taken. Under similar circumstances a like result would inevitably occur in this country. Where it is impracticable to provide tight containers for stored products steps should be taken immediately to trap or poison rats and mice in the general vicinity of storage buildings, and should be continued till the last bushel is disposed of.

A broom can be made to last longer by dipping the straw into boiling water at least once a week.