

**COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF OKLAHOMA**

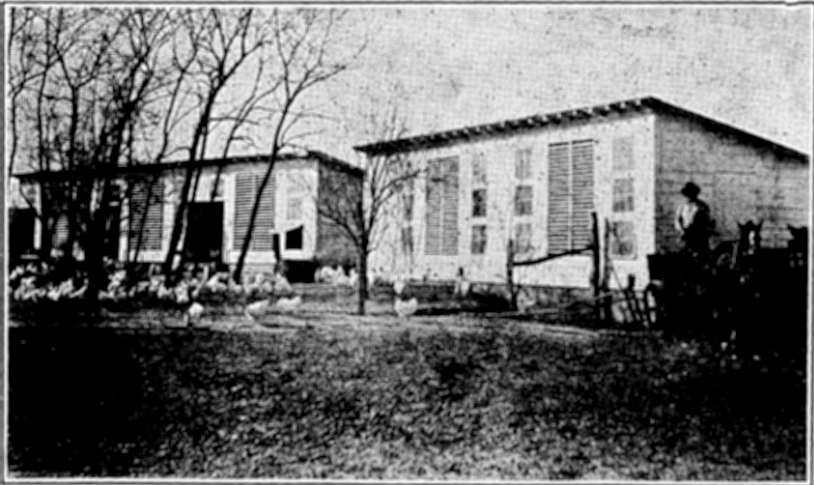
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**POULTRY EQUIPMENT
FOR
FOUR-H POULTRY CLUB
MEMBERS**



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INTRODUCTION

With the modern hen has come a greater demand for modern poultry equipment. Poultrymen are emphasizing breeding improvement to produce flocks with higher laying capacity and greater freedom from disease. They are also giving the flocks more consideration concerning their living quarters.

Poultry equipment should be designed for efficiency, convenience, simplicity and economy in construction. It should meet the needs of the birds in every way possible, and should be convenient to the caretaker.

The equipment shown and described in this pamphlet is intended to help the farmer or 4-H poultry club member to build satisfactory poultry equipment at an economical cost.

PORTABLE BROODER HOUSE

The 10x12-foot Oklahoma shed-roof type portable brooder house (Fig. 1) is rapidly gaining recognition due to the economy in construction and convenience in brooding chicks.

Since the value of clean soil is so great in the production of chicks the Oklahoma house is built on skids in order that it can be moved to clean soil from time to time.

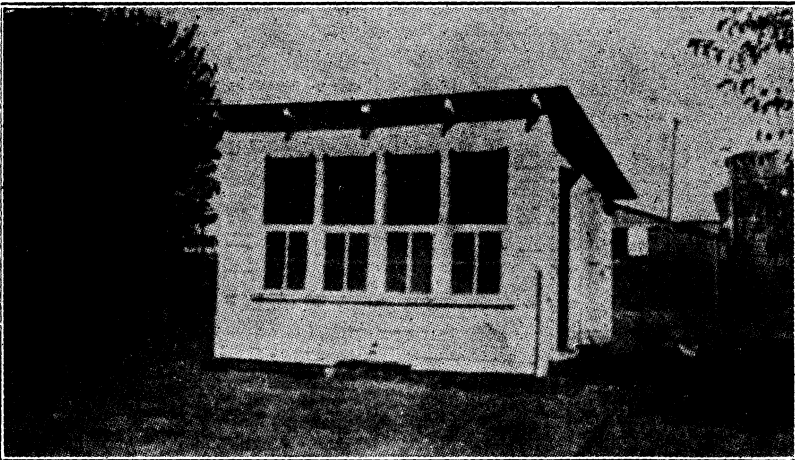


Fig. 1—Portable brooder house

Front height of the portable house is 8 feet, back height 6 feet. It is 12 feet long and 10 feet deep and has a total of 120 square feet floor space. Boards and battens are recommended in the construction of poultry houses; however, drop siding is used extensively.

