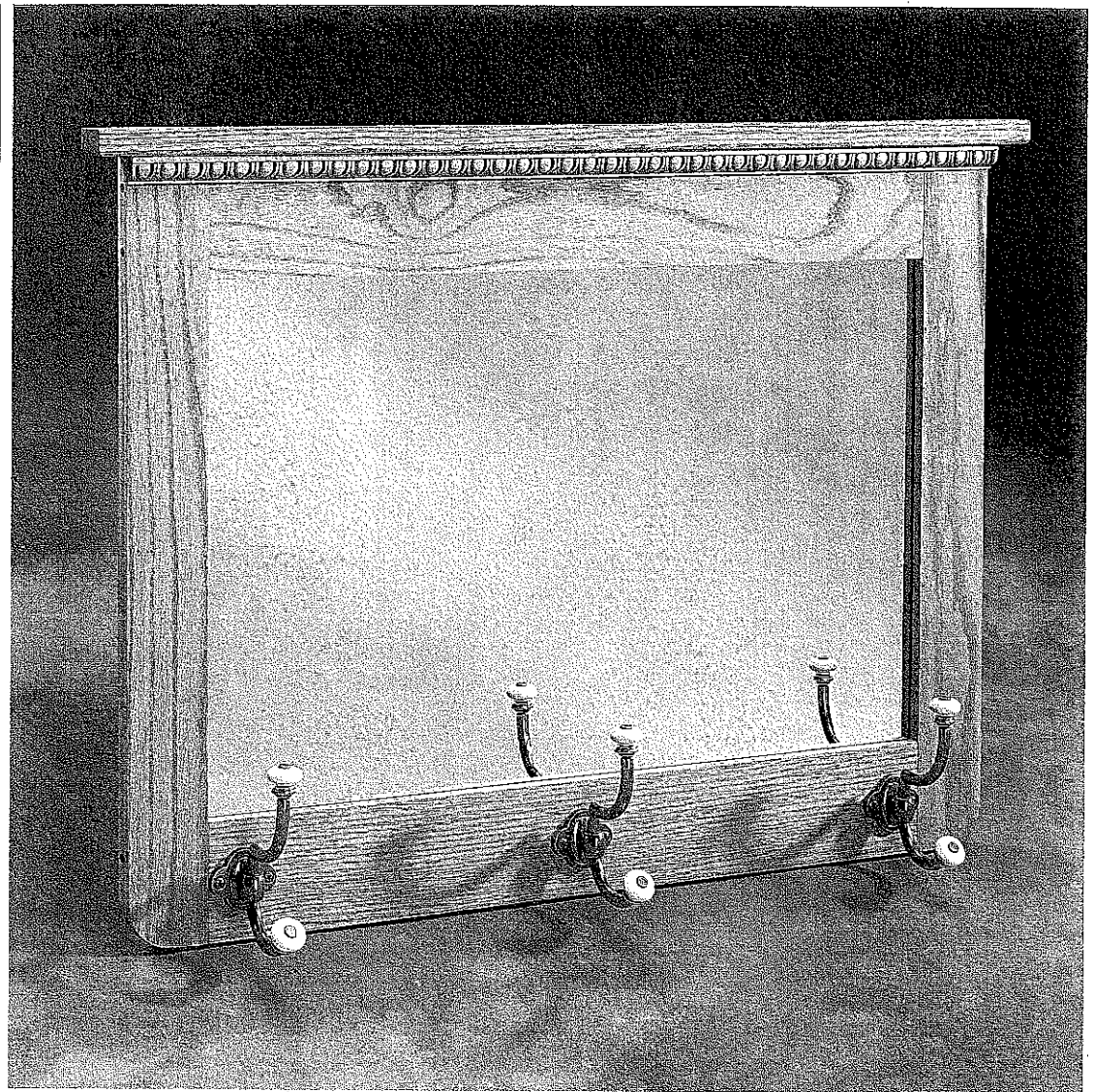
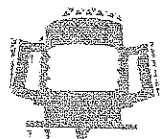


PROJECT
POWER TOOLS



Mirrored Coat Rack

Nothing welcomes visitors to your home like an elegant, finely crafted mirrored coat rack.

