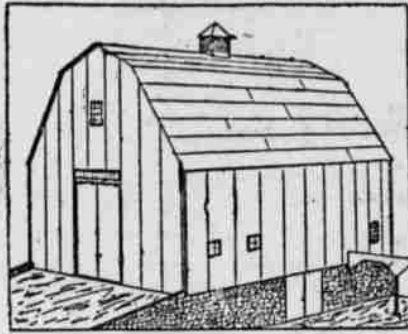


# FARM AND GARDEN

## Plank-Frame Barn.

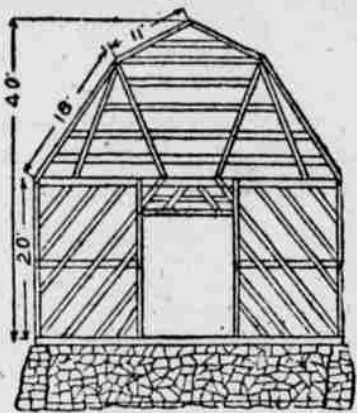
The evolution of the plank-frame barn is the natural result of the scarcity of timber for building. A considerable saving in lumber and ease of building is effected in the plank



PLANK-FRAME BARN.

frame. Less time and fewer men are required in the erection, and there is little or nothing sacrificed in strength since the excellent method of bracing enables them to stand the pressure of hay and grain within or strong winds without. A solid frame foundation may be used or the entire structure may be of plank. A good, firmly built stone and cement foundation is advisable. With this to rest the plank upon the frame is raised.

No sills are used and the upright studs take the place of posts. Two for each post are set on the foundation on each side. Between these the cross-plank is placed and spiked so that it will extend the width of the barn and tie the two sides together. The scantlings on each side of the barn floor, forming center posts, are then raised and spiked in place. Upon the outside of each upright is spiked a plank of the same size as and parallel with the first cross plank. This gives three 2x8 inches for cross sills through the center of the barn, each joint or hard being fixed in this way. End joints, using boards instead of plank on outside, give the bedwork of the barn. At the sides, between uprights in place of sill, a plank is firmly spiked; this holds the uprights firmly in place and prevents working sideways while the thoroughly spiked cross planks prevent all movement in other directions. Throughout



CROSS-SECTION SHOWING BRACING.

there should be no sparing of spike nails, as these are an essential feature to secure solidity.

## Reviving Old Fruit Trees.

A Maryland fruit grower has after several years of experimenting discovered a way to revive old fruit trees and keep them in bearing condition long after their supposed stage of usefulness has passed. As the cause of decay in a tree is its inability to carry the sap to all of its branches, heading the tree lessens the area to be traversed, the amount of top to be removed, varying according to the farmer's judgment. Bone-dust and ashes must then be administered as a fertilizer, the latter in the autumn and the other in the spring. This treatment will revive old trees, the cutting off the branches, tending to increase the number of fruit buds formed, and the ashes and bone-dust tending to stimulate the tree growth.

## Bean Poles.

As soon as the lima beans start up the pole, be sure to tie them up with raffia. If you are trying to use last year's white birch poles, you are going to have them rot off and fall down and cause no end of trouble. There is nothing better than cedar bean poles.

## Testing Soils.

All soils are formed from disintegrated rocks and organic matter. Of the latter, soils contain from 1 to more than 70 per cent; it is, however, only in bogs or beds of peat that the amount last named is ever present. The best wheat lands contain only from 4 to 6 per cent of organic matter; oats and rye will grow in soils containing only 1 or 2. The intelligent farmer should endeavor to ascertain what is wanting in the soil and supply it, remembering that he can make no possible mistake with barnyard manure.

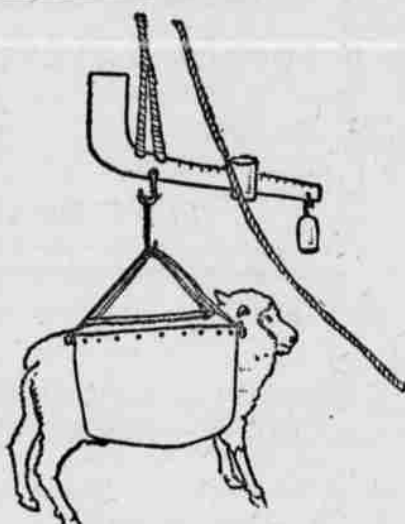
## Crop-Bound Fowls.

Every farmer is familiar with what is called "crop-bound" in fowls. The crop becomes packed with food that has ceased to pass into the gizzard of the bird. If the contents of the crop consist of grain only, the fowl should be kept from food for some days. In addition, the crop should be manipulated with the hands. This will tend to loosen the grain and start its passage into the gizzard.