Floors are built of wood and the roof is made of shingles on solid sheathing. West walls are solid, north walls have two 2x2-foot windows 24 inches from the floor, and there is a standard size door in the east end. South front has four full window spaces with bottom sash made to slide up or down, and muslin cloth on frames for the upper half of the window spaces. The muslin is for the purpose of permitting the air to pass into the house without causing a draft.

The brooder house should be well braced to prevent damage when moving. Skids can be made of 4x6-inch stringers, extending about 12 inches past each end of the house.

MASH HOPPER FOR CHICKS

The hopper shown in Fig. 2 is made of 1-inch material, is 3 feet long, 3 inches deep, and equipped with a reel and stand. Hopper box is made by nailing 1x4-inch sides and ends around a 1x6-inch bottom. This is intended for chicks one week of age or older. For younger chicks use a shallow box. One-half inch hopper space should be allowed for each chick. When the chicks are four weeks old the hopper space should be doubled.

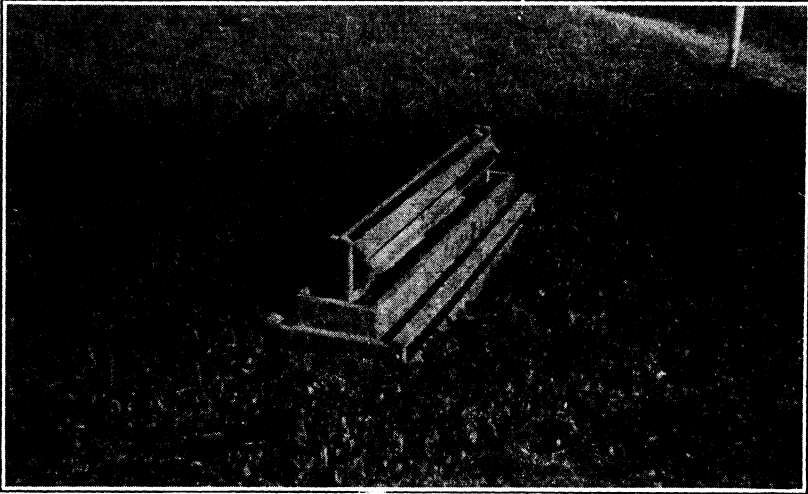


Fig. 2—Chick mash hopper

The reel is made of four laths 33½ inches long; and ends are 4 inches square. The supports for the reel are 7 inches high, and placed inside the mash box. By making notches in the supports, and using 16 penny nails as pivots, the height of the reel can be adjusted. The stand is 1 foot wide, 4 inches high, and 36 inches long. Laths are nailed on the edge of the stand for a runway.

SANITARY SUNPORCH

On farms where the brooder house cannot be moved to clean ground frequently, sanitary sunporches (Fig. 3) are serving an important part in the brooding of the chicks. Many healthy chicks are raised yearly by means of sanitary sunporches where chicks could not be raised before on account of contaminated soil.

The wire floor permits the droppings to fall through onto the ground, thus preventing the chicks from scratching in the droppings and picking up worm eggs and disease organisms.

The sunporch is also a useful piece of equipment to be used in outbreaks of coccidiosis. Another desirable feature is that the chicks get direct sunlight, thus receiving the beneficial effects of the ultra-violet rays, and at the same time can be kept off contaminated soil. Chicks may be kept in sunporches until they are 10 weeks old, or older. Sunporches are generally placed against the south side of the brooder house. It is not necessary to use wire on the end of the porch that is placed next to the house if it can be fitted closely enough to prevent the chicks escaping.

The dimensions of the sunporch should be about the same as the floor

of the brooder house. It is of frame construction. The four corner posts are made of 2x4-inch material, and the frame work for the floor may be made of 1x4-inch material set on edge and spaced two feet apart. The floor should be from six to ten inches above the ground, and is covered with $\frac{3}{8}$ -inch hardware cloth. The sides extend two feet above the floor. Ordinary one-inch mesh poultry netting is used to cover the sides, ends and top. A hinged panel on the top two feet wide is convenient, for there are times when access to the inside of the sunporch is desirable.

