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The Ohio Summer Range Shelter

By
D. D. MOYER, Extension Poultryman,
and
J. D. BLICKLE, Agricultural Extension Engineer

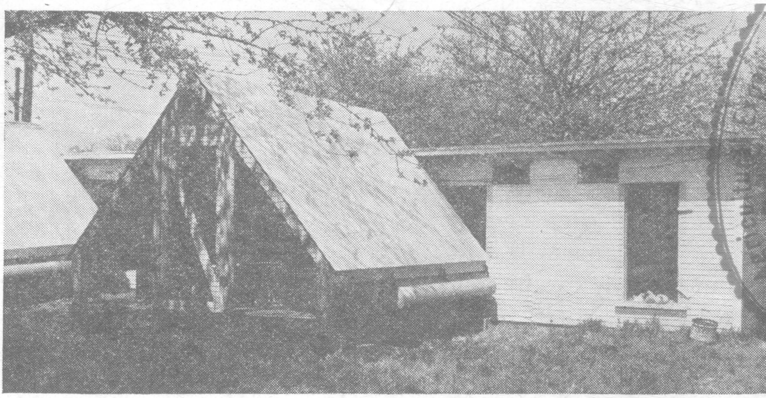

FIG. 1.—The Ohio range shelter, as a sun porch and summer quarters for pullets. Sun porch feeders are hung on the sides to provide more feeding space.

The cool, roomy summer quarters provided by a range shelter aids in the development of large-bodied, well developed pullets. Comfortable summer housing plus a good pasture results in more of the pullets being suitable for selection for the laying flock.

The Ohio Shelter described in this bulletin is unlike most shelters in that it is built of heavier materials. It has more head room and roosts are placed on the floor joists.

The low roosts make it easier to catch the pullets at housing time. The lower door at the rear permits driving the pullets into catching coops.

On farms where 250 to 300 sexed pullets are brooded in a 10 by 12-foot brooder house it is imperative to provide additional room at 5 to 6 weeks of age. When weather conditions are unfavorable for allowing the chicks to run on the ground, the shelter can be used as a sunporch by placing it in front or along the side of the brooder house. This provides an excellent opportunity for the pullets to become adjusted to less protection and cooler temperatures before they are moved to the range. This "dual purpose" feature increases the use of the equipment.

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The Ohio Shelter is built to last for many years, if good materials are used and exposed parts are given a protective coating, such as creosote, etc. The cost per square foot of floor space is comparable to small shelters built of light material. It can be moved with a truck or a light tractor.

The 10 by 12-foot structure provides ample room for 200 pullets. Its open construction provides well ventilated quarters night and day during hot weather. When it is time to move, the pullets are driven into the shelter and moved to the range.

Construction Details of the Shelter

The 2 by 10-inch skids are cut 12 feet in length. The ends are angled and holes are bored for attaching a clevis or cable for moving.

The two end and center floor joists are cut 10 feet long and notched into the skids as shown in the framing details. (See Fig. 2.) The frame should then be squared and a temporary diagonal brace nailed on top of the frame before the six remaining floor joists are butt jointed to the skids with the top of the joist flush with the top of the skids.

Studding 18 inches long are spaced 3 feet apart and set on the ends of the floor joist, as shown in the framing detail. (See Fig. 2.) The studs are held in place by two by fours, 22 inches long, which are cut and nailed on the sides of the studs. These nailing members extend down flush with the underneath side of the floor joist and are nailed to the floor joist as well as to the skids.

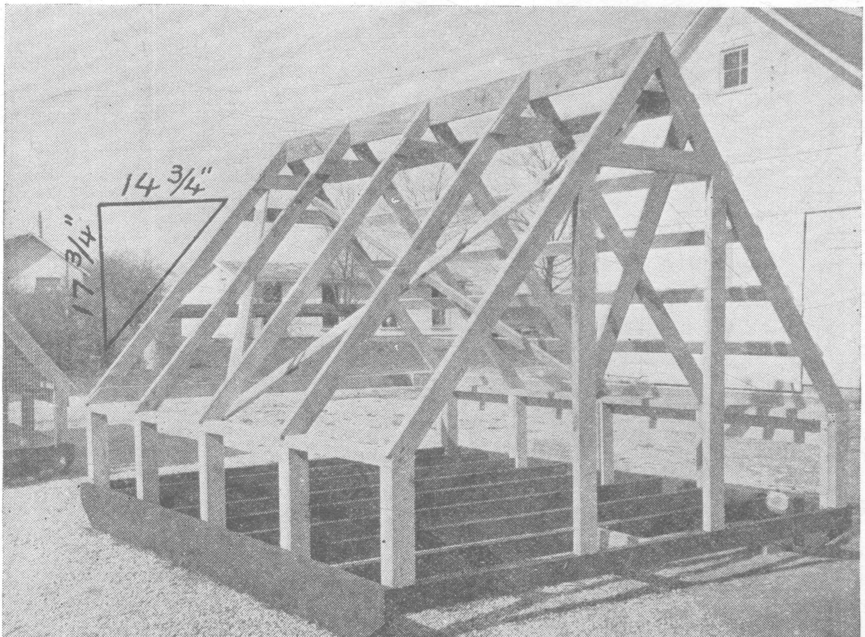

FIG. 2.—Framing details of the shelter.