Sometimes the condition is caused by feeding cut hay, dried alfalfa or clover, which have packed at the point where the food should pass out of the crop. One poultry raiser in cases of this kind pours sweet oil down the throat of the bird, and this loosens up the mass. In bad cases he opens the crop by cutting and removes the collected food, afterward sewing up the crop. He says that this does appear to cause the bird much pain. After this is done the bird should be fed only milk or other light food for some days.

## For Weighing Lambs.

Mr. John Spears, of British Columbia, sends to the Montreal Star a sketch of a contrivance for weighing live lambs. Farmers who have lambs to sell are in need of some such method of ascertaining their weight. It consists of an ordinary wheat sack, having two suitable sticks attached to top and bottom. A stout piece of rope is attached to the ends of each of these sticks. The whole forms a sling. By this method the lambs do not wriggle



HOW TO WEIGH THE LAMB.

and they can't get out when once in, and it is very quick, humane and effective.

## The Farm Garden.

No farmer can afford to do without a good garden. It is not to be expected that every one will be a fancy gardener, but every one should give sufficient attention to the subject so as to produce all staple vegetables earlier than can be produced in the field. It is not only essential to the health and proper enjoyment of the family, but it is actually a matter of profit. Could your whole farm be made as smooth, dry, rich and as well cultivated as a good garden, the increased product would pay a large per cent of profit upon the outlay. In the garden, or in a separate compartment, may be cultivated strawberries, raspberries, blackberries, currants, grapes and dwarf pears. They can all be had at a very small cost of money or labor, and will add immensely to the enjoyment of the household.

## Feeding Meat to Poultry.

That fowls and especially laying pullets and hens require a certain amount of animal food is admitted by every one who understands poultry, but it is an extremely nice point to know just how to feed them and not overdo it. There is much danger in feeding meat for, to be valuable and do the fowls no harm, it should be perfectly fresh and fed in small quantities. The local butcher is tempted to work off his putrid meat on the customers who want it for feeding fowls and such meat will mean trouble for the birds, bowel trouble of a serious nature.

## Collar and Saddle Galls.

Galls on horses are due to several causes, but frequently to saddles and harness that press unevenly on the body. The collar should fit the horse perfectly, and it cannot be too good. A loose girth to a saddle may allow it to shift. When a gall is noticed there is something wrong with the saddle or harness, and no remedy will be available until the cause of the gall is removed. An examination of the harness should be made whenever the horse is brought up from work at night, and it should be kept in good condition or the horse will suffer.

In a current California report it is asserted that a new process for preserving perishable fruit and food products has been discovered and tested with success in California. It is said that by the use of a vacuum fresh fruit may be kept from spoiling, and the promoters of the new process say that by this means fresh fruit can be kept perfectly fresh for three months. Decay is said to be warded off in the most remarkable manner. It is claimed that this new vacuum process will revolutionize the transportation of fruits and vegetables from California.

# THE HOUSEHOLD

## Useful to Housewife.

Handling boiling clothes with an ordinary pole was not considered an up-to-date method by an Iowa inventor. He therefore evolved the apparatus shown here—a pair of forceps so shaped as to firmly and positively grip the clothes so that they can be handled without tearing. It resembles very much a pair of scissors, having two

for hot clothes. Levers intermediately pivoted. One end of the levers is shaped to form a handle and the other into spoons. These spoons are hollowed out to form a recess, the back being slotted, which reduces the weight and also affords a firm grip. Between the handles is a spring. It is the intention of the inventor to manufacture these forceps of aluminum.

## Spiced Crabapples.

Prepare the apples as for preserves. Make a syrup of one pint of vinegar to three and a half pints of sugar. Pour over the fruit and let stand overnight. Boil the fruit, a little at a time, in the syrup till tender. Pack the fruit in jars. Add mixed spices to the vinegar to suit the taste, boil down to enough to just cover the fruit, pour over it and seal. Crabapples can be carefully gathered and stored away till the throng of other fruits is over. In fact, the above recipes are those used with wild crabapples, which were formerly buried in the ground to ripen; but these formulas can be used successfully with the cultivated varieties.

## Deviled Eggs.

Boll as many eggs as are required for ten minutes, put them in cold water, and when cold shell them. Cut in halves lengthwise, remove the yolks, and rub them to a smooth paste with a tablespoonful of clovepenny and six eggs, a dessertspoonful of salad oil, salt and cayenne to taste, a few drops of onion juice, and half a teaspoonful of French mustard. Cut a tiny slice off the bottom of each half of the white so that it will stand on the dish, fill with the prepared mixture, and serve, garnishing with watercress.

