

UNIVERSITY OF IDAHO

EXTENSION DIVISION

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PROBLEMS IN HANDICRAFT FOR CORN CLUB WORK

By H. T. NIECE

Ada County Club Leader

COOPERATIVE EXTENSION SERVICE IN AGRICULTURE
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Doing Two Things At Once.

THE boy who makes the articles described in this bulletin is doing two things at once. He is working on his corn project and he is learning handicraft. Such a boy will be interested in selecting the best possible lot of seed corn and he will be interested also in doing the best possible piece of carpenter work.

A good carpenter knows the correct way to use his tools and he knows how to take care of them. A boy can learn the same things. Many of the common mistakes in the use of tools are very simple ones, which can be avoided easily when one knows they are wrong. For the boy who wants to do the job right, Mr. Niece has written a bulletin called, "Tools; Their Use and Care." This can be obtained by asking your county club leader or by writing to the Extension Division, Boise, Idaho.

For the boy interested in pigs or poultry or in making useful articles for the house, there are the following bulletins: "Problems in Handicraft for Pig Club Projects"; "Problems in Handicraft in Poultry Club Work"; and "Problems in Handicraft for the Home."

"Rope and Its Uses on the Farm" also is an interesting and useful bulletin for club members.

PROBLEMS IN HANDICRAFT FOR CORN CLUB WORK

By H. T. NIECE
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ARTICLES TO BE MADE

Seed Corn Sled
Seed Corn Drying Pedestal
Seed Corn Drying Rack
Rag Doll Seed Tester

Testing Tray for Seed Corn
Rack for Testing Trays
Crate for Corn in Ear
Sack Holder

SEED CORN SLED

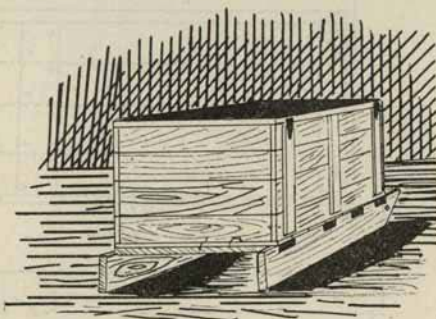
THRU experiment and considerable study by the leading agriculturists, it is found that in selecting the best seed corn it is necessary to know the size and shape of ear, the kind of grain on the ear, the height of the stalk and the height and angle on the stalk at which the ear hangs, the healthiness of the stalk and the stand of corn around the hill from which the ear is selected. They have found that the best seed corn is picked early, before time for the regular husking. When this selection is made, it is convenient to have a narrow, one-horse sled, which will not break down the rows of corn, for taking the seed ears to the barn. The husk can be stripped back and left on the stalk when the ear is pulled.

Such a sled is pictured here and its construction is described. The box on top of the runners has a side door hinged at the top and fastened at the bottom on each end with a hinge hasp. When the box is filled, it is taken to the barn and the side door of the box opened and the corn dumped out on the floor.

Material.—Use any lumber that can be found that will answer the purpose. The size of sled may vary to suit pieces of lumber at hand. If new lumber is bought, get dimensions according to the drawing.

2 pieces 2 in. by 8 in. by 7 ft. 3 in., runners.

4 pieces 2 in. by 4 in. by 2 ft., cross ties on runners.



