STEP LADDER - DETAIL SHEET

BEND FORWARD
ON DOTTED LINE

E. HINGE FOR FOLDING SHELF.
MAKE OF 16, 18, OR 20 GAGE SHEET METAL.
SCALE - \( \frac{1}{8} = 1" \).

SQUARE SETTING - 4 \( \frac{1}{2} \) \& 12.

DETAIL OF SHEET METAL BRACKET.
MAKE OF 16, 18, OR 20 GAGE SHEET METAL.
SCALE - \( \frac{1}{4} = 1" \).

SQUARE SETTING ON END 18 \( \frac{1}{2} \)

F. DETAIL OF STEP.

STEP LADDER

SCALE - \( \frac{3}{32} = 1" \).

DADO LEGS \( \frac{1}{8} \) for steps

A

B

C

1/4" TIE RODS

STEP LADDER

DATE - 30 APRIL 1967

USED - COURTESY - C. WESTON

DRAWN BY B. TRACED BY B. W.

PLAN NUMBER - 106

BACK LEGS - LENGTH - 44 1/4" 

EDGE CUT - SQUARE SETTING - 1 8 \& 12

SIDE CUT - SQUARE SETTING - 3 3/4 \& 12

FRONT LEGS - LENGTH - 45 3/4" 

EDGE CUT - SQUARE SETTING - 1 8 \& 12

SIDE CUT - SQUARE SETTING - 4 1/2 \& 12
Bill of Material

2 - 1" x 3" x 46" lumber - front legs
2 - 1" x 2" x 45" lumber - rear legs
1 - 1" x 5" x 43" lumber - steps
1 - 1" x 7" x 16" lumber - top
2 - 3/8" x 1-1/4" x 43" lumber - back braces
2 - 7/8" x 1-1/4" x 18" lumber - shelf brackets
1 - 3/8" x 7" x 13" lumber - shelf
2 - 2-1/4" x 6" - 16 gauge sheet metal

Construction Procedure

1. Select suitable clear lumber such as yellow pine or oak in the sizes as indicated in the bill of material.
2. Mark out the legs very carefully, on the square setting as shown on the drawings. Saw accurately.
3. If dado for steps is cut on power saw, the angle is the same as square setting of 1 and 12.
4. After dado cuts have been made the top and legs should be fastened together by the use of the 16 gauge metal bracket or angle.
5. Cut steps to size and insert. Steps are held in place by the 1/4" round tie rods. After nuts are installed on tie rods the end of thread should be slightly upset.
6. Install back braces and shelf, be sure the rivets are not drawn up so tight that the back legs will not fold up.
7. Carriage bolts may be used instead of rivets in most cases. If rivets are used they should have washers installed where the rivet is braded to prevent the braded head from pulling into the wood.
8. Raw linseed oil finish is suitable for this type of project.