## Crabapple Pickles.

Remove the stems and flowers, but leave the fruit whole; wipe with a damp cloth and simmer very gently until tender but not broken; drain in a colander; make sufficient syrup to cover the fruit in the proportion of one pint of vinegar to two pounds of granulated sugar. Use only the best cider vinegar. Put the fruit in the syrup and keep at the boiling point, but not boiling, for ten minutes, then seal boiling hot in self-sealers or jars. These may be spiced if preferred.

## Swiss Tartlets.

Take one egg, its weight in stale cake crumbs and fresh butter, a tablespoonful of sugar, and a little flavoring. Beat up the butter to a cream with the sugar, add the cake crumbs and eggs, then flavoring, mixing all together. Line some patty pans with puff paste, and then a layer of apricot jam and a thick layer of the mixture. Bake about a quarter of an hour in a sharp oven.

## Strawberry Ice Cream.

Put a pint of cream in a saucepan with half a pound of sugar, and set over the fire to heat. When the sugar is dissolved stand aside to cool; add a pint of cream. Mash a quart and a half of ripe strawberries with three-quarters of a pound of sugar and let stand one hour, then strain the juice off, pour into the cream, mix well, turn into a freezer and freeze.

## Almond Cakes.

Rub two ounces of butter into five ounces flour, five ounces powdered lump sugar, beat an egg with half the sugar, then put it to the other ingredients. Add one ounce blanched almonds and a little almond flavor, roll them in your hand to the size of a nutmeg, and sprinkle with fine lump sugar. They should be lightly baked.

## To Choose Apples.

In choosing apples be guided by the weight; the heaviest are the best, and those should always be selected which, on being pressed by the thumb, yield to it with a slight cracking noise. With large apples waste is saved in peeling and coring them.

## Why Not Try It?

Place an apple in the bread and cake boxes to keep bread and cake moist. Add one or two tablespoons of sugar to strong turnips when cooking. Try rubbing tough meat with a cut lemon to make it tender. Sprinkle clothes with a whisk broom and hot water.

## A WONDERFUL GROWTH.

### Curious Details of Human Hair as Revealed by Microscope.

A study of the hair will afford novelty to many. It is so common a substance, and exhibits such a meager information to the unaided vision, that few people suspect it to be worthy of prolonged attention. Yet each hair of the human body is a wonderful growth, full of curious details.

The hairs of animals differ so considerably from the other, that a practiced microscopist can determine, upon viewing a single hair handed to him for inspection, from what creature it had been plucked. The hair of the human specimen sprouts from a tiny pit formed in the skin. Its so-called root is really a greasy bulb, occupying the cavity referred to, like an egg-shaped ball of fat, from which arises a tube with a sharp and well-defined shell, as it were, terminating at its utmost extremity in a point. This tube is filled for the greater part of its length with a pulpy matter, which may be compared with pith in plant stalks, although, scientifically regarded, it is of a totally different nature. The varied color of hair is due to interior deposits in the form of invisible grains of pigment, or natural paint, and it is through the loss of this matter that hair becomes gray, in which case the hair may be likened to a semi-transparent, glassy tube.

A very marvelous circumstance in connection with human hair lies in the fact that its outer surface is not smooth, as generally supposed. It is actually completely covered with incredibly minute scales in a similar manner to the wings of butterflies and the bodies of fishes—that is to say, these invisible slabs overlap one another precisely as do the tiles of a house. This statement may be verified readily by detaching a hair from a lady's head—by preference—and while holding the opposite ends in both hands, so that it becomes stretched and taut, dragging it across the tender surface of one's lips. When drawn in the direction in which the scales lie the hair feels quite smooth; but if moved in the opposite direction a distinctly noticeable rasping is felt as the edges of the scales hitch against the flesh.

## Scores on Insurance Men.

"Insurance adjusters are about as clever and smooth as any class of men to be found," said an old-time merchant the other day. "Their logic is always oiled and ready to run without the least friction. Once, however, one of the tribe got slipped up on. His logic got sidetracked on a derailing switch. I was running a country store which was destroyed by fire. The adjuster came along and then came the battle to get a settlement satisfactory to both sides. We were going over the items burned in the basement. 'Now, what else was there?' asked the adjuster. 'There were twenty bushels of potatoes which I paid 25 cents a bushel for, but at the time they were worth 80 cents a bushel.'

"Hold on," said the insurance man. 'We're only paying you for what you lost. No inflated values go. They cost you \$5. What else?' "There were four barrels of apples which had rotted on my hands and I was going to throw out that day. The fire prevented it. They weren't worth a cent, but they cost me \$3 a barrel.' "The adjuster saw he was caught. Without batting an eye, he wrote, 'Four barrels of apples at \$3 a barrel, \$12. What else?'—Kansas City Times.

