

DAIRY THE DAIRY

HIGH TEMPERATURE OF MILK

Bitterness Will Not Be in Evidence During Winter if Liquid Is Kept at 50 or 60 Degrees.

Maybe you have had experience with bitter milk and cream in the wintertime and wonder why you are never bothered that way in summer. Is it the feed?

All the changes that occur in milk and cream, such as souring, are due to the action of bacteria—the little microscopic plants that nature has provided to tear down the larger plant and animal tissues. If it were not for bacteria nothing would decay.

But as in the higher plant life we have weeds—so in the microscopic plant life we have weeds—the undesirable bacteria. The lactic acid bacteria that sour milk and cream are beneficial. They can quite readily be controlled so as to be made useful rather than harmful. But there is a class of weed bacteria that causes the milk and cream to become bitter in winter. These weed bacteria only flourish in very low temperatures. They are like some of the snow flowers of the high mountain peaks, resistant to cold.

In summer, and in winter, if the milk and cream are kept at summer temperatures, they are kept in check by the other kinds of bacteria, just as ragweed is kept smothered out by a good growth of clover. In winter when you allow your milk and cream to get clear down to freezing the lactic acid, or souring bacteria, are not growing. The bacteria that cause the bitter flavor have full swing because they flourish in cold milk.

If you want to overcome this bitter flavor all you have to do is to keep the milk and cream at a higher temperature—say around 50 or 60 degrees—and the bitterness will not be in evidence.

MAKING BUTTER AND CHEESE

Culture Starter Mailing Packet and Method for Making It is Invention of Chicago Man.

In illustrating and describing a culture starter mailing packet and method for making it, invented by B. Barlow of Chicago, the Scientific American says:

This invention relates more particularly to a culture starter for making butter and cheese. The culture remains pure a long while in use, because the center of pure growth is



Culture Starting Packet.

carried over when the sack is lifted from one bottom of pasteurized milk to another. By other methods an average mixed sample is transferred. The culture is easy to handle and convenient in use. It has shown its advantage in transmission through the mail, as it goes in a sealed envelope as small matter of first-class.

REMEDY FOR CHAPPED TEATS

Trouble May Be Slight, or It May Develop Into Deep, Gaping Sores—Use Vaseline.

Chapped teats may be caused by anything that irritates them, as, for example, the sudden chilling of the teat in winter after the calf has just let go, milking with wet hands, or contact with cold, dirty water. The trouble may be slight, or it may develop into deep, gaping sores.

The use of vaseline at the first sign of the trouble will usually check and cure it. If the teats are badly chapped, thorough washing in warm water, followed by application of glycerine of tannin or equal parts of spermaceti and oil of sweet almonds is to be recommended.

AMOUNT TO FEED DAIRY COW

Small Animals Will Consume From Twenty-Five to Thirty Pounds of Silage Each Day.

Cows should be fed as much silage as they will clean up without waste when consumed with hay and grain. Generally speaking, a good cow should be fed up to the limit of her appetite. If she refuses any of her feed, reduce the quantity at once.

Small cows will eat 25 to 30 pounds silage a day and the large ones 30 pounds or more.

RAISING TURKEYS IS MOST PROFITABLE



Breeding Flock of Bronze Turkeys on a Range.

(Prepared by the United States Department of Agriculture.)

For those who are favorably situated for raising turkeys, a more profitable side line can hardly be found. Given plenty of range where the turkeys can find grasshoppers and other insects, green vegetation, the seeds of weeds and grasses, waste grain, acorns and nuts of various kinds, the cost of raising them is very small and the profits large. Grain and stock farms are particularly well adapted to turkey raising, and it is on such farms that most of the turkeys are found. Little has ever been done in the way of raising turkeys in confinement, and where it has been tried the results have been discouraging. Plenty of range is essential to success in turkey raising.

Brooding.