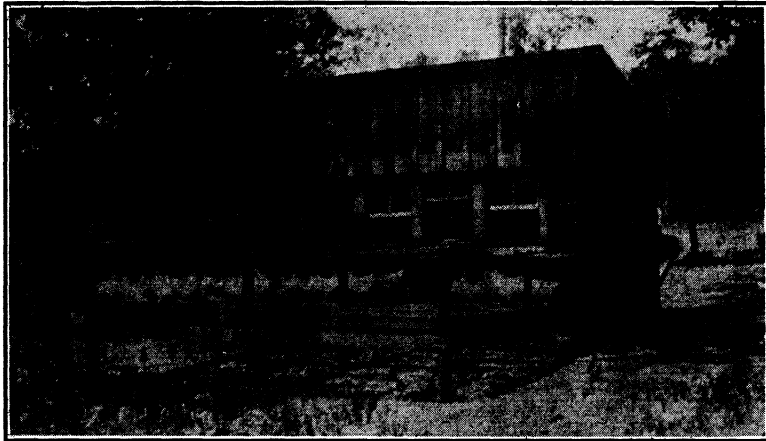


Fig. 3—Sanitary sunporch

WATERING EQUIPMENT

A plentiful supply of clean, fresh water is a necessity for profitable poultry production. Water is essential for digestion, and when it is lacking the birds suffer. The egg contains a large percentage of water and production is greatly decreased when laying stock is forced to go for long periods of time without water.

Water should be kept before the birds at all times. A hen never drinks much at one time, but makes many trips to the fountain during the day. In summer, it is well to fill the buckets or fountains two or three times daily with fresh, clean water. In winter the chill should be broken so that the birds will drink freely.

The watering equipment should be easily cleaned and disinfected. This is one piece of equipment that should be kept sanitary, for certain diseases may be rapidly spread by means of a contaminated water pail. These utensils need not be costly, but should be substantial and adequate in size and number. A heavy galvanized 12-quart water bucket is satisfactory for hens. Smaller vessels or crocks are used for chicks. A heavy wire guard should be fitted over the top of shallow vessels to prevent the birds getting their feet in the water.

An inexpensive stand (Fig. 4) can be used for the purpose of holding the water container off the floor to prevent the birds scratching litter and droppings into it.

A good platform can be built 36 inches square and 24 inches from the ground, with legs made of 2x4-inch material. Four pieces 1x6-inch material, 36 inches long are used for end and side braces. Twelve pieces 1x2-inch material, 36 inches long are used to make the platform. About one and

one-fourth inch space is left between each strip on the floor. In the center a hole is cut the size of the bottom of an ordinary 12-quart bucket. Under the bottom, 2 pieces of 2x4-inch material are nailed across the braces for the bucket to sit on.

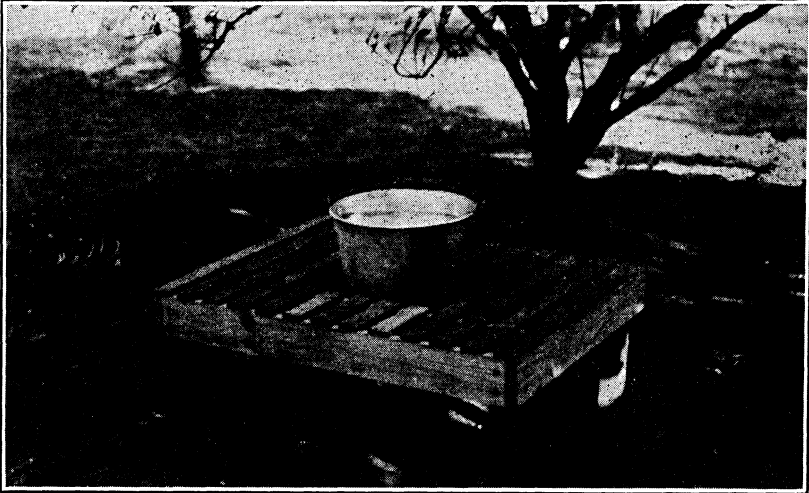


Fig 4—Water bucket and water stand

WATER VESSEL NO. 2

An ordinary two gallon crock with wire collar and guard rods set three inches apart made to fit and welded is a good watering utensil. The rack

