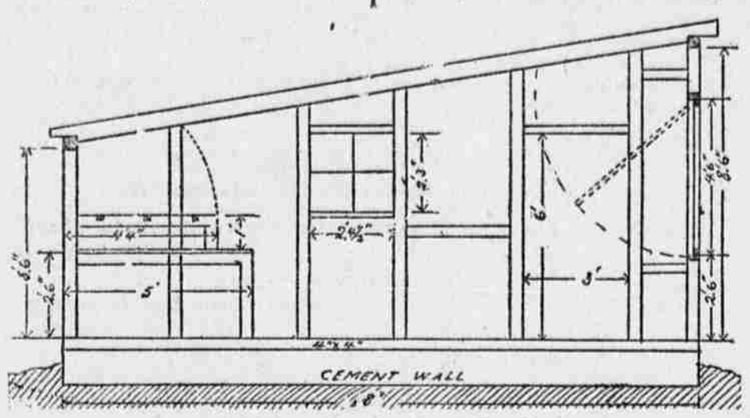
# EXCELLENT HEN HOUSE TO SHELTER MATURE FOWLS

**Illustration Shows End View of Building Giving Roost Detail—Detailed Instructions for Construction —Will Shelter From 80 to 100 Chickens.**

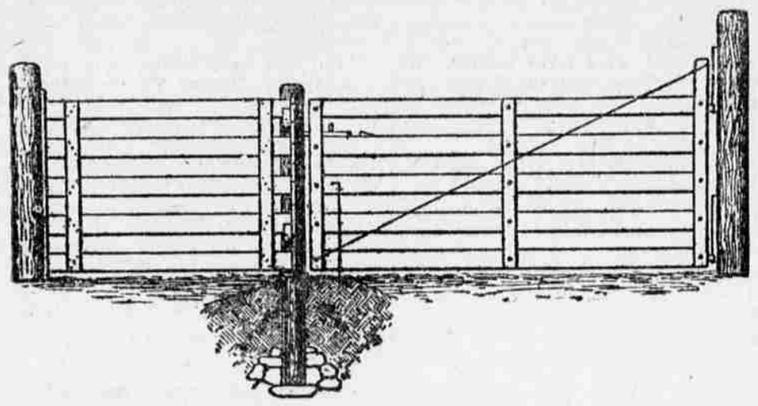
The illustration shows a house for poultry as constructed by the Maryland Agricultural Experiment station. The house is 20 feet long by 18 feet wide, 8 feet 6 inches high in front and 5 feet 6 inches from sill to plate in the rear. The sills are 4 by 4 inches in size and rest on a cement foundation 6 inches wide. All studding is 2 by 4 in size and the rafters are 2 by 6. The building can be covered with German or Rustic siding or rough boards and a good grade of roofing paper. The floor is of cement, which makes the best floor for the poultry house. The front or south side of the building has two windows of 12 lights of 10 by 12 glass; these are stationary and placed 1 foot 10½ inches from each end of the building. They are 2 feet 6 inches from the floor. The space between the windows is 10 feet long and 4 feet 6 inches wide; this space is not boarded, but left open to be covered by the cloth curtain when necessary. This leaves a tight wall 2 feet 6 inches high, extending from the bottom of the opening down to the floor, which prevents the wind or storm from blowing directly on the birds when they are on the floor. Two light frames, made of 1 by 3 inch pine strips, are covered with sheating, and hinged at the top of the front opening, which it covers when closed down. When the curtain is up it is held by hooks fastened to the rafters.

The roost platform is made tight and extends along the whole length of the rear wall. It is 5 feet wide and 2 feet 6 inches from the floor, high enough to permit the sunlight to sweep under and to allow a person to catch or handle the birds. There are 3 roosts framed together in two 10-foot sections. They are 1 foot above the platform and hinged to the back wall so they may be turned up and out of the way when cleaning the platform. The back roost is 12 inches from the rear wall, and the space between each of the others is 16 inches. There is no curtain in front of the roost, but on cold nights the curtains in the front of the house are closed. The nests are placed on the side walls and may be constructed according to the ideas of the builder. On each end of the building and 1 foot 8 inches from the front wall is a 3 by 6 foot door. There is also one 2 light sash of 12 by 24 glass in each end of the building, and they are used only during the summer months when they add greatly to the comfort of the birds. They are hinged at the top and swing out and up. The house will accommodate from 80 to 100 mature fowls.




