## UNIVERSITY OF IDAHO

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## PROBLEMS IN HANDICRAFT IN POULTRY CLUB WORK

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COOPERATIVE EXTENSION SERVICE IN AGRICULTURE
AND HOME ECONOMICS OF THE STATE OF IDAHO UNIVERSITY OF IDAHO EXTENSION DIVISION AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING

## FARM BUREAU JUNIOR CLUBS

## What This Bulletin Tells

THIS BULLETIN tells how to make an A-shaped chicken coop, box coop, chicken crate, chicken feeder, egg tester, row of nests for laying hens, a nest for a setting hen, and two kinds of trap nests.

In doing this work, it will be of great advantage to any boy to have at hand Mr. Niece's bulletin on "Tools; Their Use and Care," which can be obtained from the county club leader or by writing to the Extension Division, at Boise.

The boy or girl who likes carpentry probably will not be content simply to make things for poultry work, but will like to provide some useful articles for use in the house. Instructions for making such things as a bread board, mop rack, fly trap, knife and fork box, kitchen table, and the like will be found in the bulletin, "Problems in Handicraft for the Home."
"Problems in Handicraft for Corn Club Work," "Problems in Handicraft for Pig Club Projects" and "Rope and Its Uses on the Farm" are other bulletins in this same series.

# PROBLEMS IN HANDICRAFT IN POULTRY CLUB WORK 

By H. T. NIECE<br>Ada County Club Leader

THE PROBLEMS in this bulletin offer some of the more simple pieces of construction that are within the ability of poultry club members to make.

These problems will lead the club member to become interested in the more difficult handicraft projects in poultry raising, such as poultry houses.

## A-SHAPED CHICKEN COOP

Chicken coops are needed wherever chickens are raised, and any boy or girl who joins the poultry club should be able to make a simple A-coop. A different


THE A-SHAPED COOP style of A-coop can be made with the slats running up and down at the ends instead of crosswise. For newly hatched chickens this style is somewhat better, for the little ones can run back and forth and not get caught as they would in trying to climb over the cross-slats. However, the style indicated by the drawing is a better one for the chickens when they are older.

Tools Required-Saw, hammer, plane, square and T-bevel.
Material Required-Cheap grade of pine or old lumber of any kind. One piece $7 / 8$ inches by 12 inches by 10 feet. One piece $7 / 8$ inches by 12 inches by 7 feet. Two laths or strips $1 / 2$ inch by $11 / 2$ inches by 2 feet 6 inches. One pound 6-penny nails, common.

## Bill of Stock

1. 4 pieces $7 / 8$-inch $\times 12$ inches $\times 2$ feet 6 inches, for roof.
2. 2 laths $1 / 2$ inch $\times 11 / 2$ inches $\times 2$ feet 6 inches, for roof.
3. 1 piece $7 / 8$ inch $\times 12$ inches $\times 3$ feet, for lower back piece.
4. 1 piece $7 / 8$ inch $\times 12$ inches $\times 1$ foot 6 inches for upper back piece.
5. 1 piece each, of $7 / 8$ inch $\times 11 / 2$ inches $\times 3$ feet, 2 feet 6 inches, 1 foot 11 inches and 1 foot 4 inches for front strips.
6. 1 piece $7 / 8$ inch $\times 6$ inches $\times 9$ inches for upper front strip.
7. 4 pieces $7 / 8$ inch $\times 21 / 2$ inches $\times 2$ feet, for inner cross pieces.


Front and Side Elevations of A-Shaped Chicken Coop

## Directions for Construction.

Saw all the pieces indicated under bill of stock. Set the T-bevel on the square at an angle of $11 / 2$ inches to 2 inches. Bevel the ends of the roof boards to the angle set on T-bevel. Using the same angle, saw the back boards mentioned in Nos. 3 and 4, Nos. 5 and 6. Pieces in No. 7 of bill of stock are used merely as nail ties to keep the coop from parting in the middle. Nail the roof boards to the cross ties first. Fit the two parts together and nail at the top. Nail on the lower back piece, then the upper and lastly the front strips, using the measurements shown in the drawing. The laths are to keep rain from running thru the cracks between the two boards. Nail all pieces securely as the coop is likely to be moved often. Paint.

## BOX COOP

Tools Required-Same as for A-shaped coop.
Material-Same wood as in A-shaped coop. One piece $7 / 8$ inch x 12 inches x 14 feet. One piece $7 / 8$ inch x 8 inches x 14 feet. Two laths or strips $1 / 2$ inch $\times 11 / 2$ inches $\times 3$ feet. One piece $1 \times 2$ inches $\times 4$ feet, for nail ties. One-half pound each of 6penny and 8 -penny common nails.

For this coop the boy should be able to make out his own stock bill.