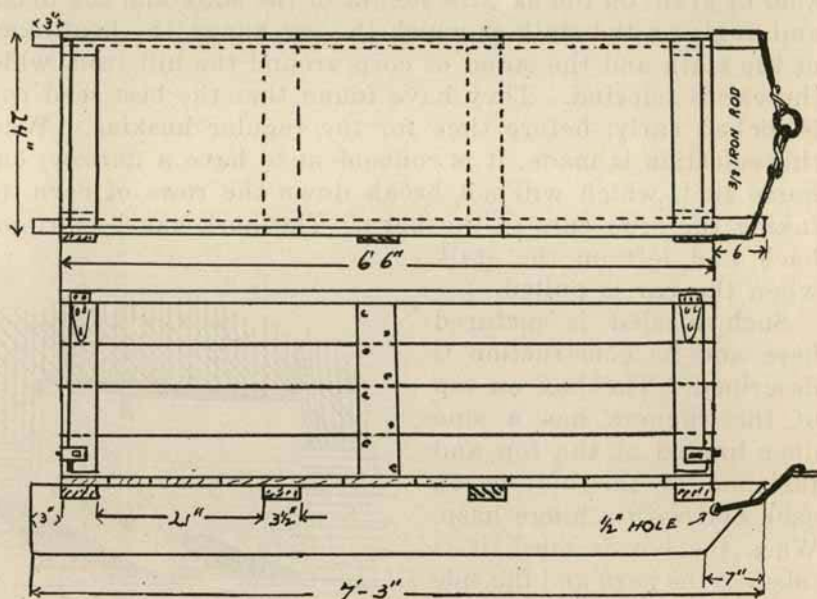
- 4 pieces 2 in. by 4 in. by 2 ft., corner posts.
- 2 pieces 2 in. by 4 in. by 6 ft. 6 in., top side rails.
- 2 pieces 2 in. by 4 in. by 2 ft., top end rails.
- 8 pieces 1 in. by 6 in. by 6 ft. 6 in., sides.
- 13 pieces 1 in. by 6 in. by 2 ft., bottom.
- 3 pieces 2 in. by 4 in. by 2 ft., cleats for side door.
- 1 pair T-hinges and screws.
- 2 hasps with staples.
- 6 ft. $\frac{3}{8}$ -in. round Norway iron.
- 12 $\frac{1}{2}$ -in. iron ring from $\frac{1}{2}$ -in. stock.

A pound each of 20-penny, 8-penny and 6-penny common nails.

$\frac{1}{2}$ gallon paint.

Let club member work out lumber lengths for himself.

Tools.—Saw, plane, chisel, square, brace, $\frac{1}{2}$ -in. bit, screw driver and hammer.



Above, the seed corn sled is shown as seen from above. Below, it is shown as seen from the side.

Steps in Construction.

1. Saw runners to length.
2. Measure back 7 inches on one edge of runner.
3. Draw line from this point to corner.
4. Saw off triangular block.

5. Measure from opposite end 3 inches and then $3\frac{1}{2}$ inches and cut down $1\frac{3}{4}$ inches, or enough for a piece of studding to fit flush with top of runner.

6. Lay out, saw and chisel the other three notches.

7. Bore $\frac{1}{2}$ -inch hole in the front end about where it is indicated in the drawing.

8. Saw and cut to dimension all other pieces.

9. Nail with 20-penny nails the cross ties on the runners.

10. Nail on the floor with 8-penny nails.

11. Nail the end pieces to the corner posts.

12. Nail pieces of one side to ends.

13. Mitre joint the top rail pieces.

14. Nail top rail pieces to side and ends.

15. Make side door by nailing the other side pieces to the three cleats.

16. Fasten door to right top rail by means of T-hinges.

17. Place completed box on floor of sled and secure by toenailing.

18. Have blacksmith cut and bend the Norway iron into shape indicated in drawing.

19. Fasten hasps as indicated in drawing.

20. Paint.

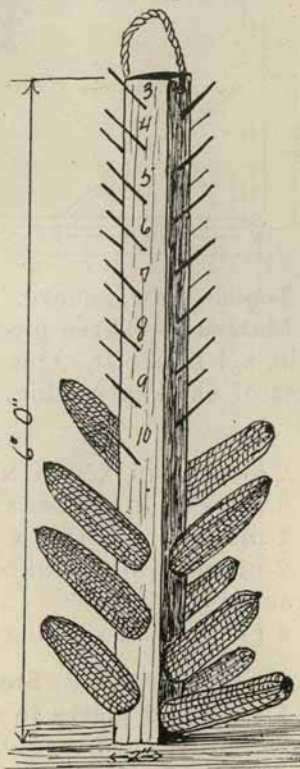
SEED CORN DRYING PEDESTAL

Seed corn should be stored in a cool, dry place and the ears should be kept apart, in order that air can circulate freely about them. A very convenient and easily constructed rack is shown here.

Material.—2 in. x 4 in. x 6 ft., ripped in two pieces.

