

DRY SINK

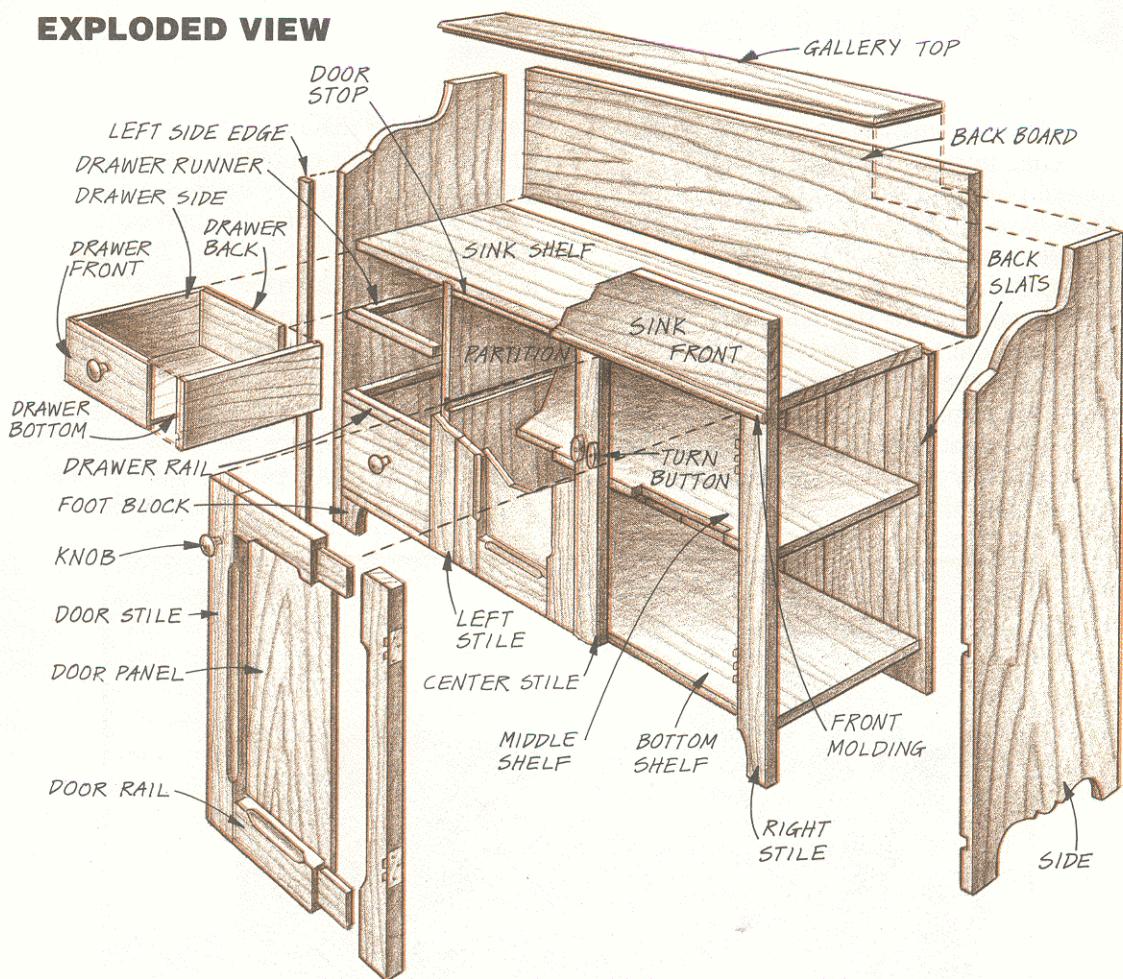
Once common in country homes, dry sinks became obsolete with the spread of indoor plumbing. Still, dry sinks have a charm about them, and they are ideal as a place for houseplants. The example shown here has both shelving and drawers below the sink itself, with doors in front of the shelving. The gallery above the sink provides additional space for display.

Although the design is elaborate for a country dry sink, the construction is simple. The through mortises in the door

frames can be made on the drill press. The drawers are rabbeted and nailed together. The carcase is essentially a box with two ends, a partition, and three shelves, all dadoed together. The facing is nailed to this carcase.

The original is made of white pine with poplar drawer sides. Most of the parts are $\frac{3}{4}$ inch thick; have your supplier plane stock for all of the thinner parts. You can replace the solid wood back, shelves, door panels, and drawer bottoms with plywood if you prefer.