In selecting turkeys for brooding, the most important factors to be considered are vigor, size, shape, bone, early maturity and color of plumage. The body should be deep and wide, the back broad, and the breast round and full. The head should be of good size and of a clean, healthy appearance. A strong, well-made skeleton is shown by thick, sturdy shanks and straight, strong toes. It should be the aim of every turkey raiser to have a flock of purebred turkeys, even though they are sold at market prices. The male at the head of the flock should by all means be a purebred of the best type obtainable. The male is one-half the entire flock, and by continually selecting the best females of a similar type and mating these with a purebred male, one can soon have a flock of uniformly large, early-maturing, strong-boned, long and deep-bodied turkeys of the same color.

Fifteen turkey hens can safely be mated to a vigorous tom. If 25 or 30 hens are kept, two toms should not be allowed to run with them at the same time, but one should be confined one day and the other the next. When two toms are allowed to run together



Bronze Turkey Hen.

during the mating season, they fight badly and the stronger does practically all of the mating.

Laying.

Turkey hens are wont to "steal" their nests in hidden places, such as a patch of weeds, tall grass or thick brush and often wander a half mile or more from home before they find locations that suit them. To find these stolen nests often proves to be a long and tedious task, the usual method being to follow each turkey hen as she separates from the flock and starts toward her nest, care being taken that she does not know she is being followed. A much easier and quicker method than this is to confine the hens early some morning soon after they have come down from roost and let them out late in the afternoon. Those that are laying will then head for their nests in order to lay the eggs they have been holding.

If many turkeys are kept, the use of a breeding pen will be found a great convenience. This pen should cover a sufficient area to allow the turkeys some exercise, an acre for 15 birds being none too large. A hog-tight wire fence three feet high will hold most turkeys, and if any persist in flying out, the flight feathers of one wing should be clipped. Nests should be scattered about the pen, those which turkey hens take to most readily being barrels turned on their sides and nests shaped in them with straw.

Incubation.

Turkey hens, chicken hens and incubators are commonly used to incubate turkey eggs. During the early part of the laying season it often happens that one has on hand a number of eggs that should be incubated before any of the turkey hens are through laying their first litter and become "broody." In such case, and also when it is desired that the turkey hens lay more than one litter, some of the eggs have to be incubated under chicken hens or in an incubator. About a week before the poulters are due to hatch, turkey hens enough should be allowed to sit to take all the poulters hatched. They can be given a few eggs from the in-

cubator or from under the chicken hens and allowed to hatch the poulters themselves, or at night a newly hatched poult can be slipped under each turkey hen that is to be given a brood of poulters and by morning she will be glad to take them.

Brooding.

If the weather is warm and dry no shelter is required, as the poulters do better in the open. Should it be rainy, however, they need to be protected, for nothing is more injurious than for them to become wet and chilled. The most satisfactory plan is to confine the mother turkey hen to a coop and allow the poulters to run in and out whenever rain does not prevent. This coop should be placed in a field where they can run out and find grasshoppers, green vegetation and other feed. The coop should be moved to fresh ground every day.

Improper feeding, combined with close confinement, has been the cause of many failures in turkey raising. Given free range on the average farm, the poulters can easily pick up their own living, and one light feed a day for the purpose of inducing them to come in at night is sufficient. If the mother hen is confined to a coop and the poulters allowed to run in and out, three times a day is often enough to feed and very little should be given at a time. The poulters should always be ready to eat; if given all they will clean up several times a day, indigestion will be the result. If there is little or no feed outside the coop for the poulters to pick up, then they should be fed about five times a day, feeding only a small quantity at a time. A good feed for the first few days is stale bread soaked in milk and squeezed dry. Corn bread crumbs and clabbered milk or cottage cheese is also quite often fed with excellent results. Green feed and grit should be on hand at all times. As the poulters grow older, the ration should gradually be changed to grain.

PROPER EGGS FOR HATCHING

Those From Old Hens Are Preferred to Ones Secured From Pullets—Have Them Uniform.

First of all, eggs for hatching should be from strong, healthy hens, says a writer in an exchange. A hen is not capable of producing a chick that will develop into a bird stronger than she herself was at the time the egg was laid. The eggs chosen should average in size, neither too large nor too small, I like for them to average about 24 ounces to the dozen. Eggs from old hens are usually to be preferred to those from pullets. When beginning to lay, and for a time afterward, pullets lay eggs that are under the average in size. When the eggs become normal in size, it is usually safe to use them for incubation, especially in the case of birds of the smaller breeds. The eggs chosen should be uniform in size, shape and color.