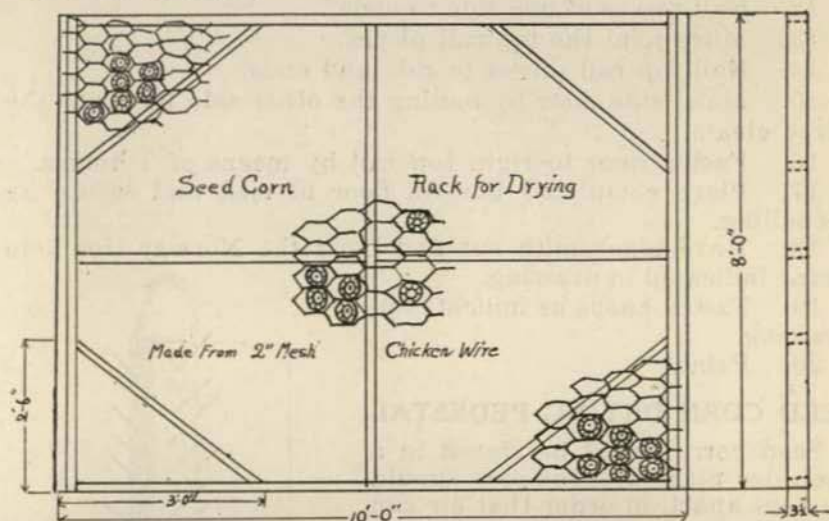
Tools.—Rip-saw, plane and hammer, and brace and $\frac{1}{2}$ -in. bit.

Steps in Construction.—Make a line down center of surface of 2 x 4 and with rip-saw rip in two pieces, 2 in. x 2 in. x 6 ft. Plane smooth. Bore $\frac{1}{2}$ -inch hole near top. Fasten short piece of rope or wire thru this hole. Drive 10 finishing nails on each side. Number the nails 1 to 40—10 on each side. When the rack is to be used, the butts of the corncobs are stuck on the nails as shown in the illustration and the rack is then hung up.



SEED CORN DRYING RACK

Another very convenient seed corn drying rack is made from chicken wire netting. A solid frame is made of wood well braced and the wire netting is stretched over this frame. On the top of this frame screw two strong screw eyes and then, by means of two small ropes tied in each screw eye and the other end run thru small pulleys fastened to ceiling, the rack can be raised and lowered very easily. A rack of this kind will hold several bushels, and may vary in size to suit the amount to be dried.



Tools.—Saw, square, T-bevel, hammer, pliers.

Material.—Three pieces 2 in. x 4 in. x 10 ft. Seven pieces 2 in. x 4 in. x 8 ft. One pound of small staples. Eighty square feet of chicken netting.

Bill of Stock

- 2 pieces 2 in. x 4 in. x 10 ft., for upper and lower pieces.
- 4 pieces 2 in. x 4 in. x 8 ft., for double ends.
- 1 piece 2 in. x 4 in. x 7 ft. 8½ in., for middle upright.
- 2 pieces 2 in. x 4 in. x 4 ft. 11⅞ in. for middle lengthwise braces.
- 4 pieces 2 in. x 4 in. x 4 ft., for corner braces.

Steps in Construction

1. Cut all pieces to dimensions stated in stock bill.
2. Mitre the braces by using 10 inches on one arm of square and 12 inches on the other.

3. Reverse this to get angle at the other end.
4. Lay on the floor the two 10-ft. pieces. Nail one 8-ft. piece at each end. Cut in the middle the upright piece, then the two cross braces. Nail on the extra 8-ft. pieces at the ends. Put in the mitred braces.
5. Next nail the wire netting on top edge of frame. Stretch well and nail securely the edges of netting. Fasten at bottom.
6. Fasten screw-eyes in top piece about 6 inches from end.

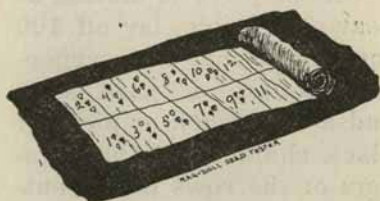
RAG-DOLL SEED TESTER

To make this tester, secure sheeting of a good quality and tear into strips from eight to ten inches wide and three to five feet long. It is well to hem the edges. Each cloth should then be marked with a heavy pencil, first lengthwise in the middle, and then crosswise as shown in the figure, making squares about three inches wide. Number the squares as shown in the illustration.

Moisten one of these cloths and lay it out on a board of convenient size in front of the ears which are to be tested. Place six kernels from each ear in squares numbered to correspond to the numbers of the ears. When the cloth has been filled, begin at the upper end with ears Nos. 1 and 2 and roll the cloth up. Since the cloth is moistened, the kernels will not push out of place. When the rolling has been finished, tie a string rather loosely around the roll, or better still, use a rubber band. From 20 to 50 ears may be tested in each roll.

After all the rolls have been filled, they should be placed in a bucket of water, where they may remain for from two to eighteen hours depending upon the preference of the one testing. At the end of this time pour off the water and turn the bucket upside down over the rolls, or a small wooden box is very convenient for this. A couple of small sticks should be placed under the rolls and the edge of the box or bucket should be raised a trifle to allow ventilation. At the end of five days the reading should be ready to make.