CONSTRUCTION MATERIALS

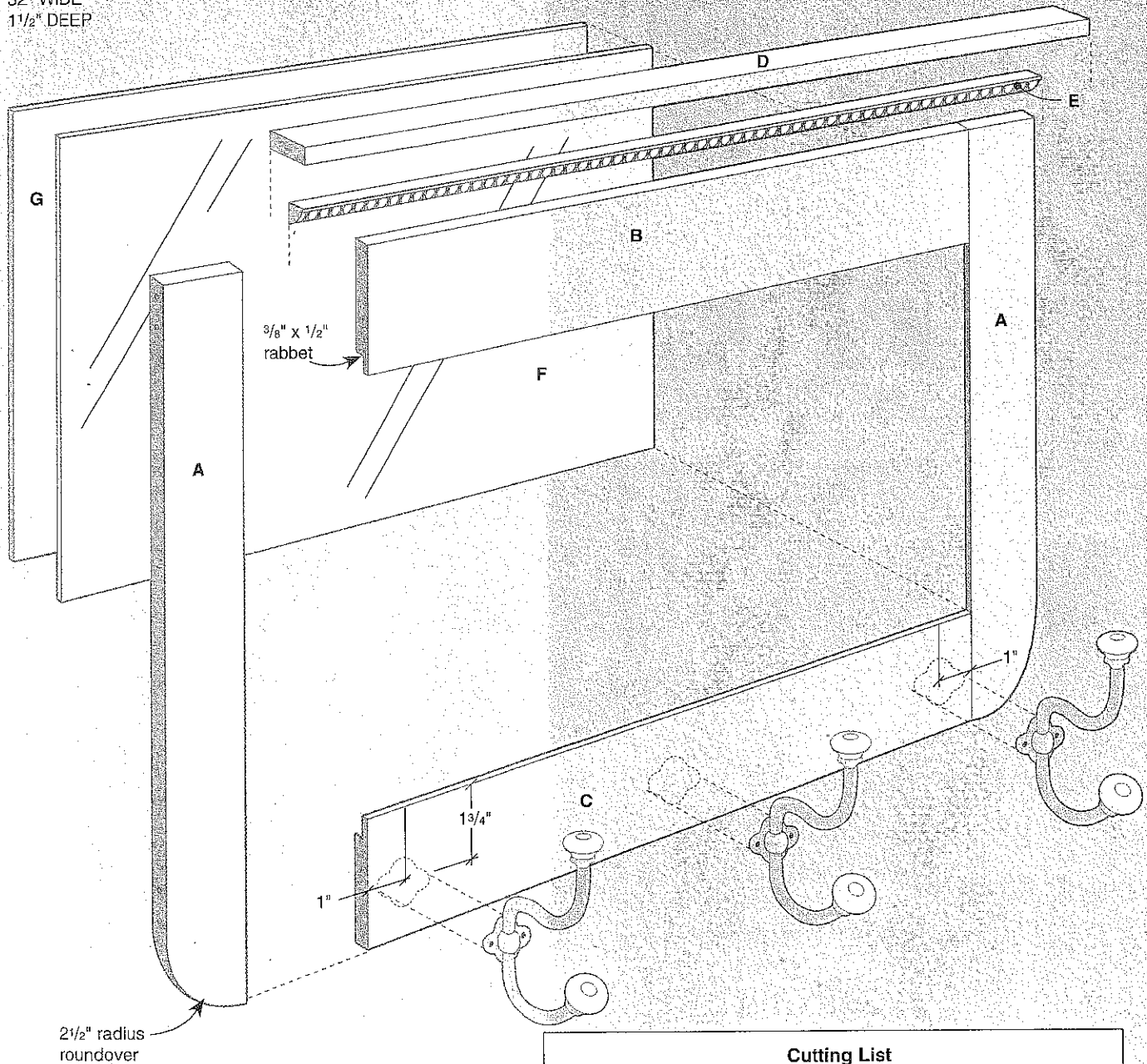
Quantity	Lumber
1	1 × 2" × 3' oak
1	1 × 3" × 4' oak
1	1 × 4" × 6' oak
1	½ × ¾" × 4' molding
1	¼" × 2 × 4' hardboard
1	½ × 15½ × 24¾" mirrored glass

An entryway or foyer seems naked without a coat rack and a mirror, and this simple oak project gives you both features in one striking package. The egg-and-dart beading at the top and the decorative porcelain and brass coat hooks provide just enough design interest to make the project elegant without overwhelm-

ing the essential simplicity of the look.

