

# FARM AND ORCHARD

Notes and Instructions from Agricultural Colleges and Experiment Stations of Oregon and Washington, Specially Suitable to Pacific Coast Conditions

## CHEESE-MAKING ON THE FARM.

(Prof. F. L. Kent, Oregon Agricultural College.)

The purpose of this article is to give simple directions for the making of cheese in the farm home with the appliances which will usually be found on the farm. A reliable dairy thermometer will be necessary, for success in cheese-making depends to a large extent upon the proper control of temperature, and the "rule of thumb" is not sufficiently accurate.

We will assume that 100 pounds, which is about 12 gallons, of milk is to be used. Should a greater or a less quantity of milk be used the maker must govern his work accordingly, using color, salt, and rennet proportionately.

### Directions.

**Coloring**—It is not absolutely necessary to color the cheese, but the appearance will be considerably improved by the use of color. Remember that butter color will not do for cheese. Probably the most satisfactory form in which to buy the cheese color for our purpose is in the dry form. Both color and rennet can be had from the dairy supply houses in dry form, and in this form does not readily deteriorate, an important point to consider where cheese is made for family purposes only, which means making probably not oftener than once a week. The dry color is dissolved according to directions, and the proper amount to use is diluted with about a half glass of water and added to the milk before the addition of the rennet. The amount of color to use will depend upon the shade desired in the finished product, as well as upon the character of feed the animals are getting. The breed of cows also make some difference.

**Rennet**—The most satisfactory form of rennet for use in farm cheese-making is rennet tablets. They are not quite so convenient to use as the liquid extract, for they should be dissolved two or three hours before time to use them, but they will keep almost indefinitely, which is not true of the extract when once opened.

**Preparing the Milk**—Take about six gallons of the evening's milk and leave it covered with a cloth at a temperature of 65 to 70 degrees until morning, and then pour it with another six gallons of the morning's milk into a large wash boiler or wooden tub. If a wooden tub is used considerable care will be necessary in keeping it properly cleaned. All the milk is then heated to 86 to 88 degrees. Perhaps the safest and simplest way for heating is to hang a deep can filled with water at about 150 degrees down in the milk and move it around. If the can is suspended from the ceiling it is a very easy matter to swing it back and forth in the milk, and it can be raised out as soon as the desired temperature has been reached. The milk should not be exposed to cool drafts and it is well, after the heating is done, to cover with a cloth.

**Setting**—Having previously dissolved one rennet tablet in about a half glass of cold water, add this solution to the milk previously heated to 86 to 88 degrees, and stir well for about two minutes, then pass the back of the stirring dipper over the surface of the milk to stop any movement. While the curdling is taking place it is important that there be no jarring of the milk, otherwise the coagulation will not be so perfect. Some makers prefer to use two rennet tablets, thereby saving time in the making, and the resulting cheese will also cure quicker.

**Cutting**—Rennet curdles the milk and if one tablet is used the curd should be ready to cut in twenty to thirty minutes. To tell when the curd is firm enough to cut, push the forefinger into the milk, bend the finger to a 45-degree angle, and raise it gently. If the curd breaks clean across the finger it is ready to cut. The cutting can be done with a wire toaster, a piece of sufficiently coarse wire netting, or even with a long knife. First cut slowly lengthwise, then crosswise until the curd is in nearly uniform pieces of about a half-inch cube. If two tablets are used the milk should be ready for cutting in about fifteen minutes. If the evening's milk used should be pretty close to the setting point when the morning's milk is added, the curdling will take place somewhat more quickly, but the quality of the cheese is liable to suffer. The factory cheese-maker uses an accurate test to determine the condition of the milk as to its approach to sourness, but this is hardly practical for the ordinary farm cheese-maker.

**Cooking**—This is rather a misleading term since the temperature reached is only about 100 degrees, but the term is in common use among the factory makers, hence is used here. After cutting leave the curd alone for five minutes, then raise the temperature slowly, about 2 degrees in five minutes, to 98 to 100 degrees by the use of the heating can, stirring gently all the time while heating. Then cover with a cloth and keep the temperature about 98 degrees for about forty minutes, or until the curd is sufficiently "cooked," stirring occasionally to prevent the curd from sticking together. If the temperature falls too low the heating can will have to be used again. Another way of heating the curd is to draw off a part of the whey, heat it to 130 to 140 degrees and pour it back. It is important that no particle of curd gets into the whey that is being heated. To determine when the curd is ready, take a handful and squeeze it hard in the hand for a moment; if it feels elastic and does not stick together it has been cooked enough. If the milk was good the curd should have a pleasant, very slightly acid

odor. As soon as the curd is cooked, draw off the whey. If a tub is used this can be done by letting the whey out through a hole in the bottom, or all the curd can be dipped out with a sieve and placed in another vessel.