## Dogs and Men.

"The average dog is better than the average man," says the Greenleaf Sentinel. "Do a dog a favor and he will never forget it. He will be your lifelong friend thereafter. This does not apply to one dog or two dogs, but to all dogs. Do a man a favor and he may remember it and be your lifelong friend thereafter. Some will go back on you and do you dirt in five minutes after you have done them a favor. Some are only your friends so long as you are in shape to do them favors. Get into trouble and many will verbally sympathize with you, but only a few will show their friendship in a substantial manner. If a man is not a true friend, there is very little real nobility in his makeup. 'The more we see of some men, the more we think of dogs,' as Madame de Stael said."—Kansas City Journal.

## An Advantage of the System.

"Julia," said the mormon husband to his better half, "I proposed to the cook the other day." "Oh, John, how sweet and thoughtful of you!" she exclaimed, delightfully. "Now, we can keep her in the family without raising her wages."—Baltimore American.

## Condolences.

Miss Bragitt—I get so much attention that positively sometimes I feel that social duty is a perfect elephant on my hands. Miss Sharp—At least, dear, it's a comfort to know the poor beast has plenty of room.—Baltimore American. Some people are so unfortunate that their troubles make people laugh instead of cry.

## OUR ARMY IN GRAY.

### UNCLE SAM'S LETTER CARRIER'S NUMBER 22,000.

They Work in 1,200 Cities and Towns—Present System Due to Sunset Cox's Efforts—Carrying the Mail in Skyscrapers.

The most rapidly increasing army the United States government has is an army in gray. It started with hardly a handful of men over forty years ago. Its ranks have grown steadily, never thinning in times of profound peace. Now these men in gray are quite a third as many as the government's regular military establishment on land.

They are the letter carriers in almost 1,200 cities and large towns of the United States. Their number is now approximately 22,000. To be exact, according to the last official count, they were 21,778. They have doubled numerically in the last fifteen years. In the very last year—which in postoffice parlance means the last fiscal year—they increased almost 5 per cent, which is a very large increase. Could they all be marshalled on Boston Common from their 1,200 towns and cities they would be as imposing a force, perhaps, as ever assembled on that historic ground.

"Sunset" Cox, lawyer, editor and legislator, a graduate of Brown University, who served several terms in Congress, first from Ohio and then from New York, was known as the father of the carrier service. It is, in considerable part, due to his efforts that the free delivery of mail was developed. It was during the Fifty-third Congress, covering the latter half of the first Cleveland administration, that the letter carrier service began its modern growth, jumping 10.3 per cent in one year and 30.1 per cent the following year, till it comprised 8,257 men in 401 towns and cities on June 30, 1889, just after Benjamin Harrison had entered the White House.

But while those proportions seemed large for those days, they were small as compared with the present day. For the fiscal year that ended June 30, 1889, the carrier service was costing the treasury \$6,957,042. The cost has grown by leaps and bounds till last year it was \$20,919,078. The cost per carrier then was \$843; last year it was \$961.

Ex-Representative Eugene F. Loud, of California, who was long chairman of the House Committee on Postoffices and Post Roads, told recently how he remembered the penny post in Boston when a young man before the Civil War. Individuals delivered letters for a penny each, the recipients paying for the service. There was a similar service elsewhere. It led eventually to the Postoffice Department taking over the work. At first postmasters hired the carriers and made the arrangements for their salary. The present civil service examinations for admission, and the grading of salaries and the prescribing of the strict eight-hour law, for which Representative Cox was chiefly responsible, and other latter-day laws and regulations for the discipline and maintenance of the big force were unknown.

It is a frequent saying that postoffice receipts form a good gauge of local prosperity. The gross receipts of free delivery offices have been climbing very steadily. With few exceptions, the total has been larger every year, which means that the carriers have had more mail matter to collect and also to deliver. The gross receipts of \$109,801,335 in the 1,114 free delivery offices last year were by far the largest ever known. The number of carriers was increased by 1,020 and the number of free delivery offices that year increased by 44.

The estimated population of the cities and towns having free delivery was 36,402,353, almost half of the entire population of the United States. Each of these 21,778 carriers served an average of 1,675 people, who had their mail put down at the door from two to nine times every weekday, according as they received it in a small or large city and in the business or residence section.

The consolidation of service and the taking of towns adjacent to large centers of population have helped swell the army of carriers in gray to a degree. Thus the area covered by the carriers from a given office is generally larger now than it was ten years ago.

The largest area is that in Chicago, where the carriers, numbering 1,619, traverse 190 square miles. Before Belmont and Waverly were added, the free delivery area in Boston was 95 square miles, covered by 1,022 carriers, almost a twentieth of the entire free delivery carrier force. The addition of Belmont and Waverly gives the free delivery district of Boston, comprising 38 stations, an area of approximately 100 square miles. New York City's 1,983 letter carriers cover a district of only 32.35 square miles.