You can use inexpensive red oak to build your mirrored coat rack. Or, if you are willing to invest a little more money, use quarter-sawn white oak to create an item with the look of a true antique. For a special touch, have the edges of the mirror beveled.

OVERALL SIZE:
 22³/₄" HIGH
 32" WIDE
 1¹/₂" DEEP

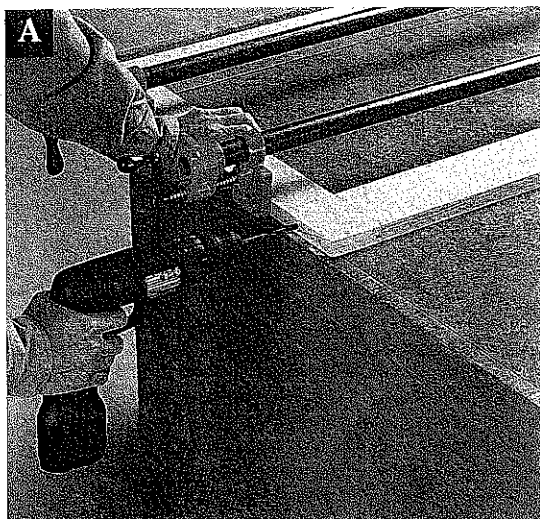


Cutting List

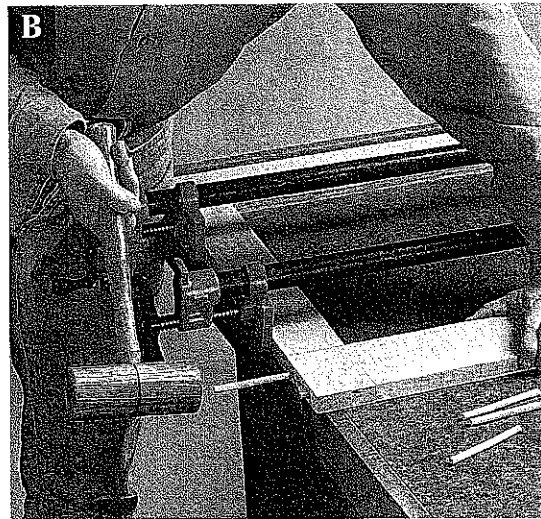
Key	Part	Dimension	Pcs.	Material
A	Stile	3/4 x 2 1/2 x 22"	2	Oak
B	Top rail	3/4 x 3 1/2 x 24"	1	Oak
C	Bottom rail	3/4 x 3 1/2 x 24"	1	Oak
D	Cap	3/4 x 1 1/2 x 32"	1	Oak
E	Molding	1/2 x 3/4 x 29"	1	Oak
F	Mirror	1/8 x 15 3/4 x 24 3/4"	1	Mirror
G	Mirror back	1/4 x 15 3/4 x 24 3/4"	1	Hardboard

Materials: #6 x 1 1/2" wood screws, 16-ga. x 1" brads, coat hooks with screws (3), 1/4 x 36" oak dowel, wood glue, finishing materials.

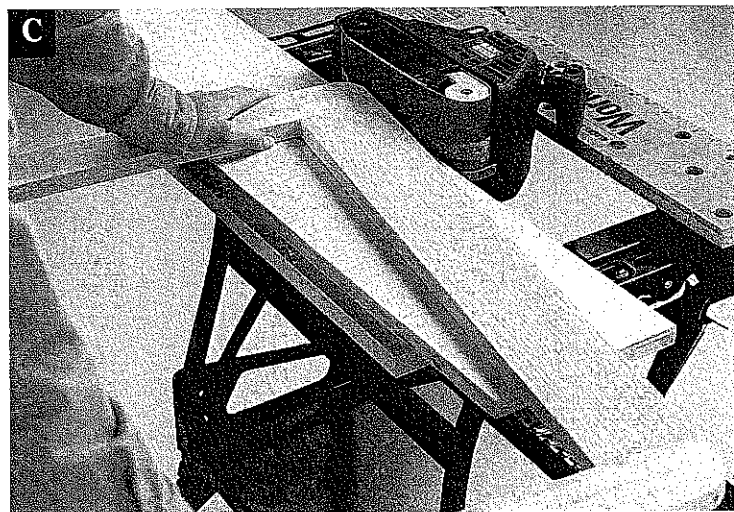
Note: Measurements reflect the actual size of dimension lumber.



