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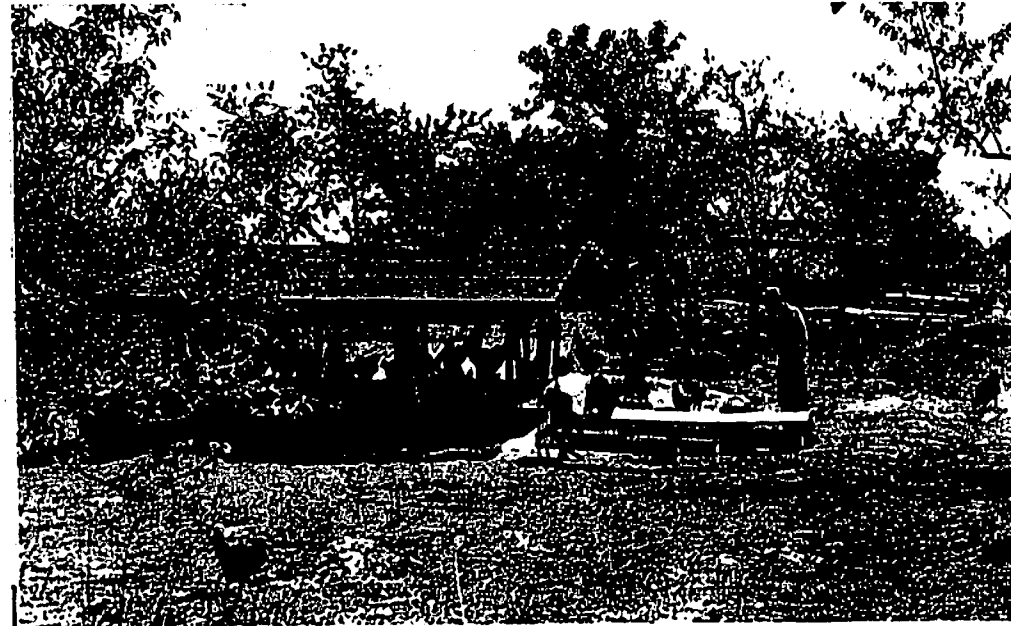
April

An All Season Range Shelter *for* Poultry

George D. Quigley



A satisfactory method for watering pullets on range. Drill a hole in a barrel slightly smaller than the pipe, screw the pipe into the hole, and attach a float valve. Select a shady place for location of the water barrel.



Use a range shelter, on a clean range, for quality pullets.



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AN ALL SEASON RANGE SHELTER FOR POULTRY

By GEO. D. QUIGLEY
Poultry Department

MARYLAND farmers and poultrymen should make greater use of range shelters in improving their pullet rearing program. This type of equipment is well beyond the experimental stage and is being used successfully on thousands of farms in all sections of the country.

Use of the Shelter

Poultry producers find that a range shelter is a very handy and versatile piece of equipment. Its principal use is as a shelter for pullets from 10 or 11 weeks of age on range until transferred to laying quarters. There is probably no better method of producing pullets than by this method. Chicks are started in any cleaned and disinfected quarters, reared with range or in confinement for 10 to 11 weeks, and the pullets transferred to the shelter which has been moved to a clean, disease-free range. If the weather is cold, protection is given on three sides by plywood, lumber substitutes, bags, or building paper, as illustrated in Fig. 1. Cockerels remaining from the brood are finished for market in the brooding quarters, and later another brood may be started and handled in the same manner as the first one. In this manner the shelter has the effect of doubling pullet rearing capacity with only moderate cost for additional equipment.

Other uses of the range shelter are:

1. As a finishing house for yearlings from July 1 to November, to make room for early hatched pullets in regular laying quarters.
2. To house surplus laying pullets until suitable laying quarters can be provided. Nests can be attached to the outside of the building; boxes or barrels make good emergency nests, or portable nesting structures may be provided. This general arrangement, however, is best upon sandy soils, since eggs become badly soiled on heavy soils during wet weather.
3. As a shelter for cockerels until the breeding season.
4. For a fall crop of roasters or capons.
5. For storage of unused range or other equipment during the winter.

Cooperative Extension Work in Agriculture and Home Economics, Extension Service, University of Maryland, and United States Department of Agriculture, Cooperating.

T. B. SYMONS, Director

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Shelter Design

The Maryland shelter has several new and distinct features which have worked out exceptionally well in practice. The roost arrangement is such that pullets that have not roosted previously will roost very soon, usually within an hour. The almost flat roof, located high above the roosting chickens, makes the shelter especially comfortable during hot weather, and the shelter with no special insulation competes well with average natural shade. The overhanging roof often prevents wetting of the manure during rain storms, and the 12-inch runners ordinarily prevent trouble from accumulated manure. The shelter is heavy enough to safely resist substantial wind velocity. It is designed to hold 100 to 150 pullets comfortably.