Take roll No. 1, or the last roll filled, and place in front of the ears which it represents and unroll. Examine all kernels carefully. In cases where all six kernels are not strong, the



ear should be discarded. Proceed with all the rolls in the same way.

TESTING TRAY FOR SEED CORN

Those who do not care for the rag-doll seed tester will find in the testing tray a very convenient device for testing seed corn.

Material.—Any soft wood. One piece $\frac{3}{4}$ -in. x 8 in. x 10 ft. Two pieces cheap muslin about 28 inches square. One-half pound of 8-penny common nails.

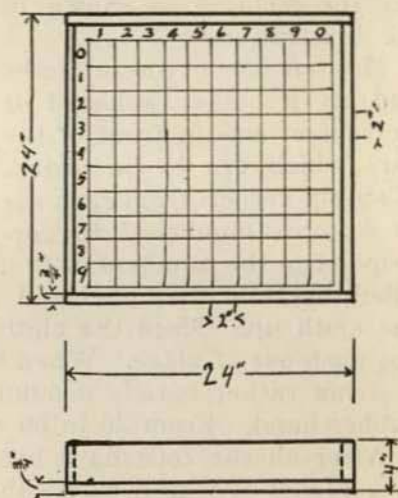
Tools.—Saw, hammer, plane, square.

Steps in Construction

Cut all pieces to dimensions shown in the drawing. Nail sides and ends, and then bottom.

On one piece of muslin, as near as possible, lay off 100 squares, using the carpenter's square or yard stick and a soft pencil or piece of black chalk. Put the numbers of the rows to the outside as shown in the drawing. Fill the box about half full of sawdust, pressing down level all over the box. Lay the piece of muslin with the squares over the sawdust in the box. Place your ears of corn to be tested in rows of ten or one hundred, so that you will know where each ear belongs. Choose six kernels from different parts of the ear. Lay these six kernels in square No. 1 in two rows pointing in the same direction. Repeat until all the squares are filled.

Cover with the second piece of muslin and spread sawdust over this. Moisten well and keep in a warm place four or five days. Then remove the top cloth and the kernels are ready to read. If all the six kernels do not sprout well, discard that ear. The ears that are left are the ones to be used.



Top and side-view drawings of testing tray.

RACK FOR SEED CORN TESTING TRAYS

This frame makes a convenient place to keep the trays while testing the kernels and it affords a place to keep them from one year to the next. Six trays will be enough for a farm of almost any size. Allowing 100 ears to the bushel, six bushels can be tested at one time.

Material.—Any cheap wood that you can find about the farm. One piece 2 in. x 4 in. x 7 ft. One piece $\frac{3}{4}$ -in. x 6 in. x 12 ft. One piece $\frac{3}{4}$ -in. x 6 in. x 8 ft. One and one-half pounds 8-penny common nails. Small amount of paint.

Tools. — Saw, hammer, square.

Steps in Construction.—Cut four posts to length, 3 ft. $5\frac{1}{4}$ in. Cut 12 braces to length, 2 ft. $3\frac{1}{2}$ in. Cut 18 pieces to length 2 ft. Nail together the pieces and braces for the trays first, then nail these to the posts. Paint two coats.

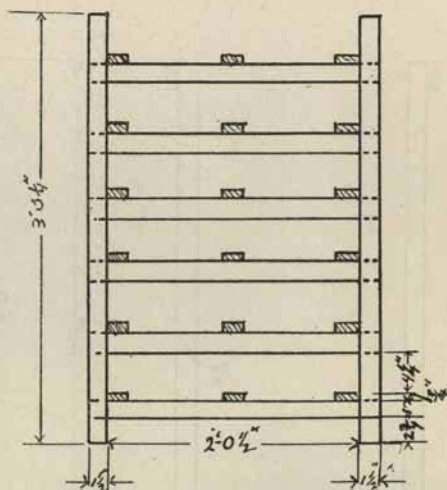


Diagram of Rack for Testing Trays.

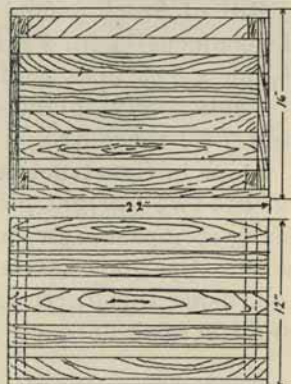
CRATE FOR CORN IN EAR

This crate is very convenient for handling seed corn and any small amounts of corn in ear at exhibitions, etc.

