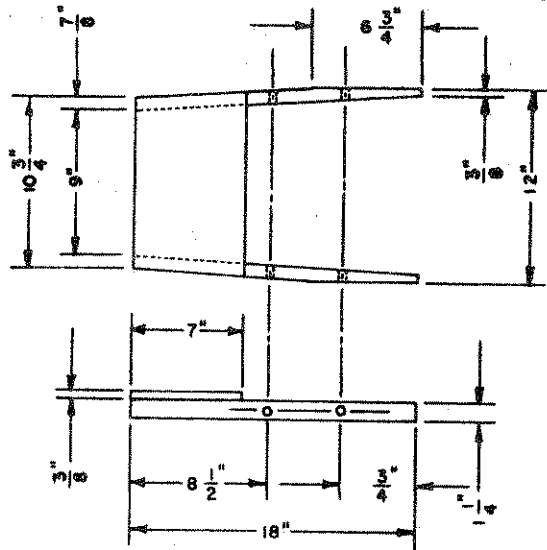
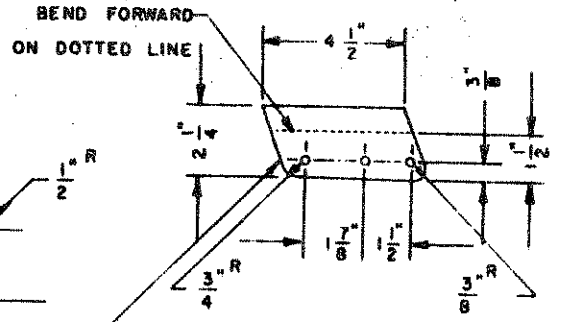


**STEP LADDER - DETAIL SHEET**

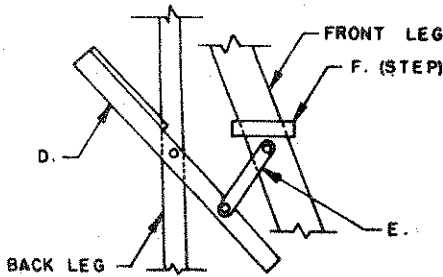


D. DETAIL OF FOLDING SHELF.  
SCALE -  $\frac{1}{8}'' = 1''$ .

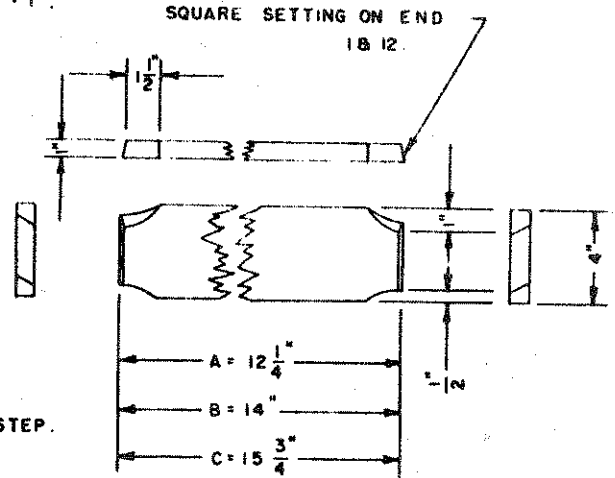
E. HINGE FOR FOLDING SHELF.  
MAKE OF 16, 18, OR 20 GAGE SHEET METAL.  
SCALE -  $\frac{1}{8}'' = 1''$ .