**Salting**—After the curd is well drained and before it gets a chance to stick together, add one-fourth pound of fine salt and mix well. After salting, leave the curd to cool for about fifteen minutes, stirring it occasionally. When properly cooled the curd should have a temperature of about 75 to 80 degrees. It is then ready for the final step in the making, namely:

**Molding and Pressing**—The cheese hoop generally used is made of tinned or galvanized iron, and is seven to 10 inches in diameter and about nine inches deep. Put a wooden box, six by eight inches and ten inches deep, without top or bottom, will serve the purpose fairly well. If the box is used it would be advisable to have some small holes bored in the wood to permit drainage for the whey. But if several cheeses are to be made during the season we would strongly recommend the purchase of a regulation cheese hop and regular seamless bandage. A very simple press can be made by using a pole about twelve feet long as a lever. One end of the pole is supported by a slat nailed to the wall, the cheese hoop being placed so that its center is about three feet from the wall. The weight on the long arm of the lever can be a pair partly filled with stones, and the pressure is applied to the cheese through a block of wood that fits the hoop. Before the curd is placed in the hoop, the hoop is lined on the inside with cheese cloth. Cut a piece of cloth and place it in the bottom; then take another piece large enough to line the inside and one inch longer at the top and bottom. The lower end of the cloth is turned in over the cloth at the bottom and the upper end is turned back over the edge of the hoop. After the curd is packed fairly tight, it is covered with another piece of cloth and the upper end of the bandage is turned over it. A slight pressure is first applied by hanging the pail on the lever close to the mold and after about an hour the cheese is taken out and the cloth rearranged, by pulling it up and trimming off so that it will project over the cheese ends about an inch. When placed in the mold again the pressure is gradually increased by moving the pail toward the end of the lever, and the cheese will be ready for the curing room the next day.

**Curing**—The curing is best done in a slightly moist air at a temperature of about 60 degrees. A good cellar will be quite satisfactory. During the first few days the cheese should be turned daily. It is well to rub the cheese once a week for a few weeks with butter or cheese grease and also with salt if it shows signs of mold. The cheese will be eatable in three to four weeks, but will improve if kept for a longer time. The 12 gallons of milk will make about ten pounds of cheese, varying somewhat according to the richness of the milk.

Don't let the evening's milk get sour. Don't overheat at the various steps in the process. Don't use too much salt. Don't try to get along without an accurate thermometer. Don't fail to keep the utensils clean and sweet.

## FASHION HINTS



Separate fancy waists hold a very important place in the wardrobe of the well-dressed woman.

Semi-barbaric tendencies show in many models.

Head-work is a popular trimming, in colors and in black and white.

The accompanying sketch shows an attractive waist of chiffon cloth, with just a little beading on the vest.

**Accounted For.**  
"Where are our poets of today?" thundered the orator, looking over the vast audience that had gathered in the district schoolhouse, waiting a breathless moment or two to let his words sink into the minds of his spellbound listeners.

"Waal," replied Hiram Plunkett, from the rear of the room, "our best poet here is down to Bear Run cuttin' timber fur a steam sawmill company, an' Marthy Baker, our next author, is in order, hed to stay away tonight, much to her vexation, becuz her pap's got the roomertis."

**Grapefruit Cocktail.**  
Cut three medium-sized grapefruit into halves, remove pulp and membrane and separate the pulp into flakes. Mix this lightly with quarter of a pound of Malaga grapes, which have been skinned and seeded, sprinkle liberally with sugar and chill thoroughly. Serve in the grapefruit shells with a little crushed ice.

## QUEEN VICTORIA TO DICKENS

What a Humble Writer Said to One of the World's Greatest Novelists.

Alfred Dickens' record of Queen Victoria's modest remark on the difference in literary rank between her authorship and his father's differs a little (at any rate as reported) from what Foster tells in "Life." According to the biographer, the queen said, but did not write, that she was giving the book of the humblest of writers to one of the greatest. Dickens had been famous for 35 years before the queen sent for him, and she was just in time, for he went to Buckingham palace in the year he died. "Describing the brief audience to my father," writes a correspondent, "Dickens said he could describe the queen's manner only as that of a little girl—a very difficult little girl," he added.