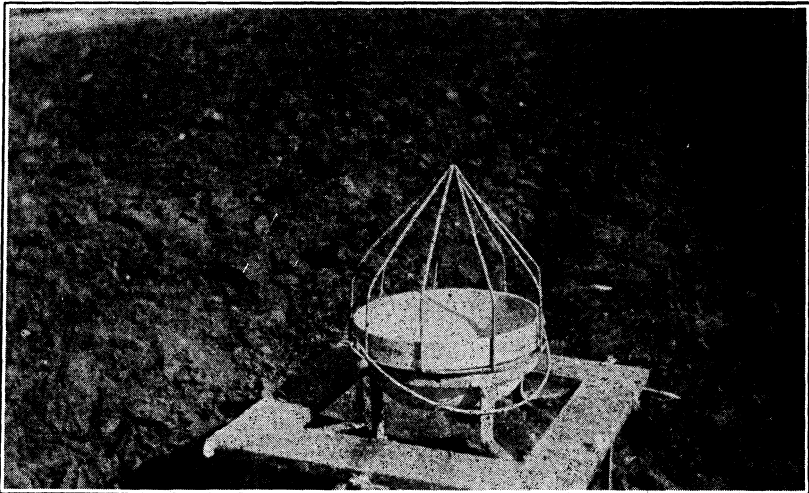


Fig. 5—An inexpensive frame and crock for watering purposes

that holds the crock is made from strips of strapiron. The frame and crock (Fig. 5) is set on another frame made of 1x4-inch material set on legs 18 inches from the ground.

MASH HOPPER FOR HENS

An adequate mash hopper is important in the poultry feeding program. A mash hopper (Fig. 6) should be simple and economical in construction, should have not less than 1½ inches of feeding space for each hen, should have a reel or guard to prevent hens from getting into the feed with their feet, and should be built 18 to 24 inches above the ground. Rollers must be properly spaced to prevent comb injury.

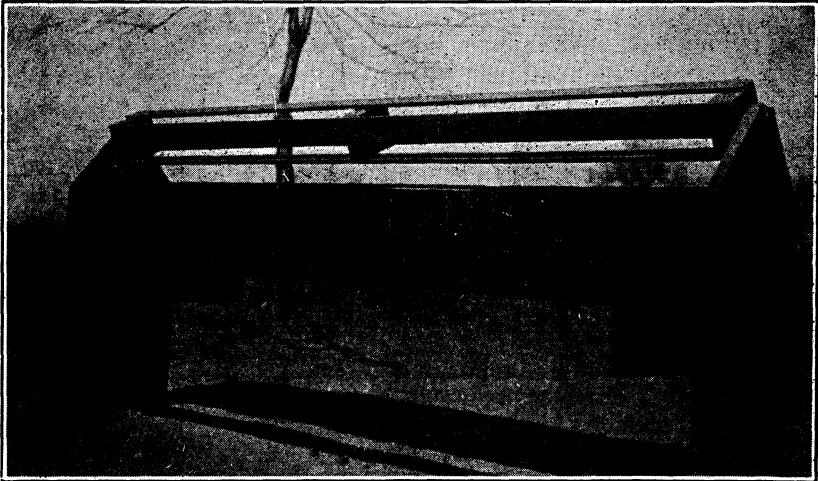


Fig. 6—A reel mash hopper for hens

The end supports of the reel hoppers are 26 inches high and 12 inches wide. Hopper box is 5 feet long, 1 foot wide, and 6 inches deep. Bottom of hopper box is 18 inches from the floor.