EXPLODED VIEW

1 Select the stock and cut the parts. Cut the carcase parts to the dimensions given in the Cutting List. Don't cut the door or drawer parts until after the carcase is assembled. Then if necessary you can adjust the dimensions to fit the openings. Edge-glue stock as necessary to get sufficient width. See page 6 for more on edge-gluing.

2 Rout shelf dadoes in the sides and partition. Lay out the shelf dadoes on the inside of each side, and on the right side of the partition. The dimensions are given in the *Side View*. Note in the *Front View* that three shelves join the right side but only two join the left side. The partition requires a dado only for the middle shelf as shown

CUTTING LIST

Part

Part	Dimensions
Sides (2)	$\frac{3}{4}'' \times 18\frac{5}{8}'' \times 38\frac{3}{4}''$
Partition	$\frac{3}{4}'' \times 18\frac{5}{8}'' \times 22\frac{1}{8}''$
Sink shelf	$\frac{3}{4}'' \times 18\frac{5}{8}'' \times 48\frac{3}{8}''$
Bottom shelf	$\frac{3}{4}'' \times 18\frac{5}{8}'' \times 48\frac{3}{8}''$
Middle shelf	$\frac{3}{4}'' \times 18\frac{5}{8}'' \times 37''$
Door stop	$\frac{3}{8}'' \times \frac{3}{4}'' \times 36\frac{3}{8}''$
Sink front	$\frac{3}{4}'' \times 6\frac{7}{8}'' \times 49\frac{1}{4}''$
Drawer rails (2)	$\frac{3}{4}'' \times 1\frac{13}{16}'' \times 11\frac{5}{8}''$
Drawer rail	$\frac{3}{4}'' \times 1'' \times 10\frac{5}{8}''$
Left stile	$\frac{3}{4}'' \times 2\frac{7}{8}'' \times 22\frac{1}{2}''$
Left side edge	$\frac{3}{4}'' \times 1\frac{13}{16}'' \times 25\frac{1}{2}''$
Right stile	$\frac{3}{4}'' \times 2\frac{7}{8}'' \times 25\frac{1}{2}''$
Center stile	$\frac{3}{4}'' \times 2\frac{7}{8}'' \times 22\frac{3}{4}''$
Back board	$\frac{3}{4}'' \times 13'' \times 49\frac{1}{4}''$
Back slats*	$\frac{1}{2}'' \times \text{random width} \times 25\frac{3}{4}''$
Gallery top	$\frac{3}{4}'' \times 6\frac{3}{4}'' \times 50\frac{3}{4}''$
Drawer runners (4)	$1\frac{3}{16}'' \times \frac{3}{4}'' \times 18''$
Foot block	$1\frac{1}{8}'' \times 1\frac{3}{4}'' \times 3''$
Front molding	$\frac{3}{8}'' \times \frac{7}{8}'' \times 49\frac{1}{4}''$
Door stiles (4)	$\frac{3}{4}'' \times 2\frac{7}{8}'' \times 22\frac{7}{16}''$
Door rails (4)	$\frac{3}{4}'' \times 2\frac{7}{8}'' \times 14\frac{1}{2}''$
Door panels (2)	$\frac{3}{8}'' \times 10'' \times 18''$
Turn buttons (2)	$\frac{1}{2}'' \times \frac{7}{8}'' \times 2\frac{1}{4}''$
Drawer front	$\frac{3}{4}'' \times 5\frac{3}{8}'' \times 10\frac{1}{2}''$
Drawer sides (2)	$\frac{1}{2}'' \times 5\frac{3}{8}'' \times 19\frac{1}{8}''$
Drawer back	$\frac{1}{2}'' \times 4\frac{3}{4}'' \times 10''$
Drawer front	$\frac{3}{4}'' \times 6\frac{5}{8}'' \times 10\frac{1}{2}''$
Drawer sides (2)	$\frac{1}{2}'' \times 6\frac{5}{8}'' \times 19\frac{1}{8}''$
Drawer back	$\frac{1}{2}'' \times 6'' \times 10''$
Drawer front	$\frac{3}{4}'' \times 7\frac{1}{2}'' \times 10\frac{1}{2}''$
Drawer sides (2)	$\frac{1}{2}'' \times 7\frac{1}{2}'' \times 19\frac{1}{8}''$
Drawer back	$\frac{1}{2}'' \times 6\frac{7}{8}'' \times 10''$
Drawer bottoms (3)	$\frac{7}{16}'' \times 18\frac{7}{8}'' \times 9\frac{15}{16}''$
Knobs (5)	$1\frac{1}{2}'' \text{ dia. } \times \frac{3}{4}''$

Hardware

6d cut finish nails. Available from many building-supply stores and from Tremont Nail Company, P.O. Box 111, Wareham, MA 02571; (508) 295-0038. Item #CE-6.