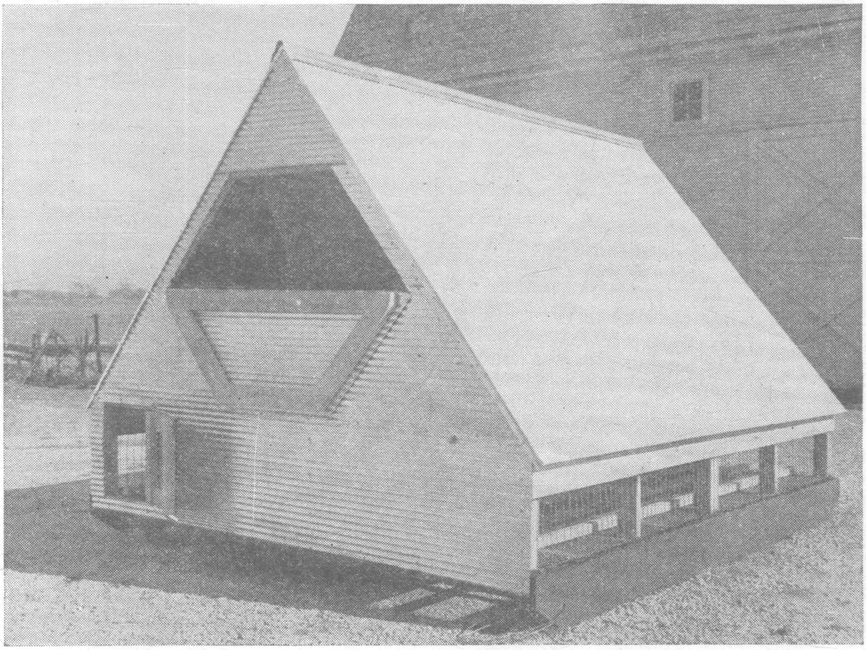

FIG. 3.—Rear view showing ventilator and small door.

A 2 by 4 rafter plate 12 feet long is spiked securely over the studding on each side.

The next step is to place the 1 by 1-inch or 1 by 2-inch mesh weld wire on the floor joist. Three-foot wire will place the edge of the wire on center on the floor joists.

The rafters are cut 7 feet 7 inches long and the heel extends 1 inch beyond the rafter plate. A 1 by 6-inch ridge pole is used. This makes the ridge 5 feet 11 inches above the rafter plate. The framing diagram in Fig. 2 shows the cut for the five sets of rafters.

After the rafters are in place they should be plumbed and the four diagonal braces nailed underneath the rafters as shown. One foot by four-inch collar beams are used on each rafter.

A 1 by 8-inch board is nailed to the outside of the studs and the rafter plate to provide bracing and a nailing strip for the sidewall cover. (See Fig. 3.)

Galvanized or aluminum corrugated or V-crimp roofing is fastened with lead headed nails to seven 1 by 4-inch sheathing boards equally spaced on each side of the roof. A standard metal ridge roll is used.

On the rear end a 2 by 4 is placed 20 inches above the floor joist as a nailing strip for the metal covering and small door. A vertical 2 by 4 post spaced 18 inches from the corner studding is provided also for the small door. (See Fig. 3.) The lower panel is covered with an 8-foot sheet of metal. The next panel is 10 feet long with the ends cut off to fit the angle of the roof.

The upper nailing strip for this sheet is a 2 by 4 spaced 18 inches above the first nailing strip. The hinges for the ventilating door are also fastened to this strip.

An 8-foot sheet of metal is used for the ventilating door and the space above the door. The door is 22 inches high. Enough metal will be left from this strip to cover the small lower door. The remaining metal scraps are used to cover the exposed rafters on each side of the ventilating door as shown in the picture of the rear view of the house. (See Fig. 3.)

All doors are hinged with butt hinges and the frames for the doors are made of two thicknesses of 1 by 4-inch material with overlapping joints.

The front of the house, including the door, is covered with 1 by 2-inch welded wire or heavy gauge hexagon poultry netting. Two by four framing is used to provide a 2½ by 5½-foot door opening.

The 9 roost poles, 2 inches square, are spaced 12 inches on center with 10 inches clearance between the outside roost and the wall, and are nailed to the floor joists on top of the wire floor covering. If desired, roosts can be placed crosswise the house and nailed on top of the floor joist.

Grille wire, 2 by 12-inch mesh, or wood slats are used to cover the sides of the shelter, if feeders are to be hung on the sides. Otherwise, the sides can be covered with the same material as the front. The opening provided by the rear ventilating door is also covered with wire.

A 1 by 4-inch board should be hinged to the front and rear floor joist with 6-inch strap hinges to keep the birds from going underneath the shelter.

Bill of Materials

2 pieces, 2″ x 10″ x 12′ skids
4 pieces, 2″ x 4″ x 12′ rafter plates, rear end and ventilating door framing
13 pieces, 2″ x 4″ x 10′ floor joist, studding side braces (22″), front door framing
12 pieces, 2″ x 4″ x 8′ rafters and studding (18″)
9 pieces, 2″ x 2″ x 12′ roost poles
1 piece, 1″ x 6″ x 12′ ridge pole
12 pieces, 1″ x 4″ x 8′ front and rear door frames, collar beams and braces
2 pieces, 1″ x 8″ x 12′ nailing strips for feeder wire
14 pieces, 1″ x 4″ x 12′ sheathing for roof
2 pieces, 1″ x 4″ x 10′ hinged door for front and rear floor joist
40 feet, 36 inches wide, 1″ x 2″ or 1″ x 2″ mesh welded wire for floor
16 feet, 36 inches wide, 1″ x 2″ mesh welded wire for ends
14 sheets, 2′ x 8′ metal roofing for roof and end
1 sheet, 2′ x 10′ metal roofing for end
24 feet, 2″ x 12″ mesh grille wire for sides
3 pairs 4″ butt hinges
2 pairs 6″ strap hinges
12 feet ridge roll
20d and 8d nails and 1-inch fence staples for framing and wire