Two 1x4-inch pieces 24 inches long are nailed to the end supports flush with the bottom of the hopper box and form a support for the two 1x4-inch pieces that are used for the birds to stand on while eating.

The reel is made by using three pieces of 1-inch material 4 inches square, with four laths, one nailed to each side of the blocks.

CATCHING COOP

A catching coop (Fig. 7) is a convenience when the flock is to be culled. It can also be used in transferring birds from one house to another, in weighing birds, and as a market crate. When substantially made, it will last many years.

The coop should be two feet wide, two feet high, and four feet long. The floor should be made of shiplap. The frame work may be made of 1x4's. A handle on each end of the coop is essential and very easily made. The sides and one end may be covered with ½-inch hardware cloth or slatted. The top should be slatted with 1x2-inch material. A slatted hinged door in the top, and a sliding door in the end of the coop are essential. In culling or catching birds, one end of the coop can be placed before the door of the poultry house, and the birds easily driven into it. The door

in the top allows the birds to be taken out one by one without the necessity of moving the coop.

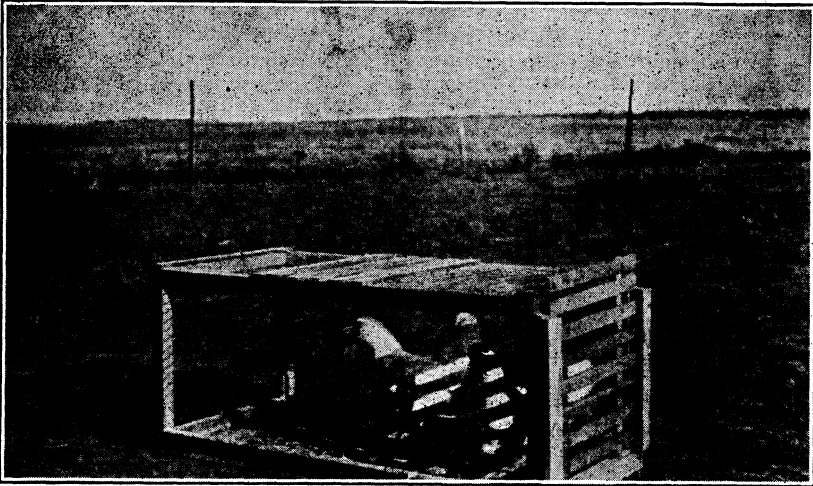


Fig. 7—A practical catching coop, useful in culling, leg-banding and grading the flock

CATCHING HOOK

A very useful catching hook can be made of No. 8 wire. Hooks that are too long are unhandy to use. One about five feet in length serves most purposes. A short loop with a twist or two of the wire at one end makes a very convenient handle, giving a firm grip on the hook. The other end of

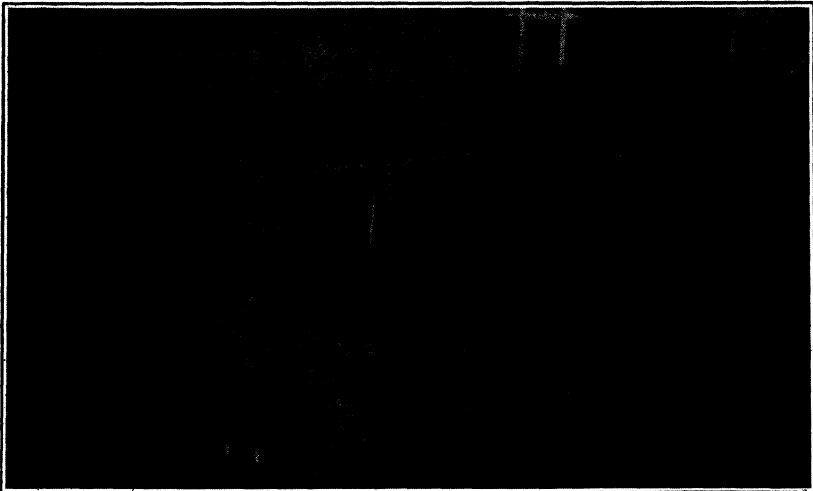


Fig. 8—Catching hook

the wire should be bent into a modified V-shaped loop about three inches in length, so that it will slip securely over the shank of a bird.