Eggs should not be older than ten days before they are placed in the incubator or under hens; in fact, much better results would be obtained if the eggs were no older than five days. While eggs four or five weeks old will sometimes hatch, the chicks from such eggs are usually disappointing—are hard to raise, and when grown, will likely prove to be weaklings.

White and brown eggs should never be incubated together for the reason that they need different heat and moisture requirements.

In holding eggs for incubation they should be kept in a room having a temperature of about 50 degrees F. If kept in a very low temperature, the germ may be killed or weakened. If subjected to a very high temperature, the germ will start to develop. Eggs being held for incubation should be turned daily.

CARE OF BROODER CHICKENS

Young Birds Must Be Watched Carefully for First Few Days—Guard Against Chilling.

Young chicks being raised by a wooden mother should not be permitted a very large yard at first, until they become "housewise" and know how to get back to artificial warmth. Many of them at first do not know enough to go back into the house when they become chilled, and it may be necessary at first to put them under the brooder a few times, after they have had a run outside, especially if they begin to huddle together outside. They often will get chilled while playing in the bright sunlight, and in place of going back to the brooder huddle together in a corner of the yard. After a few days of experience they do not have to be watched.

A hen mother calls them about her and broods the chicks quite often whenever she thinks they need warmth; but no one has invented an artificial caller for the wooden hens.

SPEAKS UP FOR CANADA

And No Wonder—Renting His Land He Made \$8.50 Per Acre.

So many Americans now have personal knowledge of Canada that false reports concerning this country are being continually corrected by Americans themselves who know the facts, and who are too fair-minded to let a false statement go unchallenged. A case in point arises out of a statement supposed to be made by a resident of Alberta, and published recently in the Spokesman-Review, of Spokane, in which the conditions of settlers in this country was painted in a very bad way indeed. The writer of this attack on Canada refused to let his name be known, so it can be taken for what it is worth, but Mr. S. L. Wallace, of N 4723 Crestline, Spokane, who lived for some years in Western Canada, came to the defense of the country in the following letter which was published in the Spokesman-Review of February 11, 1916:—

"To the Editor of the Spokesman-Review:—

"In Sunday's Spokesman-Review was a letter from a man in Alberta to the chamber of commerce, asking that something be done to keep Americans from going to Canada, and saying that that government was run by the railroads, banks and manufacturers; that once a man got there he never could get away. Had this man published that letter over his own signature there is no doubt but he could get out of Canada.

No country will do as much to help a man to get on his feet, if he tries to help himself, as Canada. I know of the government helping people to provisions, feed, seed grain and fuel, and charging only cost of delivery to the nearest town and 5 per cent. What more could a man ask?

I lived five years in Southern Saskatchewan and earned a patent to 320 acres of as good land as I ever saw. I have raised over 80 bushels of oats on sod, 40 bushels of wheat, and 20 of flax to the acre. Until I lost my health I never was better satisfied anywhere. I had my land rented this last year for one-third. It brought me almost \$8.50 per acre, or \$1,143.91 for 135 acres.

This man says he loves the land his fathers died for. So do I, and I love the land that gave me my home.

"S. L. WALLACE."
N 4723 Crestline, Spokane.—Advertisement.

Cutting English Trees.

England has 125,000 acres of crown forests, containing magnificent trees untouched by the woodman's ax. Now they are to go. England needs the lumber and has appealed to Canada to provide a battalion of axmen. Needless to say, Canada has responded gladly. There is now organizing a battalion of 1,500 experienced bushmen, who will wear the khaki, be subject to military direction and wield their axes on the ancestral oaks of the motherland. Soon the music of their blows will be heard ringing through the great New forest of Hampshire and Dean forest, in Gloucestershire. England must have the wood, but it is sad to think of these glorious old trees "disappearing." Many of the woodsmen will come from Quebec, where experts in the craft abound.

The Last Request.