16 flathead wood screws, #8 × $\frac{3}{4}''$

2 pair butt hinges with screws, 2" × 1 $\frac{1}{2}$ ", open

2 roundhead wood screws with washers, #8 × 1 $\frac{1}{2}$ "

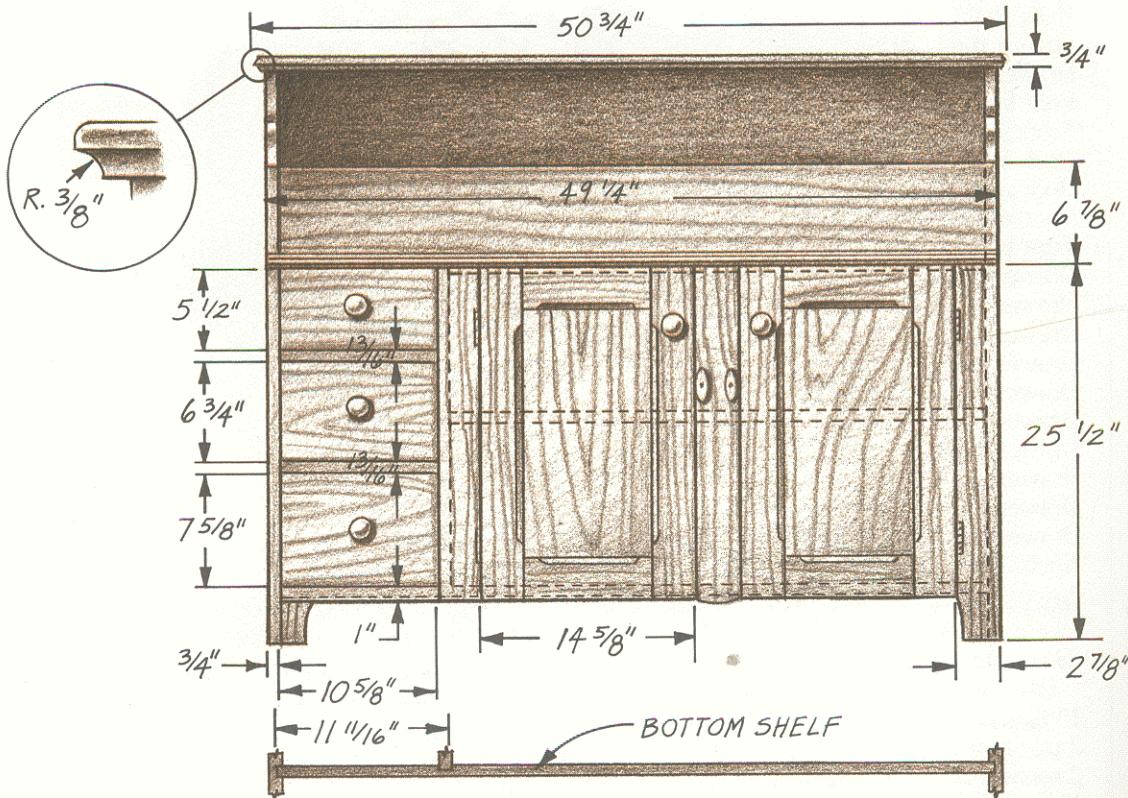
1" brads

*Cut to length during assembly.