Another type of hook (Fig. 8) found in use on many farms is made very much like the all-wire hook, except that the handle is of a two- or three-foot length of wood one inch in diameter. An ordinary broom handle serves this purpose very well. The wire end may be easily stapled to the wooden handle.

Birds are often injured in being caught and there is danger of breaking their legs when heavy hooks are used, or when handled roughly. Extreme care should always be used in catching birds.

DROPPINGS BOARDS AND PERCHES

A droppings board (Fig. 9) aids materially in keeping the house clean, and should be built in every house. Poultry wire can be tacked under the perches to prevent the birds getting in the droppings. The perches should be level to prevent crowding. In houses where the perches are slanted, the birds seek the top perch, and as a result they crowd, are uncomfortable, and become overheated, which is disastrous.

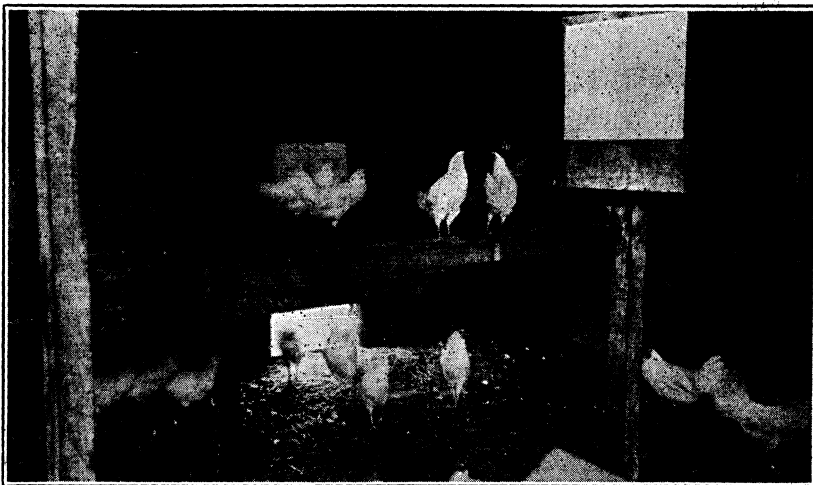


Fig. 9—Droppings board and perches are essential for the comfort and health of the flock

The droppings board is built against the north wall and extends the full length of the house. It should be 30 inches above the floor and extend six feet from the back wall for four perches. Shiplap is generally used for this and the boards are laid to run from front to back of the droppings board.

The perches are made of 2x4-inch material, are built 6 inches above the droppings board, and cut in convenient length sections, and run lengthwise of the house. Perches should be spaced 12 inches from the back wall and 16 inches from center to center. From 6 to 8 inches of perch pole space should be allowed for each bird.

NESTS

One nest is needed for five hens. Nests (Fig. 10) should be built 24 inches to 30 inches from the floor. They should be 12 inches deep, 12 inches high, and 12 inches wide, and made of light but substantial material. Nests should be placed against the wall, and not under droppings board. Wire bottoms are satisfactory if preferred.

Steps made of 1x4-inch material should be placed level with each section of nests. The bottom step should extend out about 12 inches, while the upper step should extend out 8 inches from nests.