Perhaps the royal command was so long deferred because of Dickens' refusal, in 1857, to show himself to royal eyes in a stage dress. The queen attended an amateur play, and at the end sent for the principal actor, who was Dickens, to come to her box and receive her thanks. "I replied," he wrote to a friend, "that I was in my stage dress and must be excused. Whereupon she sent again. I . . . again hoped her majesty would have the kindness to excuse my presenting myself in a costume and appearance that were not my own." Previously Dickens declined to take his company to the palace. It did not seem to occur to the author that he was doing anything unusual.

### The Place of Sentiment.

Broadly speaking, while every man must be regarded as a unit, there are generally said to be three distinct subdivisions of his nature. These are the intellect, the sensibility and the will. By means of the intellect he apprehends knowledge and comprehends its nature, its bearings and relations, and by it he reasons. By sensibility he feels, loves and hates, is excited, jubilant or depressed, enjoys or suffers, aside from physical sensation. Sometimes the line is very close between intellect and sensibility. An appreciation of anything which is purely intellectual easily becomes admiration, running into a degree of pleasure which seems to be pure sentiment. By the will the other two are controlled and directed. It chooses objects upon which the intellect is to exercise itself, and directs the general course of its activities, and it has the capacity less seldom exercised to control the range and manifestation of the sensibility. For some reason there has always been a disposition not only to regard the intellect and the will as much more important than the sensibility, ranking it as the lowest of the three subdivisions, but to disparage and belittle it and cast reflections upon its activities and results. How often does one hear: "Oh! that is mere sentiment, that doesn't count," or "he is nothing but a sentimentalist!" As a matter of fact, it is sentiment that not only makes life worth while, but that moves the world.

### The Salvation Army in England.

There are some interesting figures in the annual report of the Salvation Army in Great Britain, which was recently issued. It was prepared by Rider Haggard, the novelist and social worker, who says that nothing impressed him more than the women engaged in the work. He says that a study of the female officers of the Salvation Army is calculated to convert the observer not only to a belief in the right of woman to exercise the suffrage, but also to that of their fitness to rule among, or even over men. The figures of the Darkest England scheme work show that from the beginning 70,448 have been received into factories; temporary or permanent employment has been found for 263,663; 9,256 ex-criminals have been received into homes, of whom 9,052 were assisted, restored to friends, sent to situations, etc.; 14,103 lost persons were found; 48,096 women and girls were received into rescue homes, of whom 40,514 were sent to situations or restored to friends; and 115,145 sick people were visited and nursed.

### In a Twin Divorce Suit.

With their little daughter as the guerdon, the twin divorce suits of Love vs. Love, the one filed in Baker City, Ore., and the other in New York City, now promise to prove bitter contests. Almost immediately after filing a bill for divorce in Baker City, Ore., late on the afternoon of St. Valentine's day, Sidney C. Love left for New York city to fight the suit brought against him by his wife, Mrs. Marjorie Burnes Love, the filing of which he surmised was pending.

According to dispatches from Baker City several months since a detective came there and has since "shadowed" Love. Mrs. Love already has retained counsel to represent her in the process brought in Oregon. Little is known of Love's personal affairs in the mining town of Baker City, and his personal friends refuse to talk. Mrs. Love is equally reticent, but the positive and bitter estrangement of the once popular clubman and his wife now appears to be absolute.

### Defies Passing of Years.

Dr. D. D. Martin of Tulsa, Okla., is the oldest practicing surgeon in the United States. He is 89 years old. At the clinical convention of North American surgeons in Chicago, recently, Dr. Martin performed an operation which showed his colleagues that his skill and judgment had been in no way impaired by age.

## EXPERIMENT STATION NOTES.

(Washington Experiment Station, Pullman, Washington.)

To pack eggs in water glass, use water glass one part to fifteen parts of water. Pack the eggs in a jar and pour the liquid over them, covering them completely. Do not wash the eggs before packing them as this may injure the keeping qualities by removing a natural protective coating on the outside of the shells. Water glass is a somewhat alkaline liquid, but the diluted solution is not injurious to the hands if they are dipped into it in packing successive gatherings of eggs, or in removing the eggs in solution.

