

A Closer Look

Wood Science

YANR-7c

ALABAMA COOPERATIVE EXTENSION SYSTEM, ALABAMA A&M AND AUBURN UNIVERSITIES

4-H Woodworking Exhibit Plan

A Coat Rack

Materials Needed

One piece 1" pine or spruce stock two feet long
 Five $\frac{3}{8}$ " x $3\frac{1}{2}$ " wood dowel pegs (also called shaker pegs)
 Wood glue
 Sandpaper
 Stain
 Varnish

Tools Needed

Handsaw
 Drill with $\frac{3}{8}$ " and $\frac{1}{2}$ " drill bits
 Small paintbrush

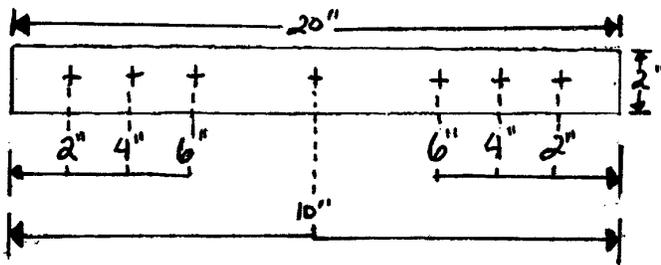


Fig-1.



Fig-2.

How to Make a Coat Rack

1. Rip the 1" stock to a width of 2".
2. Cut the stock to a length of 20".
3. Sand all surfaces smooth.
4. Using a pencil, lightly mark the center of the board at 2", 4", 6", and 10" from each end of the stock as illustrated in Fig. 1.
5. Using a drill with a $\frac{3}{8}$ " drill bit, drill holes completely through the stock at the 4" marks. These holes will be for mounting the coat rack to a wall. (TIP: When drilling through a piece of wood, place the stock on top of a piece of scrap wood. This will prevent the drill bit from splintering the stock when piercing through the back.)
6. Measure the end of the shaker peg that will fit into holes drilled on the stock. (See Fig. 2). It may be necessary to slightly trim these ends if they are within $\frac{1}{8}$ " of the thickness of the stock. Once this is accomplished, wrap a piece of masking tape around a $\frac{1}{2}$ " drill bit to mark a drilling depth $\frac{1}{8}$ " deeper than the end of the shaker peg. (See Fig. 3).
7. Using a drill with the $\frac{1}{2}$ " drill bit, drill holes at the 2", 6", and 10" center marks. Make sure NOT to drill completely through the board. Only drill to the depth indicated by the tape on the bit.
8. Sand all surfaces again, making sure to remove all pencil marks.
9. Using a piece of sandpaper wrapped around a wooden block, lightly round all four front edges of the board.
10. Place a liberal amount of wood glue into the peg holes and insert the pegs. Be sure to immediately wipe away any excess glue using a damp rag or sponge.
11. After the glue has dried, your coat rack will be ready to apply stain and varnish.

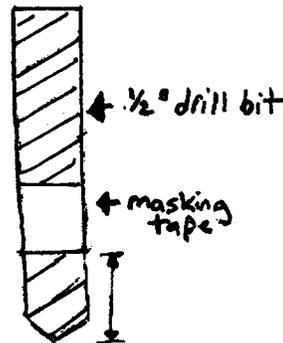


Fig-3.