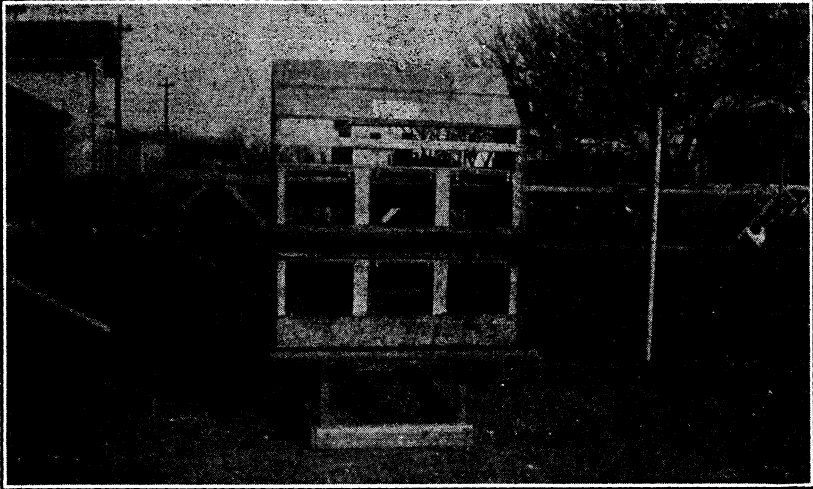


Fig. 10—One nest is needed for five hens

BROOD COOP

A broody coop should be on every farm where poultry is raised. Broody hens should be placed in a coop that has a circulation of air through it, and a slanted bottom. They should be fed and watered the same as other

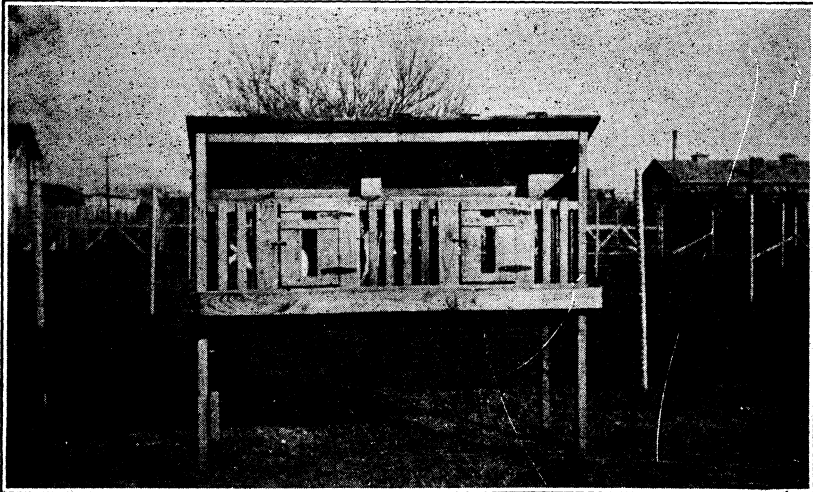


Fig. 11—Home-made broody coop

hens. Under average conditions a broody coop two feet wide and four feet long is large enough.

The coop has four pieces of 2x4-inch material for legs. The front legs are 5 feet in length, and the back legs are 4 feet in length. The top, sides, ends, and bottom are made of lath, with width of lath space between each lath. The top is covered with 1x12-inch material. A feed box 4 inches deep and 6 inches wide is built on the front to allow space for mash and grain. Two doors 10x12-inches hinged, and with a fastener is necessary for placing hens in or taking them out of the coop.

SHIPPING COOP

An exhibition shipping coop should be constructed of light but substantial material. Material of $\frac{1}{4}$ to $\frac{1}{2}$ -inch thickness is very desirable. It must be well braced at corners.

The standard exhibition shipping coop (Fig. 12) for a trio of birds is 22 inches square. That is; the height, depth, and width is 22 inches. The bottom, ends and sides are solid except hand holes near the top. The top is slatted with $1\frac{1}{2}$ -inch slats with 1-inch space between slats.

A door in the top 10x12 inches, well braced and hinged is required. Coops should be painted and carry owner's name, and address on one side in $\frac{1}{2}$ -inch letters.

