Oregon Agricultural College

Experiment Station
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Department of
Poultry Husbandry

1. A Colony House
2. A Trapnest

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PURPOSE OF HOUSING FOWLS.—The purpose of housing fowls is to increase productiveness. A little shelter from the cold winds and storms will add to the comfort of the fowls and therefore to the egg yield. A cold wave means a check to egg yield, and the reason is probably because the change means a sudden demand for increased fuel or food to keep up the heat of the body, and the food that has been going into the making of eggs will be drawn upon for that purpose. It is the food that furnishes the heat.

Fowls will maintain rugged health roosting in the trees, but sudden and frequent changes in the weather interfere with egg production. Fowls roosting in some of the so-called modern houses are no better off than in the trees, not so well off. The temperature and moisture conditions are often worse than in the trees and the health of the fowls is not as good.

WHY MANY HOUSES FAIL.—The principal reason why so many poultry houses fail to meet the requirements for egg production is that the variations in night and day temperature are too great. The attempt has been, in many cases, to pro-
vide a warm house, with double walls and double windows, and
the simple fact is that such a house will never be warm or dry
without artificial heat; but artificial heat up to date has not
been demonstrated to be practicable. The glass window house,
unless otherwise well ventilated, will be damp and cold because
of the great variation between night and day temperature.

REQUIREMENTS.—The main requirements of a good
poultry house are: Good ventilation, for fowls require consider-
ably more fresh air than other farm animals; second, it should
afford protection from cold winds and storms. Fowls object
to cold winds. Unless the hen is provided with shelter where
she can scratch and exercise she won't be productive. Activity
is the life of the hen.

VENTILATION.—The ventilation can best be furnished by
leaving one end of the house open or covered with burlap or
canvas, using no glass windows unless necessary for light. The
idea of building a warm house should be abandoned. It is
shelter that is needed. The house should be built in such a
way that the fowls will not roost near the open front where
they would be exposed to winds; nor should it face the pre-
vailing winds. A long house is more expensive to build, for a
given capacity, than one more nearly square. A long, narrow
house is also a cold house, having more exposed surface for a
given capacity than a square house.

SIZE OF HOUSE.—The size of house necessary for a cer-
tain flock will vary in different sections. Where there is little
or no snow and where the fowls can be outdoors every day in
the year, two square feet of floor space per fowl will be ample.
Where the climate is such that the fowls will seek shelter part
of the year, rather than go outdoors on the range, considerably
more space should be provided, say four to five square feet
per fowl. The idea should be not to crowd them so much that
their activity will be interfered with. Whether the shelter is
provided by enlarging the house or providing cheap scratching
sheds is immaterial. Two square feet per fowl, or even less,
is ample for roosting quarters.

THE COLONY SYSTEM.—Poultry-keeping is most suc-
cessful where the colony system prevails. The colony system
means the housing of fowls in small houses, preferably port-
able, where the fowls have free range. The chief advantage is
that the fowls are more active or busier than when confined
in yards; second, there is less danger from outbreaks of dis-
ease, as it is possible to keep the house on clean ground by
moving them occasionally; and third, they require less feeding
and care, as they pick up considerable food on the range.
Another advantage of this system is that the fowls will rid the farm of many injurious insects, such as grasshoppers. Then, the colony system will fit in with crop rotations and for part of the year the fowls will live on the stubble fields.

A good size to build a colony house is 7x12. A team of horses will pull a house of this size, and it will accommodate 30 to 40 fowls. In very cold sections I would advise the curtain-front, using eight-ounce duck, covering one end entirely with this. In most sections a plain open front of poultry netting will do, the wire being put on as a protection against wild animals.

**CONSTRUCTION OF THE COLONY HOUSE.**—The runners are made of 3”x6”x14’ rough material and act as side sills for the house. They should be beveled at ends in order to slide easily.

The cross sills are 3”x4”x7’. They are set 2” into the runners, and 12” from the ends, and fastened with %" bolts.

When the siding is put on vertically, there is no studding used.

The plates are 2”x3”x12’, halved at each end.

To the plates are nailed the 1”x12”x5’ side boards, and these are battened with 1”x3”. The siding is nailed flush with the top of plate and laps 3” on runners.

The roof is 1-3-pitch, or 2’ 4” at peak from top line of plates.

There are five pair of rafters, cut with a 1” plum cut at plate.

The roof boards are 1”x3” material, set 3” apart.

The roof is shingled and laid 5” to the weather.

The front is covered with 1” mesh wire.

The cornice is made of 1”x8” boards and projects 5” outside of walls. The frieze board, 1”x4”, is nailed up tight against the cornice.

The door is 2’x6’ and made from 1”x3” material.

The nest platform is two feet from the ground. It is nailed to a cleat on the side of the house and braced from top of runner. The platform is 22”x5’.
The nests are made of 5-gallon oil cans, the top and part of front being cut out; 2" is left of front to hold in nest material, and a small strip at top which acts as a brace.

Over the nests is fitted a sloping top, which keeps the chickens from standing on nests, and helps to darken the nest.

The droppings platform is made of 1"x8" ship-lap, is 2' 6" from floor in front and 2' 9" in rear. The slope permits the board to be cleaned more readily. For the same reason the boards should be put on from front to rear.

The perches are made of 2"x3" material, set flat. They should also be level and about 12" from droppings board in front. The roosts are set 18" apart.