End View, Showing Roost Detail.

# FOR WIDENING FARM GATEWAY



In this drawing is shown a gate hung so it can be raised when snow is deep; but more than this, the gateway may be extended for extra wide loads and tools to pass through by removing the center post and the panel at the left, says Orange Judd Farmer. This post is set in an iron well casing buried, as shown, in the ground. The panel fits in a cleat fastened to the left-hand post and sets down on a couple of cleats shown in the first and fourth bars of the gate at the middle post. All that is necessary then to widen the gateway is to lift this panel up and then remove the post. The gate proper is latched in the ordinary way, as shown at the second bar, and may be fastened in any position by means of the stiff wire rod shown near the center of the drawing. The main gate is preferably ten or eleven feet long, and the panel about six feet long.

# BITTERNESS IN MILK PRODUCT

**Source and Nature of Bacteria Which Makes This Condition Possible—Frequently Found in Udder.**

(BY L. A. ROGERS, UNITED STATES BUREAU OF ANIMAL INDUSTRY.)

The distinct bitter taste which sometimes appears in milk may be caused by (1) certain weeds that the cow has eaten, (2) an abnormal condition of the udder, (3) an advanced period of lactation, (4) the action of certain bacteria. Only the fourth cause of bitterness will be discussed in this paper.

It is probable that the bacteria causing bitterness are not at all uncommon and that they could be found in many lots of milk showing no bitterness.

Some of these bacteria form acid and sour the milk; the more common forms, however, form little acid and are checked by the growth of the lactic acid bacteria.

Nearly all of them form spores and thus survive heating, which destroys the lactic acid bacteria. For this reason bitterness has been most frequently observed in pasteurized and imperfectly sterilized milk.

The few remaining spores germinate, and as they are unhindered by the presence of lactic acid bacteria they soon reach unusual number and the bitter flavor appears.

Bitter milk may appear as an epidemic, persisting day after day, and causing great trouble. This may be due to some constant localized source of infection which adds each day unusual numbers of bacteria to the milk.

In some cases it has been found that the udder of the cow was infected. This should be determined by carefully cleaning the udders of all cows and milking from each quarter of the udder of each cow into fruit jars or bottles which have previously been cleaned with boiling water.

In case one of these samples shows a well-developed bitterness while others remain normal, it may be assumed that the source of infection is the udder of the cow. In that case there should be injected into the udder after each milking a solution of one part of hyposulphite of soda in 100 parts of water.

It is possible in many cases that the source of infection is not localized. If through some combination of circumstances the lactic acid bacteria are suppressed, other kinds become predominant.

The utensils, the milk room and the stable gradually become inoculated with these bacteria or their spores and each new lot of milk is thoroughly inoculated.

The bitter-milk bacteria may be one of the new forms. In this event it may be necessary, after thoroughly cleaning everything coming in contact with the milk, to introduce some good sour milk from a neighboring dairy.

In this way the normal fermentation may be restored and the objectionable bacteria suppressed.

### Setting Hen With Mites.

When you see the setting hen inclined to stand up on her nest you can just bet your money that she is covered with mites, and the nests, too, has a full supply. A good plan is to investigate all sitters a number of times during the incubating period in order to get rid of the mites before they get the best of you and the hen, too.

# Ancient Pueblo of Acoma

GROUP OF ACOMANS

THE pueblo of Acoma, in New Mexico, is weird and strange and out of the way. A half day's journey from the pueblo of Laguna, which is on a transcontinental line of railway, Acoma is as remote from civilization as it was when discovered 300 years ago Probably not over a dozen white men call at Acoma in the course of a year.

It is a hard trip over there, across the hot desert, and the Acomans, who belong to the Queres tribe, are none too hospitable to the stranger. Unless you have a pull with the gobernador, the Pooh Bah of the pueblo, you might as well make up your mind to say good-by just as soon as you have said hello, because you'll be given to understand very plainly that you are not wanted. This isn't from any special unfriendliness on the part of the Acomans, but they simply prefer to be left alone and figure that they have worried along pretty well without white assistance for several hundred years and will be able to do so for several hundred years more.

There's not much of anything of interest before you reach Acoma. You are beginning to nod in the wagon when suddenly you are aware that there has seemed to shoot up out of the plain a wonderful mesa, on the top of which is a town, looking not unlike a sprawly sort of castle. The mesa is in the southwest corner of a basin four miles wide and ten miles long and open from the northeast only. The general altitude of the basin is about 7,500 feet and the mesa shoots up from 200 to 250 feet right out of the desert, the sides being either vertical or overhanging.