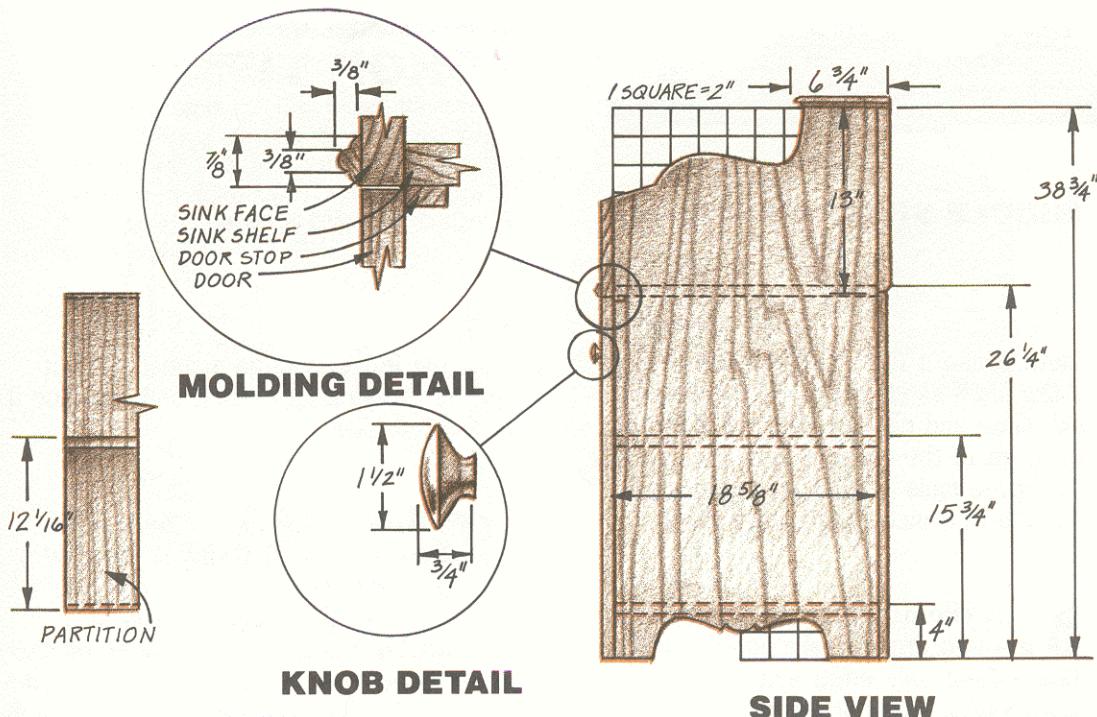
in the *Front View*. Rout the dadoes $\frac{5}{16}$ inch deep with a $\frac{3}{4}$ -inch-diameter straight bit. Guide the router with a straightedge clamped across the stock. A simple shop-made T-square is handy for this kind of job.

3 **Rout the partition dadoes in the sink shelf and bottom shelf.** Lay out and rout these two dadoes the same way you did the shelf dadoes. These, too, are $\frac{3}{4}$ inch wide $\times \frac{5}{16}$ inch deep.

4 **Cut out the shaped ends of the sides.** Draw the shapes shown in the *Side View* onto one of the sides. Since the shape at the foot is symmetrical about its centerline, you may find it easier to draw half of it on paper and trace it onto the stock. Clamp the two sides together and saw them both at once with a coping saw or portable jigsaw. Clean up the sawn edges with files and sandpaper. A drum sander in a portable drill can help remove saw marks quickly.



FRONT VIEW



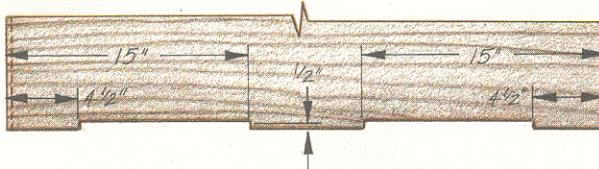
5 Notch the middle shelf for the door panels. Unlike most door panels, these are simply screwed to the backs of the frames. Since this makes them proud of the frame surface, the middle shelf must be notched to make space for them. Saw out the notches with a coping saw and clean up the sawn edge with files and sandpaper. The necessary dimensions are given in the *Middle Shelf Detail*.

6 Glue the carcase together. Sand the sides and shelves. Test each shelf in its dadoes to make certain they slide in easily. Glue and nail the partition into the sink and bottom shelves. Glue and nail the middle shelf into the parti-

tion. Finally, glue and nail the sides in place. Make certain the front edges of all the pieces are flush with each other. Use 6d cut finish nails about every 8 inches and drive them flush with the wood surface.

Measure diagonally from corner to corner across the face of the carcase. If the two diagonals are not of equal length, reposition the clamps or put a clamp across the long diagonal and tighten it until the diagonals measure the same. Sight across the face of the carcase to make certain it isn't twisted.

7 Attach the door stop and sink front. Glue and nail the door stop under the sink shelf in the door compart-



MIDDLE SHELF DETAIL

ment. Make it flush with the front edge of the shelf as shown in the *Molding Detail*. Glue and nail the sink front across the front of the carcase with 6d cut nails. Use three nails at each end and a nail every 6 to 8 inches along the shelf.