To kill the small wigglers which sometimes appear in spring water during the warm seasons of the year, try pouring kerosene over the surface of the water, allowing it to spread over the surface. This will effectively kill all the wigglers, after which the water could be allowed to run off. This, however, would not be permanent, as the wigglers would be very apt to be found in plentiful numbers in a short time. A good plan is to clean out the spring, placing in it a vessel of some kind. The wigglers will not injure the water in any way, however, even if present.

To destroy the aphids which attack garden and ornamental plants, spray as soon as the insects appear with either kerosene emulsion or tobacco. To make the latter spray, use one pound of tobacco leaves to four gallons of water. Simmer one hour and then strain. Two pounds of tobacco dust or ground tobacco may be substituted for the leaves. To make kerosene emulsion, use two gallons of kerosene to a half pound of whale oil soap to one gallon of water. Dissolve the soap in water by boiling, and add the suds boiling hot to the kerosene away from the fire. The mixture is then agitated violently, preferably by pumping it violently back on itself with a force pump. After four or five minutes the mixture suddenly becomes creamy in substance. Use one gallon of the emulsion to twelve gallons of water in spraying.

Cauliflower, like cabbage and other plants of this group, should be transplanted just a little deeper than they grow in the frame or seed bed. Usually we plant them from a half inch to an inch and a half deeper. This depends somewhat upon the condition of the soil. Cauliflower requires a moist atmosphere, and naturally a moist soil. If grown upon very dry soil in a dry atmosphere, the head is tough and rather strong. But when grown in the proper conditions, it is a very fine and much prized vegetable. Do not attempt to grow them in shady places. Give them all the sunshine they want, and keep the ground well tilled and moist. The leaves should be tied over the head as soon as the head begins to be exposed. Usually this is when the head is from three to four inches in diameter. This is simply for the purpose of making the head tender and keeping it wet. The only thing that can be done to keep the aphids out of the cauliflower head is to spray thoroughly with kerosene emulsion, tobacco, or pyrethrum decoction before the plants head. If the aphids get in their once, they cannot be gotten out.

Wire worms are one of the most difficult insects to combat. Many experiments have been undertaken to find something that will poison these worms, and all such tests have thus far been unsuccessful. Treating the seed and planting mustard in the fields have proven of a little benefit. It has been found, however, that fall plowing of the infested fields will mash a great number of the soft pupa, which is the resting stage of this insect. If all the wire worms would go in the pupa condition each fall they would be quickly killed out of the soil by fall plowing, but where the species exists for several years in the worm condition, fall plowing will destroy only a portion of the insects, that is, only those that have entered upon the pupa stage. Where fall plowing is persisted in year after year, the wire worms are, however, gradually worked out of the soil. As a usual thing, wire worms are the more destructive in new or sod land than in cultivated land. The natural food plant of the larvae consists largely of the roots of native grasses. When a small number of domestic plants are substituted, the worms naturally work on the roots of these for their sustenance. They are known to be destructive to almost every kind of plant.

The little black insect often found eating the strawberry plants is known as the flea beetle. There would seem to be no effective remedy for this insect when it appears on the plants during the fruiting season. Bordeaux might be applied were it not for the fact that it would cause the berries to taste bad, making them unmarketable. The common practice of cutting off the strawberry just after harvest and burning them is one that is very beneficial in getting rid of this pest.

It should be more of a common practice to spray young fruit trees, even though they seem to have no disease or insect annoyance. The green aphis is very commonly found on young trees and one of the most effective remedies for this pest is to spray with sulphur lime while the trees are in a dormant condition. A great number of eggs are thus destroyed. At the same time, this sulphur lime spray will assist in a great way toward the eradication of the canker. Red spider is another pest found on young trees as well as old, that can be treated successfully only by this spray. One of the most effective remedies to prevent ants from climbing the fruit trees and eating the young buds is to tie a fluffy band of cotton about the trunk of the tree. Ants will very rarely go over this fluffy band.