The top of the mesa consists of about 300 acres of denuded rock and what induced anyone to build a town there is one of those little mysteries that even the archaeologist will have a hard time making clear to you. But in all probability the pueblo was built there for purposes of defense. As you approach the mesa you understand how easy it would be for the Acomans to defend themselves against any attack that might be made upon them.

The main trail is plainly defined. It winds across the desert and brings you up against the base of the mesa between a couple of big groups of sandstone 200 feet high, guarding the pass like giants. The trail slopes upward from these giants and mules and horses can make the ascent to the top There are two other trails, but they are for foot purposes only and unless the visitor has a clear head and is a good climber he doesn't want to tackle either one of them, as the paths are cut in solid rock and in some places are merely footholes in the side of the precipice.

Long files of Indian girls are passing up and down these three trails all day long, carrying water from the springs on the plain below. There is no water on top of the mesa except that which is collected in the vast communal basin scooped in the sandstone. In time of drought this basin is as dry as a bone and all the water that is used by the Acomans is brought up from the plain below in the gaily decorated water jars that are balanced on the heads of the Acoma maidens.

The town itself, when once you have reached the top of the mesa, is something never to be forgotten. It is built after the style of most pueblo villages, all the houses being of adobe Some of them are three stories in height, the upper floors being reached by the ladders which are always leaning against the walls and which add a picturesque effect.

There are three long rows of buildings, with ten large communal houses The streets and alleys are narrow, and when looking down them one always gets the wonderful effect of distance, for the vision leaps right off the edge of the mesa and out on the plain, no matter which way you look. Some of the houses are built right on the edge of the cliff, and as nearly all the Acomans sleep on the roof, especially during the summer months, it is a wonder that some of them do not roll off or step off when walking in their sleep and dash themselves to pieces 300 feet below. When the stranger wakes up in the morning after his nap on the roof of one of these dwellings and finds himself on the verge of such a tremendous descent he is apt to plead for sleeping quarters that are less airy.

If you are fortunate enough to be in the good graces of the gobernador, whose lightest word is law, you will have no trouble about accommodations. You will be taken into an Acoma family and fed on tortillas, meat and syrup, and then everybody will sit around and smoke cigarettes and discuss you in Spanish, which is the language used more than the native Queres tongue.

The Acomans are inveterate cigarette smokers and manufacture a peculiar kind of cigarettes from tobacco and corn husks. There is always a bundle of corn husks available wherever you go, and these are used by the community. In fact all the Pueblo Indians, so called, though they belong to varying tribes, are communists, and the work of the individual goes to the general fund.

The people of Acoma have irrigated tracts of the plains below and are skillful farmers. They are moderately industrious, and in the morning a crier makes the round of the pueblo calling on all the inhabitants to rise and go forth to labor. Another crier announces the time for meals, and at bedtime the criers make their last rounds and all is quiet.

At night the herds of burros, goats and cows are driven in by the boys, who act as herders, and the sight is something never to be forgotten. The brilliant colors of a New Mexico sunset light up the pastoral scene like a huge painting. In fact, morning, noon or night Acoma will prove a delight to the painter, for there is a wonderful picture, no matter which way you look.

The burros and cows are brought to the summit of the mesa and turned into corrals, while the goats are corraled at the foot of the cliffs, where they will be safe from attack from wild beasts. The rude carts, plows and other farm machinery are stored among the hollows in the rocks at the bottom of the cliffs.

There is an old church at Acoma that has seen strenuous times. It is situated on the southeast corner of the mesa, apart from the town, and is 40 feet high and 150 feet long, and the adobe walls that compose it are seven feet thick. There is an abandoned convent near it. This church was built by the Spaniards, who conquered Acoma in the days of the Conquistadores.

Coronado stormed the mesa and captured the town in 1541. The people made a desperate defense, but it was not so easy to stop the mailed Spaniard from coming up the slopes as it would have been if the assailants had been the poorly armed Apaches or Navajos, the hereditary enemies of the Acomans. In 1589, after the people of Acoma had rebelled against Spanish rule, they were again defeated, this time by Juan de Onate, but ten years later rebelled again and murdered all the priests and partially destroyed the church. De Vargas reconquered the Acomas and rebuilt the church, and since then there has been no trouble.