Construction-Make the sides first. Nail the two nail ties, C and B, at the front to hold the three pieces together. Do not nail at the back as the back pieces will break joints. Nail the back boards to the sides, then nail on the front strips, spacing them to correspond to the figures in the drawing. To make the roof boards

project over the ends somewhat and give a good appearance, spread the roof boards $1 / 2$ inch when nailing them on. This $1 / 2^{-}$ inch crack will be covered by the strips. Give the coop two good coats of paint.

## CHICKEN CRATE

This chicken crate is for use in hauling chickens to market, moving from one place to another, or for shipping them by express. Expensive lumber is not required and boxes or crates can be used to advantage.

Material-Almost any kind or width of lumber may be used. The floor should be solid and a good set of boards at least $23 / 4$ inches wide should be used around the bottom. The sliding board on top is cut accurately while the remainder may be almost any width with spaces 2 inches or less between strips.

Tools-Saw, hammer, square and chisel.
Steps in Construction-Make the corner and middle posts first. Cut several pieces to the right length to make the ends, following as nearly as possible the widths shown in the drawing. Make the middle partition. Saw a number of pieces 4 feet long for the sides

and nail these strips to the ends. Turn the frame upside down and nail on enough $1 / 2$-inch strips to cover the bottom. Saw and nail on the top strips. Chisel out a notch for the sliding center board. Nail on the tin strips at A, B, C. When the crate is to be fastened permanently, a small nail may be driven thru a tin


CHICKEN FEEDER strip and the sliding board. Paint two coats.

## CHICKEN FEEDER

The purpose of the chicken feeder is to furnish the chickens a ground feed, where they can get at it whenever they feel like it. The A-shaped partition in the bottom allows the feed to come out of the hopper gradually and does not choke up. Partitions may be put in this feeder for grit, bone and shell. The feeder should be placed upon a frame

about 20 inches high with a shelf for them to fly upon. This gives the chicken exercise and at the same time keeps the under part of the feeder ventilated, as well as dry and clean. The feeder may be made in any size desired.

Material-This feeder should be made of good lumber, soft pine without knots, and lap joints should be made to make it tight so that the feed will not leak out.

1 piece 1 inch $\times 12$ inches $\times 6$ feet, roof boards.
1 piece 1 inch $\times 8$ inches $\times 16$ feet, for sides.
1 piece 1 inch $\times 12$ inches $\times 5$ feet, for bottom.
1 piece 1 inch $\times 6$ inches $\times 10$ feet, for sides and ends of trough.
1 piece 1 inch $\times 10$ inches $\times 8$ feet, for ends and partition.

## Bill of Stock

2 pieces 1 inch $\times 12$ inches $\times 2$ feet 10 inches, roof.
6 pieces 1 inch $\times 8$ inches $\times 2$ feet 6 inches, sides.
2 pieces 1 inch $\times 12$ inches $\times 2$ feet 6 inches, for bottom.
3 pieces 1 inch $\times 10$ inches $\times 2$ feet 6 inches, ends and grit partition.

2 pieces 1 inch $\times 6$ inches $\times 24$ inches, ends for trough.
2 pieces 1 inch x 6 inches x 2 feet 6 inches, sides for trough.
1 pair 5 -inch strap hinges.
$11 / 2$ pounds 6 -penny common nails.
1 quart paint.

## Steps in Construction

Lay out the two ends with square. On the end boards measure 6 inches on one edge; draw a line to center of end of board and cut off the corner. Do likewise with the other end and the partition. Nail the sides to the end boards and fasten in partition next. If desired, more partitions may be added for bone and shell. Nail on one side of the roof. Next, make the trough by nailing side and end boards to the bottom board. Next, set the top part in the bottom part and nail thru the ends. Screw hinges on the top. Paint two coats.

## EGG TESTER

This box is designed to aid in testing or candling eggs. It is nothing more than a box with a hole the size of an egg in the front, a hole in the top for the smoke from a lamp to escape and
a hinged door in front thru which the lamp may be admitted. An


EGG TESTER electric bulb may be used. The tester is used in a dark room. Light the lamp and place it in the box and hold the egg over the opening in front.

Material-One piece $7 / 8$ inch $x 8$ inches $\times 5$ feet 8 inches. One pair small butt hinges. A few 6-penny finishing nails.

Bill of stock may be worked out by the pupil.

Tools-Saw, hammer, square, brace and bit or key-hole saw and T-bevel, plane.

## Steps in Construction

1. Saw and plane all pieces to dimensions.
2. To shape the side pieces measure up $21 / 2$ inches. Across the opposite end measure in $31 / 4$ inches from the corner.
3. Connect these and saw and plane to the line.


Front and Side Elevations of Egg Tester
4. Set the T-bevel to this angle just made and use it in planing the lower front piece, top and upper end of door.
5. Bore $11 / 2$-inch hole in center of top board.
6. Bore another $11 / 4$-inch hole in center of door.
7. Nail the side to the back.
8. Put on the lower front piece, then the bottom and top.
9. Put on the hinges.
10. Stain or paint.