LUMBER BILL.—Sills (runners), 2 pieces 3"x6"x14', rough. Cross pieces, 1 piece 3"x4"x14', rough. Plates, rafters, roosts, 134 lineal feet 2"x3", sized. Siding, 13 pieces 1"x12"x10', 4 pieces, 1"x12"x14', finish No. 2. Cornice, 54 lineal feet 1"x8", finish No. 2. Base, 52 lineal feet 1"x6", finish No. 2. Ridge and nest platform, 20 lineal feet, 1"x5", finish No. 2. Freize and corner boards, 80 lineal feet, 1"x4", finish No. 2. Battens and trimmings, 330 lineal feet 1"x3", finish No. 2. Droppings board, nest cover, 80 lineal feet 1"x8", shiplap No. 2. Shingles, 1000.

Cost of lumber, $14.51.

HARDWARE.—5 lbs. 8d cut nails. 1 lb. 8d wire finish. 2 lbs. 6d wire finish. 3 lbs. 2d shingle nails. 1 lb. 1½" brads. 18 feet poultry netting, 1" mesh 2' wide. 1 pair 4" T hinges. 1 lock.

Cost of hardware, $1.60.

PAINT.—1 gal. creosote shingle stain. 1 gal. paint. Cost of paint, $2.00.

Cost of all material at Corvallis, $18.11.
The Trapnest

Fifty years from now Biddy will be ashamed of her ancestors. After the trapnest has got in its work and the robber hen abolished, the hens will lay twelve dozen eggs a year each instead of six dozen, which the Oregon and other hens are now laying. It is not always the fault of the feed and care that they don’t do better; it is the misfortune of the hen herself very often—she couldn’t lay if she wanted to. The trapnest is the only thing now known that will mete out even justice to the hen and her owner. It tells which hen lays the egg.
It has been demonstrated that some hens never lay an egg; others lay 200 in a year. The trapnest gives the record of each hen.

Trapnests require considerable attention. Not every farmer can give them the necessary attention. Where possible to devote a little time to it each day, the farmer will be well repaid for the labor. It is the purpose of the Experiment Station in time to furnish to farmers at reasonable prices stock and eggs from hens with a known ancestry of high producers, with the object of increasing the egg yield of their flocks.

Scores of trapnests have been invented and patented. The one illustrated herewith was designed by James Dryden several years ago, and it is now in use at the Oregon station and several other stations, where it has been thoroughly tested. It is probably the best nest ever. It is not patented and anyone can make it without fear of prosecution. As the hen enters this nest, the weight of her body closes a door behind her, and another hen cannot enter. After the hen has laid, she is released by an attendant, her leg band number being taken and marked on the egg. We give illustrations and description herewith.

**HOW TO MAKE THE TRAPNEST.**—The trapnest is simple in construction. It can be made by any one who can use a saw and drive a nail. It may all be cut out of one 12" board 10' long. The following is the material used:

1. 1 board 1"x12"x10'.
2. 6 screw eyes No. 210 Bright.
3. 2 pieces round iron 3-16"x12".
4. 2 pieces rawhide 9"x1½".

With a square, lay off the board as shown in the accompanying diagram. The shaded portions are the waste pieces of the board. The solid black lines show where the board is to be cut. When cutting the sides apart, it will be necessary to cut only as far as X, then split the boards apart, after which cut out the required angle.

After sawing the pieces, the nest is ready to be put together.

1. Nail the sides to the bottom so that the ends will be even.
2. Stand the nest on end and nail on the back. This will square the sides.
3. Stand the nest on its back and nail on the front piece.
4. Nail on the front brace, which should be set into the sides at lines indicated at A and B.
5. To the end of the bottom board nail the nest end front.
6. The two front pieces are nailed on either side of the door to the sides and the front brace.

![Diagram showing how to cut trapnest out of one board 1" x 12" x 10']
7. Put in the piece \((10\frac{1}{2}\"\times3\frac{3}{4}\")\) on which the door is balanced; nail it in between the sides so that the inner side will be flush with the outer side of the front pieces. In this piece put a screw eye 4" from each side, the outer edge of the screw eye being flush with the inner side of the piece.

8. Turn the nest on its side and bore the holes in the sides through which the 3\%4" iron passes. The holes are 1" from the bottom and 1\%4" from the nest front.

9. On the bottom of the trip-board put in a screw eye \%6" from end and 1" from each side. At the other end of trip-board bore two \%6" holes 1" from the end and 3" from each side.

10. On the bottom and at each side of the door put in a screw eye 1\%2" from the end and 3\%4" from the sides. On the upper side tack the two rawhide strips, using a small staple or nail for each. The strips are tacked on so that the end of the strap will be 2" from the end and \%2" from side of door.

11. Place the door in front of the trip-board, the screw eyes down; push the rawhide strips through the holes in the trip-board; turn the boards over and draw the strips up tight; then bend the door back over the trip-board until there is a full 4" between the board when laid flat; the strap should then be tacked to the lower side of the trip-board.

12. Put the door and trip-board in place. This is done by pushing the iron rods through the sides and the screw eyes. Care should be taken in placing the screw eyes in proper places; if they are not set properly the door will not balance.

The nests may be built singly or in groups. They may be set in the wall of chicken house, as shown in illustration of colony house, or they may be put under the droppings platform, where a platform is used. This latter plan will save the cost of covers. In either case it will be an advantage to have nests made separate and a frame made to receive them, so that the nest may be pulled out to release the hen. Occasionally a hen is slow in coming to the door to be let out, and by pulling the nest out the operation of releasing the hens may be more quickly performed.

If the nest is to be used outside of the house, it will be necessary to put a cover or roof on that will protect it from the weather.

The dimensions of the door and the size of the opening for the door are given for medium sized breeds. For large breeds it will be necessary to enlarge the opening. The front brace may be raised and the front pieces made narrower. The door opening should not be large enough to admit two hens at one time.