A short distance away from the pueblo of Acoma is the wonderful Mesa Encantada, or Enchanted Mesa. This mesa is even larger than the one on which Acoma is located, and there is no trail to the top. Legend says that the one trail was destroyed by a lightning bolt hundreds of years ago. At that time it was said there was a town on the Enchanted Mesa.

Most of the inhabitants were away in the fields when the trail was destroyed, but a few were left on top of the mesa, where they starved, the legend says. The survivors moved to the other mesa and built the town of Acoma, and today the Enchanted Mesa is shunned by the Acomans as if evil spirits resided there.

JOSIAH WALTER PRESTIN.

### The Blue Rose Has Come.

That long-sought-for novelty, the blue rose, has been developed at last, and to the intense interest of the gardeners and flower lovers who visited the spring flower show of the Pennsylvania Horticultural society and the National Association of Gardeners at Horticultural hall recently. Three plants have been put on display, says the Philadelphia Record. The color obtained is the best blue that has ever been produced. It is on the violet shade, and the rose is a Rambler type. The tiny buds in heavy clusters are of bright red hue and show the blue only on blooming.

# CARING FOR FLOORS

**PART OF HOUSEWORK THAT REQUIRES ATTENTION.**

**Results, However, Are Well Worth the Expenditure of Time and Trouble—Hardwood Always the Best and Cheapest.**

Undoubtedly the best floors for the average house are hardwood, but to keep them in order requires work. Daily wiping and polishing is necessary, but the beauty resultant more than repays trouble, and such floors, unless they are abused, wear well. Their expensiveness differs according as to whether or not they are parquetry or plain, and for bedrooms and halls the latter is as good, except in very elegant houses. If drawing and living room floors can be finished with a border they are more effective, but even in these places design is not necessary. What is required is position of the boards—that is, close together and smooth, so they can be kept in the highest state of polish and cleanliness.

When a house that is occupied during the entire year is fitted with hardwood floors the problem of carpeting is solved, for in winter rugs can be used, while in the summer the boards may be left uncovered. The latter effect is cool and pretty.

For general durability there are coverings which conceal unfinished flooring and are more easily kept clean than carpeting. In these days of frequent moving, when housekeepers do not like to have carpets and mattings cut to fit rooms, rugs of endless variety and material come in prices which are equally varied. A Wilton or tapestry carpet, cut like a large rug and finished with a wide border, is practical in many different places, and a rough floor may have a border stained to make a suitable finish.

For summer, or to use all the year in bedrooms, mats of straw are extremely pretty. They come in strawcolored grounds with designs of various sizes. They wear well and are easily kept clean.

Nothing could be prettier than some of the hand-woven rag rugs. They have the merit of washing when soiled, and have sufficient warmth to be good for winter, and yet are light enough for summer wear. In many summer houses they are used exclusively for the upstairs rooms, and large ones are exceedingly nice in dining rooms. They can be woven to order and for dining rooms round ones showing a border of contrasting color are both effective and durable.

Rag carpeting also now comes by the yard, and by many persons is preferred to matting because of the way dust sifts through the latter. Rag stair carpeting is extremely pretty.

A floor covering which has cork in its composition has come into favor for bed and billiard rooms as well as dining rooms. It is rather thick and has some "give," and may be washed with soap and water as a bare floor. It is the common covering in many English nurseries, owing to its hygienic qualities. The stuff comes in only a few plain colors and may serve as a background for rugs.

### Grandmother's Pound Cake.

One cup of butter packed solid, 1 2-3 cups granulated sugar, one-half teaspoon mace, five unbeaten eggs, two cups sifted pastry flour Have a round pan greased and floured, the oven ready and ingredients measured, as the mixing must all be done by hand. Cream the butter, add the sugar and work until you do not see any of the egg yolk. Then another egg and so on until they are all used. Then mix in the flour and turn at once into a pan and bake slowly about an hour. The grain of the cake should be fine and close with not a suspicion of any toughness or heaviness, not porous like a cake made light with gas from soda and cream of tartar or by long beating, and yet soft, light and velvety. This texture is obtained by thorough blending of the butter and sugar and not overbeating the eggs.

### Bread and Butter Pudding.

Butter a pudding dish and in the bottom put a layer of jam or marmalade or stewed fruit of any kind. Put in some very thinly cut slices of bread and butter and a layer of fruit or marmalade. Add three tablespoons of sugar and repeat the layers till the dish is full. Beat up two eggs and add enough milk to them to thoroughly moisten the bread in the basin.