Roost Paint and Wood Preservative

The entire wooden structure should be sprayed once yearly with a mixture of either carbolineum or creosote, diluted with kerosene, half and half, as a wood preservative, as a protection against ground ants, or termites, and common red mites, which are frequently so damaging to the vitality of poultry on range.

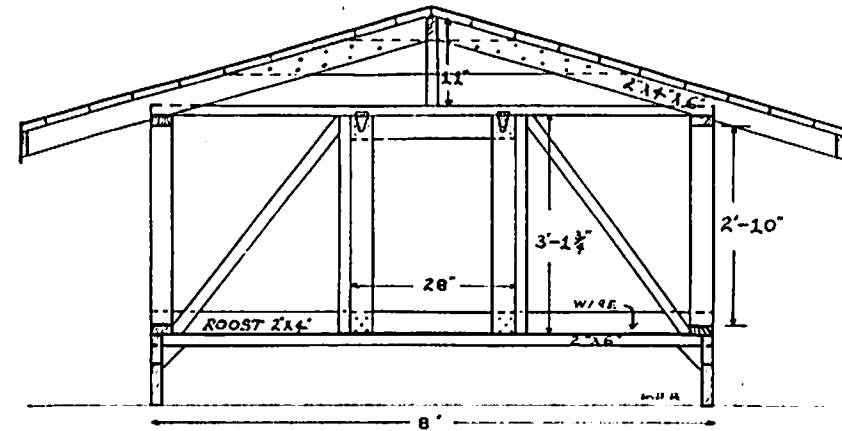
Metal Roofing

A metal roof, especially if treated with aluminum paint to repel the rays of the sun, is proving more satisfactory than would at first appear. Some experienced operators distinctly prefer metal roofs on range shelters. For year around use, we prefer paper over solid wood sheathing.

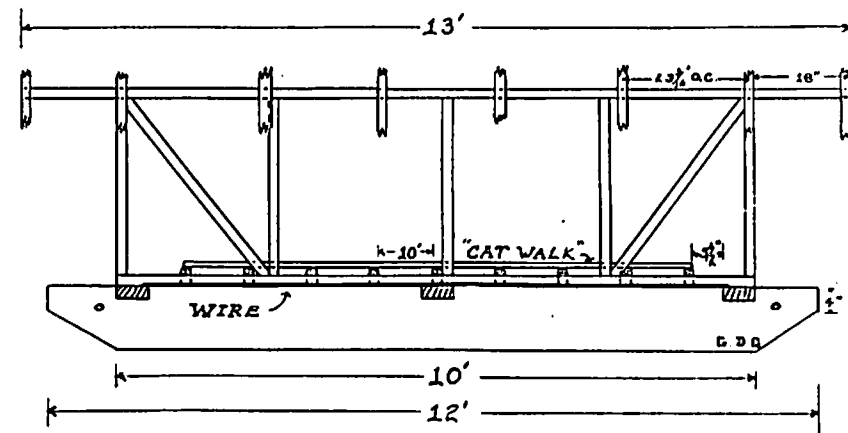


Fig.1. Protection by 1/4 inch plywood sheets for cold weather use of the all-season range shelter. Substitutes are burlap bags, building paper, or insulating building materials.

Framing details of all-season range shelter, without rafters, ridge or collar beams. It is somewhat simpler to keep front and rear plates the same height as the side plates, instead of lapping as shown.



End view of all-weather range shelter for 100 to 150 chickens, showing framing detail. Runners shown are 2" x 12". A saving of about 84 cents can be made by using 2" x 6" runners, but the heavier runners are recommended. Both ends should have doors, as shown. Note the low roosts, which encourage immediate roosting. Also, the roofing paper carried well over rafter ends. The flat roof improves air circulation in summer.



Side view, showing how cross members, sills, plate, and rafters are framed. "Cat Walk" in center is used when catching birds for vaccination, transfer to laying quarters, etc. For cold weather, pieces of 1/4" x 4' x 8' plywood applied to three sides and all eaves filled in on those sides will make a comfortable shelter. Burlap bags and building paper are cheaper substitutes.