Materials.—All material is $\frac{3}{4}$ -in. x $1\frac{1}{2}$ in. Use any lumber about the barn that is suitable.

Tools.—Saw, square, hammer.

Steps in Construction.—Rip out all pieces and saw to dimensions. Nail end pieces to the upright pieces, spacing as nearly equal as possible and using five pieces to the end. Nail on the bottom, putting on six pieces. Nail on the ten side pieces, using five on each side.

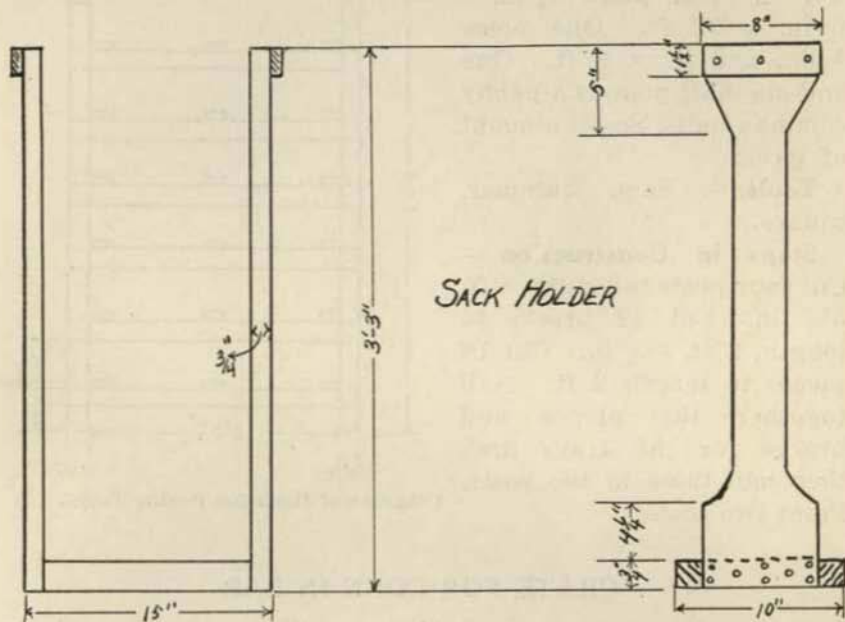


Bottom and side views of crate. Ends will be 12 x 16 inches.

SACK HOLDER

This sack holder will be found to be a very convenient piece of apparatus about the barn, especially to the boy whose duty it is to "hold sacks." It is easily made and any boy handy with tools can make it in a very short time.

Material.—One piece $1\frac{3}{4}$ in. x 10 in. x $15\frac{1}{4}$ in. One piece $\frac{3}{4}$ -in. x 8 in. x 6 ft., 8 in. Twenty-two $1\frac{1}{2}$ in. No. 9 F. H. B. screws.



Bill of Stock.—One piece $1\frac{3}{4}$ in. x 10 in. x 15 in. for base. Two pieces $\frac{3}{4}$ in. x 8 in. x 3 ft. 3 in. for uprights. Two pieces $\frac{3}{4}$ in. x $1\frac{1}{2}$ in. x 8 in. for cleats at top.

Tools.—Saw, plane, compass saw, screw driver, square, brace and 7-32 twist drill.

Steps in Construction.—Finish base as given in drawing. Lay off the two upright pieces and shape according to the drawing, using compass saw to cut curves and rip-saw to finish out with. Use part sawed out for cleats at top. Put on cleats at top, using three screws in each. Fasten uprights to base, using eight screws on each side. Paint two coats.

HANDICRAFT in club work is not designed to make craftsmen—i. e., carpenters, painters, blacksmiths, dressmakers, etc.—but to teach boys and girls to do the things that otherwise would be left undone, and to teach them in the popular projects, such as the corn, poultry or hog club work, how to make equipment that they will need.

In the preparation of this bulletin and other bulletins of the series, it has been the intention to select problems that require only simple tools and the use of discarded pieces of lumber.

The ultimate desire for the handicraft work in wood is that each boy shall have, in the near future, a workbench at home, where he can work upon his project at his leisure. New tools are expensive, and as a part of this work is to teach economy, it will be well for club members to take the tools that are at home, have them put into shape by some competent person, and then take care of them.

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