A kind physician living near Peoria, wishing to soothe the last hours of a poor woman whom he has been attending, asked her if there was anything he could do for her before she died. The poor soul, looking up, replied:

"Doctor, I have always thought I should like to have a glass butter dish before I died."

For Oiling Machinery.

The operation of oiling machinery, especially where it is desirable that the oil should be kept from the hands and clothing of the operator, has been devised recently in making use of the well-known collapsible lead capsules, so widely used for artists' colors, druggists' products, paste, etc., in the United States. The capsules are provided with a screw thread, which is screwed into an adapter, which in turn is fastened to the part to be lubricated. The lead capsule and the brass adapter make a tight joint, and all that is necessary is to apply pressure from time to time, as desired. When the grease capsule is emptied, one merely unscrews it and puts a new one in its place. No refilling is necessary, and the pressure of the fingers is usually sufficient to force the grease into the bearing.

Something to Be Thankful For.

Only a fool man will laugh at a girl because she can't hit the side of a barn with a brick; he may marry her some day, then he will be glad that this is thus.

Unpopular Stand.

"Do you know how much the war is costing Europe every day?" asked the statistician.

"No," answered the busy man. "I only know the number of friends it has cost me in my home town to maintain strict neutrality."

Temperature Kept Right.

Freight cars for shipping bananas in winter are heated by half a dozen or so large oil stoves ranged down the center of the car. The temperature is kept at an average of 35 degrees.

POULTRY

HIGH EGG PRODUCING FOWLS

Some Characteristics Which Will Serve as Guide When Trap-Nest Is Not Available.

By C. B. ANDERSON, Colorado Agricultural College, Fort Collins, Colo.)

While the trap nest is the most dependable method by which to select birds of high egg production, the additional labor and expense involved prohibits its use under most farm conditions. Without the trap nest,



Barred Plymouth Rock Female, Bred at United States Government Farm.

one must resort to external indications.

When selecting pullets, choose only those from early hatches with strong constitutional development, early producing pullets, heavy eaters, early risers, late retires and active. Hens of highest egg production have a feminine appearance, fine head, alert eyes, comb, face and wattles fine of texture and medium in size. They should stand square on their feet, legs wide apart, with the front end of the body slightly higher than the posterior end, long back and tail carried rather high. The body should present a wedge shaped appearance, yielding ample room for the reproductive and digestive organs. Late molters make heavier winter egg producers.

CHANGING COLOR OF CHICKS

No Purebred Black Fowl is Ever Absolutely Black at Birth—Color Changes With Growth.

The novice is often offended because chicks are not the color which he expects them to be, but the color of plumage, feet and shanks changes with growth in many varieties. No purebred black chick is ever absolutely black at birth. The more brilliant the adult plumage, the truer this is. The chick which is jet black when hatched is a cross and its color will change with age. A Langshan chick is almost white with some gray on its head and back, but it develops into a black with an emerald sheen.

Barred Rock chicks are black and white. Brown Leghorns and other red varieties in which the cock has a black breast have a wide brown stripe in the middle of the back and other dark bands, which are not so heavy. The Silver varieties in which the males have black breasts have similar design in deep gray, the light stripes being almost white. Reddish brown birds are nearly black at birth, and usually have some tan on the head and around the eyes.

SIMPLE COVER FOR TURKEYS

Nest Shown in Illustration Has Been Tested and Found Practical for Sitting Fowls.

The illustration shows a simple and practical sort of a cover for the nesting turkey. It should be about three feet square and about two feet in height at the top of its roof. It is said that turkey hens can be moved,



Turkey Nest.

after they begin to sit, to a place where they can be watched and cared for conveniently. Ordinarily the nesting turkey is regarded as about the wildest of the farm's domesticated creatures. The nest cover has been tested and found entirely practical.

Cure for Scaly Legs.

Scaly legs on poultry can be cured by rubbing the feet and shanks with kerosene and lard. Repeat once a week for several times until cured. Where the legs are very scaly, they should be first soaked in warm, soapy water to soften the scales.

Don't Frighten Chickens.