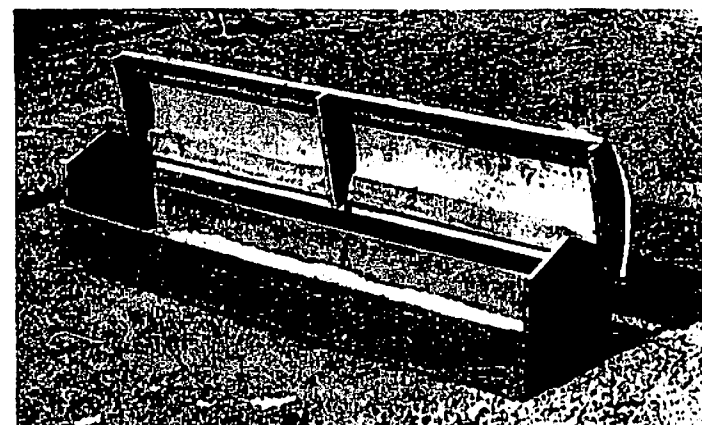
BILL OF MATERIAL, 8' x 10'
ALL WEATHER RANGE SHELTER

Runners	2 pc. 2" x 12" x 12' Pine or Fir
Crosses	3 pc. 2" x 6" x 8' " " "
Roosts	5 pc. 2" x 4" x 16' Va. Pine or Fir
Sills	2 pc. 2" x 4" x 10' " " " "
Plates	2 pc. 2" x 4" x 14' " " " "
	1 pc. 2" x 4" x 16' " " " "
Studding	4 pc. 2" x 4" x 12' " " " "
Corner Braces.....	2 pc. 2" x 4" x 14' " " " "
Rafters	8 pc. 2" x 4" x 12' " " " "
Collar beam.....	3 pc. 1" x 4" x 10' N.C. " " "
Rafter Trim.....	4 pc. 1" x 4" x 4' " " " "
"Cat Walk".....	1 pc. 1" x 12" x 8' " " " "
Doors	2 pc. 1" x 4" x 12' " " " "
Roof*	200 B. F. 1" x 6" T. & G. Roofers
Wire for floor.....	10' of 96" wide 1½" mesh, 14 gauge fox wire galvanized after weaving, or 16' of 60" 1" x 2", 14 gauge electrically welded wire.
Wire for sides.....	50' of 36" wide 1½" mesh, 18 gauge, galvanized after weaving.
Hinges	2 pr. 3" T hinges.
Spray for mites and wood preserving..	1 gallon Carbolineum + 1 gallon kerosene, applied to all wood parts after building.
Roofing	2 rolls slate surfaced, with 1" galva- nized nails; or metal roofing.
Nails	2 lbs. 20 d; 15 lbs. 8 d; 2 lbs. 10 d box; 3 lbs. 1" staples.

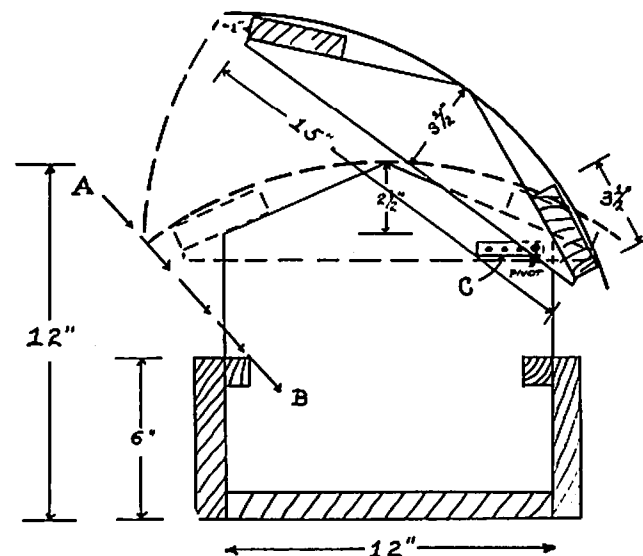
* Some operators prefer metal roofing, which saves roof sheathing and is proving quite satisfactory.

BILL OF MATERIALS FOR 5-FOOT "SIMPLICITY" RANGE HOPPER

Ends	2 pc. 1" x 12" cut to length of 12"
Bottom	1 pc. 1" x 12" x 5'
Sides	2 pc. 1" x 6" x 5'
Lips	2 pc. 1" x 1" x 5'
Top triangles.....	3 pc. 1" x 4" x 15'
Top nailing pieces.....	2 pc. 1" x 4" x 5' 4"
Top	1 pc. 18" x 64", 24 gauge flat galva- nized steel.



The simplicity range hopper, 5 feet long. Note the one-piece metal top. Wire grills may be added, if desired.



Construction details of simplicity range hopper having one-piece, curved metal top. Pivoting of top is obtained by boring a 3/16" hole in each end of top and inserting an 8d nail, and bending on the inside. Arrows on line A-B indicate the necessary angle of rainfall to seriously wet the contents. At the Maryland Agricultural Experiment Station farm the pivoting arrangement shown has stood up well under ordinary handling. Plumbers' tape, shown at C in drawing, gives greater protection for rough handling. Greater clearance can be obtained, if necessary, by making the two pivot holes in the ends of the hopper slightly larger than those in the cover.