Cover with a well-buttered paper and place in a saucepan of boiling water. Boil for two or three hours with the lid closely on and the water during the time must never get off the boil. Before serving turn this pudding on to a hot dish.

### Variety in Breadstuffs.

Bread is the staff of life—that is generally admitted—but the staff has varying degrees of strength and the weakest is white flour bread. There should be variety in bread as in meat and vegetables and the careful housewife varies her white bread and biscuits with loaves of whole wheat or rye or graham and muffins of cornmeal and oatmeal. Once a week, at least, she places brown bread upon her table, not the soggy variety, but that which has been thoroughly steamed and cooked all through.

### Cheese and Pineapple Sandwiches.

Chop pineapple fine and drain off the juice. Spread bread thinly with cream cheese, sprinkle with the minced pineapple and press together. Cut in thin, slender strips.

# MORE THAN TWO THOUSAND PEOPLE SEE COOPER DAILY

During L. T. Cooper's recent stay in Boston, it is estimated that sixty-five thousand people talked with him and purchased his medicine. This is an average of over two thousand a day.

His success is so phenomenal as to cause universal comment both by the public and the press. There must be a reason for this. Here is the reason given in his own words by Mr. Cooper when interviewed on the subject. He said:

"The immense numbers of people who are calling on me here in Boston is not unusual. I have had the same experience for the past two years wherever I have gone. The reason is a simple one. It is because my medicine puts the stomach in good condition. This does not sound unusual, but it is in fact the key to health. The stomach is the very foundation of life. I attribute 90 per cent. of all sickness directly to the stomach.

"Neither animals nor men can remain well with a poor digestive apparatus. Few can be sick with a digestion in perfect condition. As a matter of fact, most men and women today are half-sick. It is because too much food and too little exercise have gradually forced the stomach into a half-sick condition. My medicine gets the stomach back where it was, and that is all that is necessary."

Among Boston people who are staunch believers in Mr. Cooper's theory, is Mr. Frank D. Brown, of 57 Bloomingdale street, Chelsea, Mass. He says:

"For five years I have sought relief for indigestion, stomach trouble and dyspepsia, spending nearly all my wages with doctors and obtaining no results. I had dull pains across my back, radiating to the shoulders. I had splitting headaches, which nothing seemed to cure. There was a gnawing and rumbling in my stomach and bowels. I was troubled with vertigo and dizziness, and at times almost overcome by drowsiness.

"I felt tired and worn out all the time, my sleep was not refreshing, and I would get up in the morning feeling as weary as when I went to bed. My appetite was variable—ravenous at times, then again nauseated at the sight of food. Sometimes my face was pale, at other times flushed. I was constipated and bilious, and had catarrhal affection in nose and throat, which caused me to hawk and spit a great deal, especially in the morning. I heard so much of the Cooper remedies that I decided to try them. After taking one bottle, a tapeworm 50 feet long passed from my system. I felt better almost immediately. All my troubles disappeared as if by magic, and my improvement was rapid. I now feel entirely well, and can honestly recommend Mr. Cooper's medicine to anyone who suffers as I did."

Cooper's New Discovery is sold by all druggists. If your druggist cannot supply you, we will forward you the name of a druggist in your city who will. Don't accept "something just as good."—The Cooper Medicine Co., Dayton, Ohio.

### Gentlemen Two.

Two street cleaning department men were having an altercation as they were driving their carts side by side along upper Broadway the other afternoon. One was red-faced and bulbous-nosed, the typical "rummy." The other was an adder-headed negro. Both looked utterly disreputable.

"Get out o' my way!" yelled the red-faced man. "Don't cher know enough to get outer der way when you see a gentleman?"

"I'm more of a gem'men than you, you big rum," retorted the negro. "Youall drives a garbage cart, an' I only picks up ashes."—New York Press.

### At or About This Time.

"Why do they call them ocean liners?" she asked.

"They're getting new terms every day," he said, without looking up from the sporting page. "I never heard it before, but an ocean liner is probably a hot one that isn't infielded well and rolls into a puddle or something."

She made no answer, but when he had gone to business she phoned the doctor about him.

### Of Another Feather.

"Did you folks want any aigs today?" called the grocery boy from the back steps.

"Yes," answered the cook who was busy kneading dough. "Just lay 'em under the refrigerator."

"I ain't Hen; I'm the other boy," shouted the lad from the grocery.—Chicago Post.