Do not permit children, dogs or men to frighten your chickens. Fowls that are easily frightened never do well. Chop the head off the wild pullet.

Look and Feel Clean, Sweet and Fresh Every Day

Drink a glass of real hot water before breakfast to wash out poisons.

Life is not merely to live, but to live well, eat well, digest well, work well, sleep well, look well. What a glorious condition to attain, and yet how very easy it is if one will only adopt the morning inside bath.

Folks who are accustomed to feel dull and heavy when they arise, splitting headache, stuffy from a cold, foul tongue, nasty breath, acid stomach, can, instead, feel as fresh as a daisy by opening the sluices of the system each morning and flushing out the whole of the internal poisonous stagnant matter.

Everyone, whether ailing, sick or well, should, each morning, before breakfast, drink a glass of real hot water with a teaspoonful of limestone phosphate in it to wash from the stomach, liver, kidneys and bowels the previous day's indigestible waste, sour bile and poisonous toxins; thus cleansing, sweetening and purifying the entire alimentary tract before putting more food into the stomach. The action of hot water and limestone phosphate on an empty stomach is wonderfully invigorating. It cleans out all the sour fermentations, gases, waste and acidity and gives one a splendid appetite for breakfast. While you are enjoying your breakfast the water and phosphate is quietly extracting a large volume of water from the blood and getting ready for a thorough flushing of all the inside organs.

The millions of people who are bothered with constipation, bilious spells, stomach trouble, rheumatism; others who have sallow skins, blood disorders and sickly complexions are urged to get a quarter pound of limestone phosphate from any store that handles drugs which will cost very little, but is sufficient to make anyone a pronounced crank on the subject of internal sanitation.—Adv.

Taxis Come High.

Mollie—You were in a taxicab with her?

Chollie—Sure.
"And you kissed her?"
"Certainly."
"How much?"
"Eight dollars and forty cents' worth."

For bunions use Hanford's Balsam. Apply it thoroughly for several nights and rub in well. Adv.

Strong of Mustard.

"What is this thing you're giving me?" asked the man at the railroad restaurant, making a wry face.
"A sandwich, of course. What did you think it was?" asked the cross-looking blonde.
"I thought it was a mustard plaster."

HOW TO REMOVE DANDRUFF

Itching and Irritation of the Scalp With Cuticura. Trial Free.

On retiring lightly touch spots of dandruff, itching and burning with Cuticura Ointment. Next morning shampoo thoroughly with Cuticura Soap and hot water. These super-creamy emollients do much to keep the scalp clean and healthy and to promote hair growth.

Free sample each by mail with Book. Address postcard, Cuticura, Dept. L, Boston. Sold everywhere.—Adv.

The Trouble.

"Those soldiers don't look natural. It's a fake film."
"No, it is not. The soldiers are real soldiers. Not being versed in acting, of course they don't look natural."

THIS IS THE AGE OF YOUTH.

You will look ten years younger if you darken your ugly, grizzly, gray hairs by using "La Creole" Hair Dressing.—Adv.

Apt Mechanic.

The phrase, "apt mechanic," is good English. Of course it is. It simply means "fit mechanic" or "good mechanic."

SWAMP-ROOT SAVES KIDNEY SUFFERERS

You naturally feel secure when you know that Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy, is absolutely pure and contains no harmful or habit producing drugs.

The same standard of purity, strength and excellence, prescribed by Dr. Kilmer many years ago, is maintained in every bottle of Swamp-Root.

Swamp-Root is scientifically compounded from vegetable herbs. It is not a stimulant and is taken in teaspoonful doses. It is not recommended for everything. According to verified testimony it is nature's great helper in relieving and overcoming kidney, liver and bladder troubles.

If you suffer, don't delay another day. Go to your nearest druggist now and get a bottle. All drug stores sell it in two sizes—fifty cents and one dollar.

However, if you wish first to try this great preparation send ten cents to Dr. Kilmer & Co., Binghamton, N. Y., for a sample bottle. When writing be sure and mention this paper.—Adv.

More than 25,000 girls have become members of canning clubs in the South.

The apple plants roses in the cheeks.