8 Cut the drawer rail joints. The top two drawer rails join the left stile and left side edge with mortise-and-tenon joints. The bottom drawer rail is simply glued and nailed to the bottom shelf. Lay out the mortises as shown in the *Drawer Detail*. Rout the mortises as explained in "Plunge-Routing Mortises" on page 18 and square the ends. Cut the tenons to match the mortises as explained in "Cutting Tenons" on page 60.

9 Attach the stiles to the carcase. Saw the foot curve on the bottom of the right stile with a coping saw. Radius the bottom of the center stile with a rasp. Sand the stiles, the left side edge, and the drawer rails. Glue and nail the stiles to the carcase with 6d nails. They should butt against the sink face. Nail them to the door stop at the top.

Glue the drawer rail tenons into their mortises in the left stile and then into the mortises in the left side edge.

SHOP TIP: Cut nails, even cut finish nails, have enough of a wedge shape to split the wood if they aren't correctly oriented. Turn the nails so their widest dimension is in the direction of the wood grain, not across it.

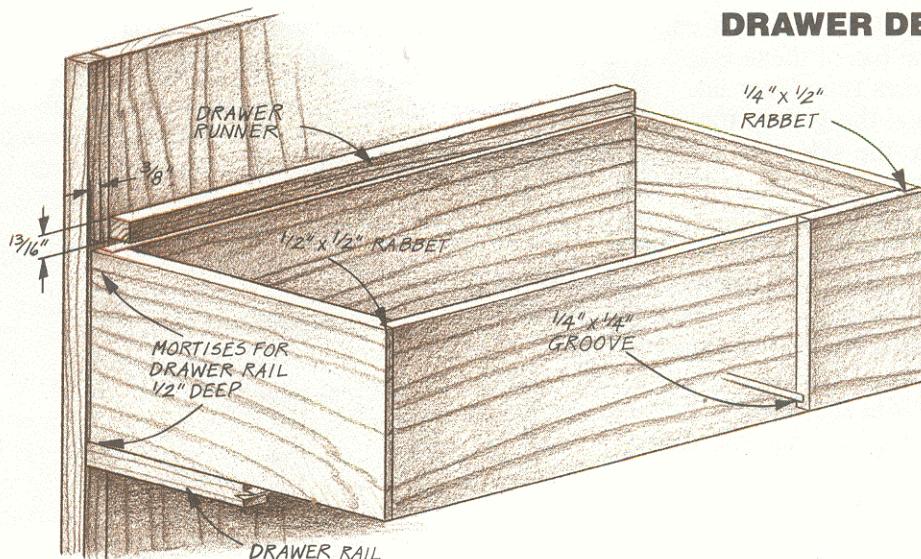
Butt the left side edge against the bottom of the sink face, then nail and glue it to the left side.

10 Attach the back board. The back of the dry sink is covered with one wide horizontal board at the top and vertical shiplapped slats at the bottom. Plane a $\frac{1}{4}$ -inch bevel on the lower edge of the horizontal back board as shown in the *Side View*. This leaves a $\frac{1}{2}$ -inch-thick edge that matches the

SHOP TIP: Always thoroughly clean up excess glue. Smeared glue should be wiped up immediately with a wet rag since it dries quickly.

Cleaning up beads of squeezed-out glue is different. If you wipe them up immediately, they smear along the joint. Wait 20 to 30 minutes for the glue to begin to set. Then scrape off the glue with an old chisel. The beads of glue will still be soft but will come off more cleanly. After scraping away the beads with the chisel, wipe the glue joint well with a wet rag to remove any remaining smears, then clean the chisel with the rag.

Keep one old chisel just for glue. It should be at least $\frac{3}{4}$ inch wide.

DRAWER DETAIL

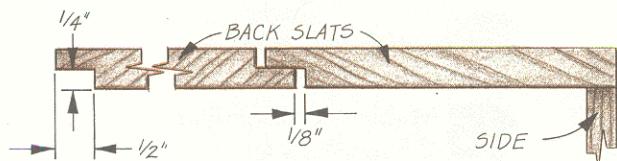
thickness of the back slats. Sand the inside surface of the back board, then nail it to the back of the dry sink with 6d nails. Make it flush with the top of the sides. Don't glue this board; it must be able to move with seasonal moisture changes.