Clamp the frame components together. Then, drill $3\frac{1}{2}$ "-deep guide holes for the through-dowel joints.



Drive glued 4"-long oak dowels into the guide holes to make the dowel joints.



Mount a belt sander to your worksurface, and use it to smooth the roundover cuts on the frame.

Directions: Mirrored Coat Rack

MAKE THE MIRROR FRAME.

1. Cut the stiles (A) to length. Cut the top rail (B) and bottom rail (C) to length.

TIP

Through-dowel joints are the easiest dowel joints to make—all you need are a good bar or pipe clamp and the ability to drill a reasonably straight guide hole. The visible dowel ends at the joints contribute to the traditional design of the project.

2. Lay the rails between the stiles on your worksurface to form a frame. Square the frame. Then, use a bar or pipe clamp to hold it together.
3. Through-dowel joints hold the frame together. To make them, drill two evenly spaced $\frac{1}{4}$ "-dia. \times $3\frac{1}{2}$ "-deep guide holes at each joint, drilling through the stiles and into the rails (photo A). Cut eight $\frac{1}{4}$ "-dia. \times 4"-long oak dowels. Unclamp the frame assembly, and squirt a little glue into each guide hole. Coat each dowel with a

light layer of glue. Drive a dowel into each guide hole, using a wood mallet so you don't break the dowels (photo B).

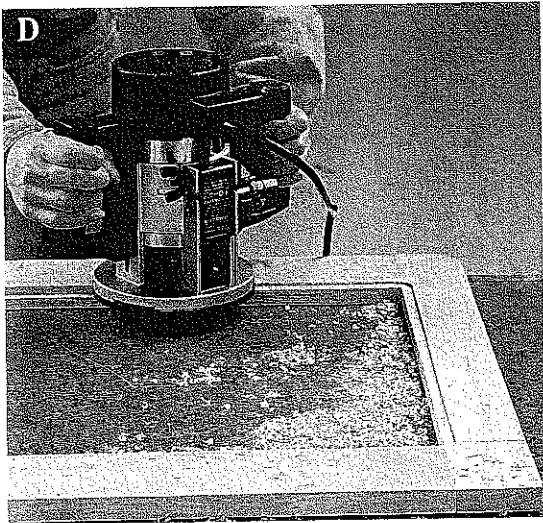
4. When all joints are made, clamp the frame assembly together. Once the glue has dried, remove the clamps, and trim off the ends of the dowels with a backsaw. Sand them flush with the surface, and scrape off excess glue.

ROUND OVER THE FRAME ENDS.

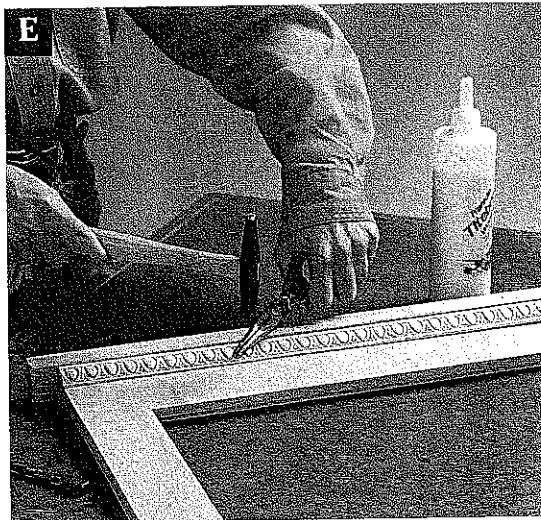
1. On the bottom end of each stile, draw an arc with a $2\frac{1}{2}$ " radius to mark the decorative roundovers. Cut along the arc line, using a jig saw.
2. Smooth the cut with a belt sander mounted to your worksurface (photo C).