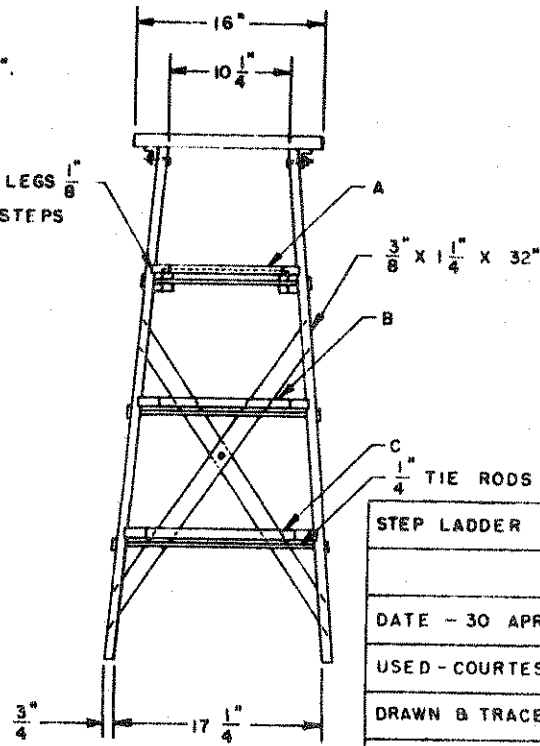
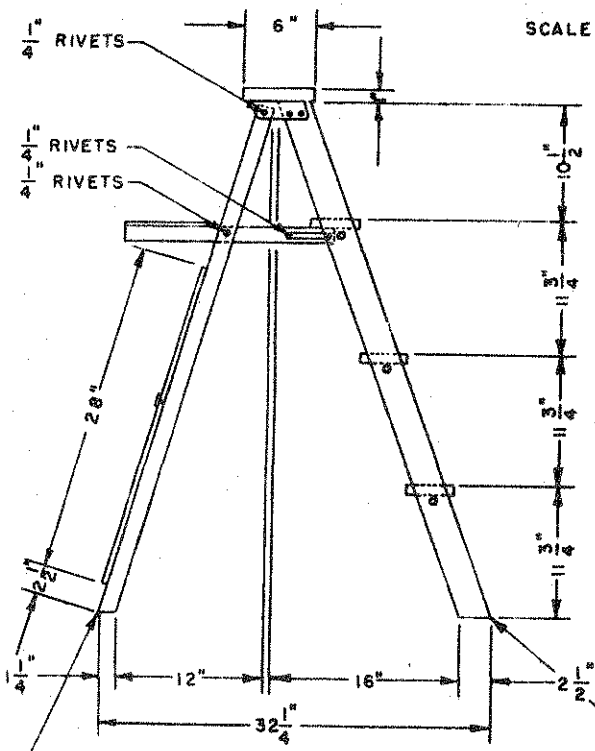
BEND FORWARD ON DOTTED LINE.  
DETAIL OF SHEET METAL BRACKET.  
MAKE OF 16, 18, OR 20 GAGE SHEET METAL.  
SCALE -  $\frac{1}{4}'' = 1''$ .



F. DETAIL OF STEP.



**STEP LADDER**



STEP LADDER
DATE - 30 APRIL 1967
USED - COURTESY - C.WESTON
DRAWN & TRACED BY - B.W.
PLAN NUMBER - 108

BACK LEGS - LENGTH - 44  $\frac{1}{2}''$   
EDGE CUT - SQUARE SETTING - 1 & 12  
SIDE CUT - SQUARE SETTING - 3  $\frac{1}{4}''$  & 12

FRONT LEGS - LENGTH - 45  $\frac{3}{4}''$   
EDGE CUT - SQUARE SETTING - 1 & 12  
SIDE CUT - SQUARE SETTING - 4  $\frac{1}{2}''$  & 12

### Bill of Material

- |   |   |
|---|---|
| 2 - 1" x 3" x 46" lumber - front legs           | 2 - 1" x 6" 16 gauge sheet metal                    |
| 2 - 1" x 2" x 45" lumber - rear legs            | 1 - 1/4" x 45" round mild steel                     |
| 1 - 1" x 5" x 43" lumber - steps                | 10 - 1/4" nuts for bolts and tie rods               |
| 1 - 1" x 7" x 16" lumber - top                  | 22 - 1/4" Washers for bolts, tie rods<br>and rivets |
| 2 - 3/8" x 1-1/4" x 43" lumber - back braces    | 10 - 1/4" x 1-1/4" soft iron rivets                 |
| 2 - 7/8" x 1-1/4" x 18" lumber - shelf brackets | 2 - 1/4" x 2" rivets                                |
| 1 - 3/8" x 7" x 13" lumber - shelf              | 4 - 1/4" x 1-1/4" carriage bolts for top            |
| 2 - 2-1/4" x 6" - 16 gauge sheet metal          | 1 - pint raw linseed oil                            |

### 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.