## ROW OF NESTS FOR LAYING HENS

This row of nests will be most convenient for every place where poultry is raised, whether in small or large flocks. The front is opened and the top


NESTS FOR LAYING HENS is a hinged lid, convenient for gathering eggs.

Material-One piece $7 / 8$ inch x 14 inches x 16 feet, pine common. One piece $7 / 8$ inch x 14 inches x 6 feet, pine common. Three $11 / 2^{-}$ inch butt hinges and a number of 8-penny common nails.

Bill of Stock-May be worked out by club member. Tools-Saw, hammer and square.
Steps in Construction-Cut the board that is 16 feet long into lengths for the top and bottom, back, front piece, and door. The other board will make the remaining pieces. Nail the top and


Front and Side Elevations of Row of Nests for Laying Hens
bottom pieces to the end pieces. Place and nail in back piece, then the division pieces. Nail on the 4 -inch front piece, then put in hinges which hold the trap door on top, as shown by figures on top of drawing.

## NEST FOR SETTING HEN

This nest is convenient in that it can be moved around easily, a thing necessary when the eggs are hatching. It is also easily cleaned.

Material-One piece $7 / 8$ inch x 12 inches x 6 feet. One 4 -inch strip. A number of 8 -penny common nails.


Front and Side of Nest for Setting Hen

Tools Required - Hammer, saw and square.

Construction - See working drawing. Club member will make out his own stock bill and,


NEST FOR SETTING HEN as this is a very simple piece of construction, the steps of construction may be easily worked out by him also. Paint two coats.

## TRAP NEST FOR LAYING HENS

When selection of eggs for breeding purposes from certain hens is desired, the trap nest is a very convenient contrivance for aiding this selection. The eggs may be numbered, and thus an accurate record may be kept and a uniform selection of eggs may be had.

The nest may be made single, or a series of nests may be built together. The drawing and details of parts shown in the accompanying pages are for the single nest.

Material Required-One piece $1 / 2$ inch x 12 inches by 8 feet. One piece 1 inch $\times 1$ inch $\times 4$ feet. Two screw eyes. One $3 / 16-$ inch rod, 12 inches long. One FHP screw, 1 inch long. One pound of No. 6 cement-coated box nails. One quart of paint. One piece of hardware cloth 18 inches long and 12 inches wide.

Tools-Hammer, saw, chisel, square, brace and $3 / 16$ bit.


How the Front End Looks


Trigger, Actual Size


TRAP NEST WITH HOLE THROUGH SIDE TO SHOW TRAP
A. Sides. B. Partition. C. Trigger. D. Trap Door. E. H. K. Front Strips. F. Step. G. Runners. J. 3/16-Inch Rod.

Stock Bill-This problem is a good one for letting the pupil use his ingenuity in working out the stock bill.

Steps in Construction-Nail bottom to sides, and back to sides and bottom. Nail strips across front. Nail the two runners on bottom. Nail strip on front. Next put in partition. Make trap door. Insert trap door in sides, first boring two $3 / 16$-inch holes, as marked on drawing. Next place trigger in side. The trigger in the drawing is actual size. Fasten hardware cloth over top of nest box.

## TRAP NEST-SECOND DESIGN

The drawings for this trap nest are designed for Leghorn chickens, but may be used for other breeds as well, by adjusting the trap for larger or smaller chickens.

- The drawing of the trap nest shown is for a single nest but this may be changed and a series of nests made from this design.

Material Required-One piece 1 inch x 12 inches by 8 feet, for ends, sides and bottom. One piece 1 inch x 10 inches $\times 2$ feet, for trap. Hardware cloth to cover trap and nest box. Number 10 double pointed tacks. One quart paint.

Tools-Saw, hammer, square.

## Bill of Stock

3 pieces, $231 / 2$ inches long x 12 inches wide, sides and bottom.
1 piece, $111 / 2$ inches $\times 111 / 2$ inches, closed end.
1 piece, 1 inch $\times 4$ inches $\times 111 / 2$ inches, partition.
1 piece, 1 inch $\times 4$ inches $\times 13$ inches, and 1 piece, 1 inch $\times 2$ inches x 13 inches, open ends.

2 pieces, cut for trap as shown in design.
2 pieces 1 inch $\times 1$ inch $\times 11$ inches, for trap braces.
Steps in Construction-Cut material into sizes given in stock bill. Nail sides to bottom. Nail closed end to sides and bottom. Nail in the partition. Nail pieces to open end. Make pattern of cardboard for the sides of trap. Nail on braces. Nail on hardware cloth to trap with double pointed tacks. (See drawing for final step in construction). Paint two coats.



DRAWING, AND DIRECTIONS FOR MAKING TRAP ROLLER