When grasshoppers are small it is best to kill them by spraying with strong soapsuds, kerosene emulsion, and the like. This will kill them by closing up their breathing pores, then suffocating them. It is also possible to poison young grasshoppers with

arsenic. This is best done by using what is known as "cuddle mixture." This is simply fresh barnyard manure mixed with slop and Paris green. After the grasshoppers are more than half-grown, it is out of the question to try to kill them by spraying. They are then too lively to reach with a suffocating spray, and cannot be easily poisoned. A great deal of good can be done by coating the plants you wish to protect with a Bordeaux spray, as the copper in this leaves a metallic taste which the grasshoppers cannot stand. When spraying for grasshoppers make the Bordeaux as follows: Bluestone, 6 pounds; good lime, 4 pounds; water, 50 gallons. Dissolve the bluestone by suspending it in a sack in 25 gallons of water in a barrel. Shake the lime in another vessel, adding water slowly to make 25 gallons of lime milk. Pour the two at the same time in another vessel, allowing them to mix thoroughly as they are poured in. If there is not enough lime in the water it will burn the foliage of the plants to which it is applied. To test this, take a saucer full of the mixture and add a few drops of a solution of ferrocyanide of potash made one ounce to the half pint of water. If a brown color appears more lime must be added till no change takes place when the test is applied.

## FASHION HINTS



Anything nautical has a charm for sweet sixteen, so the successful reign of the "middy" suit is assured. In white serge or linen it is very picturesque, but for practical wear have it made in one of the shades of blue.

### A CONSUMPTION CURE.

By B. J. Kendall, M. D.

Milk strippings when taken from a healthy cow that gives very rich milk and taken in quantities of a quart twice a day immediately after milking, before it cools any, will cure a larger per cent of cases of consumption than any other treatment and will cure in half the time of any other method. Will also prevent it when taken in time. The reason why it is so successful is because it is absorbed or transfused into the circulation almost immediately without taxing the digestive organs, as all other foods do, and as the strippings or last quart of the milking from a cow that gives very rich milk is nearly all cream, the patient will take on fat so much faster than can be accomplished by any other method that they soon gain enough strength and vitality to overcome the germs causing consumption.

To get best results one should begin with a glass of strippings and increase gradually, but if there is any disgust for it created at any time the quantity should be dropped at once to one-half, and then increase gradually again. In two or three weeks they can usually take a quart in the morning and evening.

It is very important to take it immediately after milking, so as not to allow it to cool below blood heat. In cold weather it should be milked into a dish resting in warm water to prevent it from cooling any.

### Ingenious Explanation.

Critic—Why do you say in the story of yours that "Henderson's heart beat a tattoo as Mabel entered the room," Scribble? Do you wish your readers to believe that your hero carried a drum where he should have had a heart?

Scribble—Not at all, my dear fellow. I used that expression advisedly. I meant my readers to infer that as Mabel entered the room Henderson's heart sounded a call to arms.—Harper's Week.

### Japanese Method of Cold Storage.

On a recent visit to the city of Takata, on the northwest coast of Japan, I had occasion to observe, what at first thought I imagined was a haystack, but on investigation found to be an immense mound of snow covered with straw matting. The purpose of this mound was to keep in cold storage, for consumption in summer, fish caught in the wintertime. This is the only method of cold storage employed in the rural districts in the northwest of Jaapan, where the snowfall is very deep in winter, and these stacks are to be seen in considerable numbers distributed in different parts of the country.—Strand Magazine.

### A Special.

"That steak you sent home was tough," said the housekeeper. "It must have been one of our specials that we gave you by mistake," answered the dealer. "A special!" "Yes; one that we send out with a durability guaranty."

## A Greek Joke.

A citizen of Cumae, on a donkey, passed by an orchard, and seeing a branch of a fig tree loaded with delicious fruit he laid hold of it, but the donkey went on, leaving him suspended. Just then the gardener came up and asked him what he did there. The man replied, "I fell off the donkey."—Clouston's "A Book of Noodles."

## TRY MURINE EYE REMEDY

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## Dairying in Sweden.

Sweden has agricultural societies which assist the dairying business by appointing itinerant teachers, giving grants to schools and support to exhibitions.

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## Raising Black Fox.

On Prince Edward Island about 25,000 muskrats, 500 minks, 1,000 red foxes and a few weasels are killed each year. The black fox is bred there by people who keep their methods secret. A good black fox skin is worth \$1,500.

## WOMAN ESCAPES OPERATION

## Was Cured by Lydia E. Pinkham's Vegetable Compound

Elwood, Ind.—"Your remedies have cured me and I have only taken six bottles of Lydia E. Pinkham's Vegetable Compound. I was sick three months and could not walk. I suffered all the time. The doctors said I could not get well without an operation, for I could hardly stand the pains in my sides, especially my right one, and down my right leg. I began to feel better when I had taken only one bottle of Compound, but kept on as I was afraid to stop too soon."—Mrs. SADDIE MULLEN, 2723 N. B. St., Elwood, Ind.

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