DRILL MOUNTING HOLES AND CUT THE MIRROR RECESS.

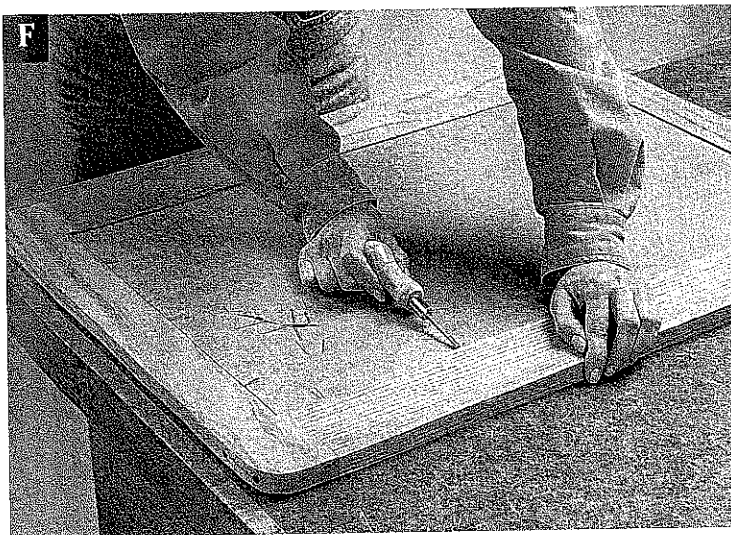
1. Drill $\frac{1}{8}$ " holes through the fronts of the stiles, 6" down from the top, so you can attach the rack to a wall. With a counterbore bit, drill $\frac{3}{8}$ "-dia. \times $\frac{1}{4}$ "-deep counterbores for oak plugs to cover the screw heads after you



D Use a router with a $\frac{3}{8}$ " rabbeting bit to cut a recess for the mirror in the frame back.



E Center egg-and-dart trim molding under the cap, and attach it with glue and brads.



F Install the mirror and mirror back. Then, secure them to the frame with brads, using a brad pusher.

hang the coat rack.

2. Cut a groove around the back inside edges of the frame to make a recess for the mirror and back. The easiest way to cut this kind of groove (called a rabbet) is with a router and a $\frac{3}{8}$ " rabbeting bit. Set the cutting depth of the router to $\frac{3}{8}$ ", then trim around the back inside edges of the frame (**photo D**). Reset the router depth to $\frac{1}{2}$ ", and make another pass around the edges to complete the rabbet. Square the grooves at the corners with a wood chisel.

INSTALL THE CAP AND MOLDING.

- 1.** Cut the cap (D) to length.
- 2.** Drill $\frac{3}{32}$ " pilot holes through the cap and into the top rail. Counterbore the holes $\frac{1}{4}$ " deep, using a $\frac{3}{8}$ " counterbore bit. Attach the cap flush with the back edge of the rail, using glue and $1\frac{1}{2}$ " wood screws. The cap overhangs the stiles $1\frac{1}{2}$ " on each end.
- 3.** Cut a piece of egg-and-dart style molding (E) to length. Sand a slight bevel at each end.
- 4.** Attach the molding flush against the underside of the

cap, centered side to side, using glue and 1" brads driven with a tack hammer (**photo E**). Drill $\frac{1}{16}$ " pilot holes through the molding to prevent splitting. Set the nail heads, using a nail set.

APPLY FINISHING TOUCHES AND INSTALL THE MIRROR.

1. Sand all sharp edges on the frame. Fill the screw holes with oak plugs, and sand them flush with the surface. Apply a finish. When it's dry, install the coat hooks (see *Diagram*, page 15).

2. Have the mirrored glass cut to size at a glass store. Set the glass into the rabbet in the frame. Cut $\frac{1}{4}$ "-thick hardboard to make the mirror back (G), and install it behind the mirror. Secure the mirror and mirror back by driving 1" brads into the edges of the frame with a brad pusher (**photo F**).

3. Hang the coat rack (see *Tip*, above). Fill the mounting screw holes with oak plugs. Sand them flush with the surface and touch up the area with finish.

TIP

Try to hit a wall stud with the mounting screws when hanging heavy objects on a wall. Use toggle bolts to mount where no studs are present.