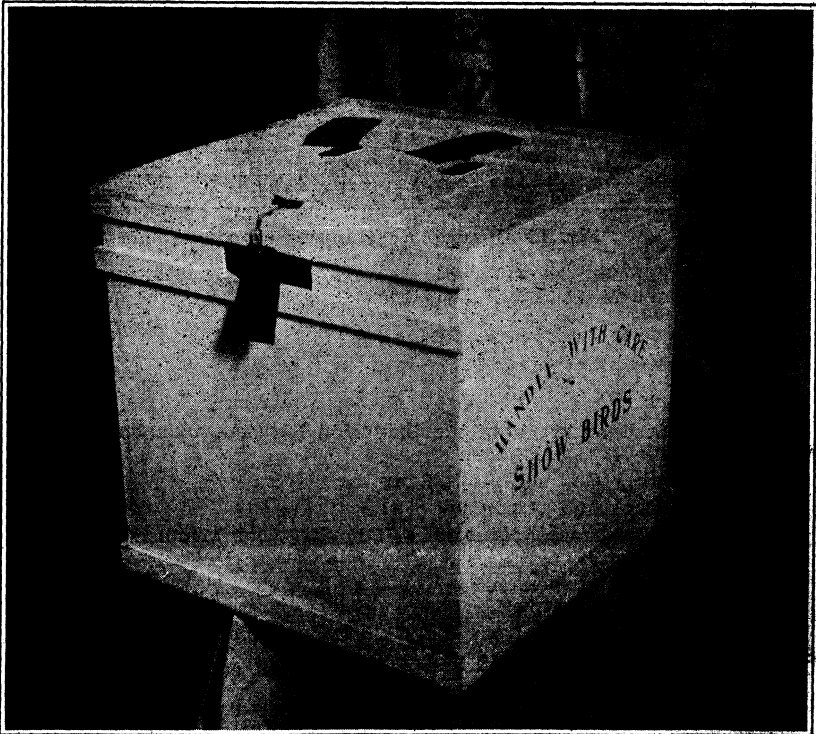


Fig. 12—Standard shipping coop of proper size and correctly built

Shipping coops lacking in size prove very uncomfortable and dangerous to birds when in transit to and from poultry shows. In some instances birds have been killed or permanently injured as a result of the use of wrong kind of shipping coops.

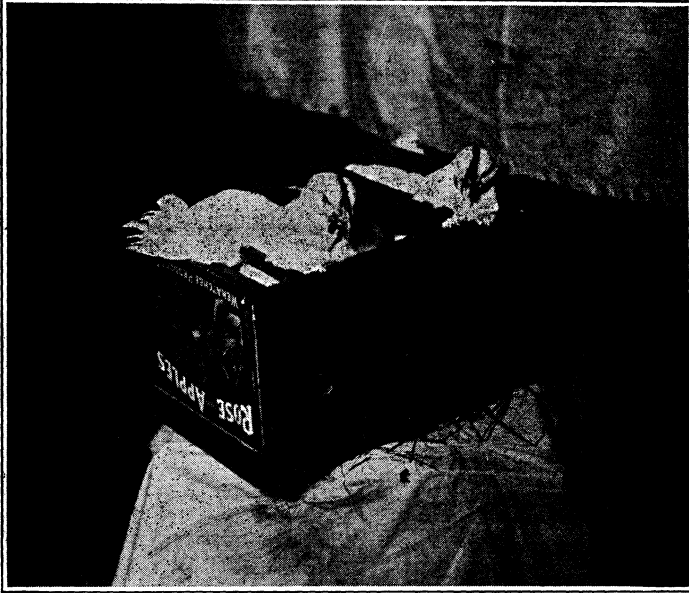


Fig. 13—Inadequate shipping coop

Poultry equipment shown in Figures 2, 6, 8, 9, 10, 11, is in use on the Oklahoma A. and M. College Poultry Farm.

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