11 Attach the back slats. Cut the shiplap joints between the random-width back slats with the router. Use the two widest slats at the sides. They get a rabbet (half a shiplap joint) on one edge only as shown in the *Shiplap Detail*. Make sure you cut the rabbets in the rest of the slats on opposite surfaces as shown in the drawing. Cut and fit the slats for the entire back before nailing any in place.

Lay the sink on its front, then position the slats on the back. Leave $\frac{1}{8}$ inch between adjoining slats. Trim the outside slats to adjust the overall fit.

Trace along the bottom of the bottom shelf to mark the length of the slats. Crosscut the middle slats to this length. Lay out feet on the two outer slats similar to the front feet shown in the *Front View* and saw them with a coping saw. When you're sure they all fit well, nail them in place.

12 Install the gallery top. Rout a $\frac{3}{8}$ -inch-radius cove on the edges of the gallery top as shown in the *Front View*, using a piloted coving bit. Rout the cove on the side edges, then the front

**SHIPLAP DETAIL**

edges, but not the back edge. Round-over the top of these edges with a $\frac{3}{8}$ -inch-radius roundover bit.

Sand the gallery top, then glue and nail it to the sides and back board with 6d nails.

13 Attach the drawer runners and foot block. Nail the drawer runners to the side and partition as shown in the *Drawer Detail*. Predrill the nail holes in the runners to minimize the hammering and glue the center 3 inches of each runner.

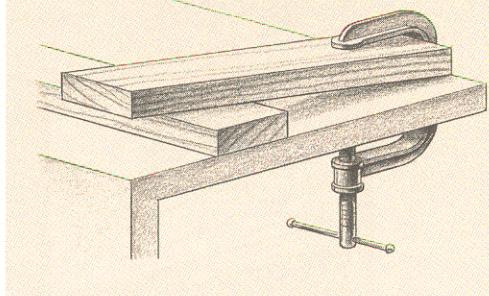
Saw the foot curve in the inside edge of the foot block with a coping saw, then glue and clamp the foot block to the left side edge as shown in the *Front View*.

14 Make and attach the front molding strip. This strip adds a bit of decoration and hides the nails across the sink front. A point-cutting roundover bit with a $\frac{3}{16}$ -inch radius will closely approximate the shape of the original molding as shown in the *Molding Detail*.

Shape the molding on the edge of a larger piece of wood, then saw it free. Mount the router in a router table to make the cuts. Glue and clamp it to the bottom edge of the sink face. A suggestion for clamping it is shown on this page.

15 Make the door frames. Lay out the mortises and tenons as shown in the *Door Detail*. These through mortises are too deep to cut with a plunge

SHOP TIP: Use ordinary C-clamps and scraps of stiff wood as shown to obtain greater reach than possible with the C-clamps alone.



router the way you mortised for the drawer rails. Instead, cut them by drilling a series of overlapping holes with a brad-point bit in the drill press, then cleaning up the mortise with a chisel. Cut the tenons as you cut the drawer rail tenons.

Rout the decorative cove cuts on the rails and stiles with the same cove bit you used for the gallery top. Sand the door frame parts and the panels. Glue and clamp the rails and stiles together on a flat surface, and check that the diagonals are of equal length.

16 Attach the panels. Sand the door panels. Drill and countersink shank holes for #8 screws in the door panels, three along each side and one centered top and bottom. Drill corresponding pilot holes in the door frames and screw the panels in place with #8 \times $\frac{3}{4}$ -inch screws.

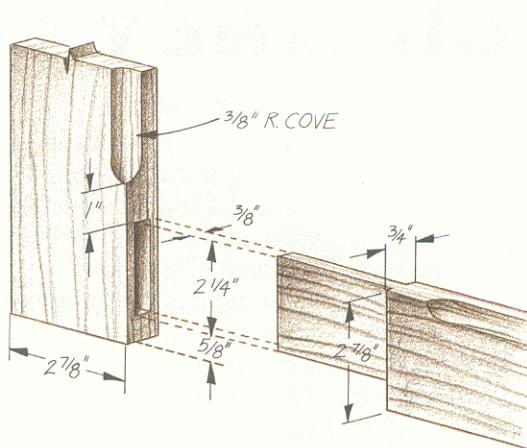
17 Hang the doors. Set the dry sink on its back to make it easier to fit the doors. Lay out the positions of the hinges on the cabinet and door stiles. Cut the hinge mortises with a sharp knife and chisel to a depth equal to the thickness of the hinge leaves. You can mark the depth of the mortises with a marking gauge. Drill pilot holes for the hinge screws and install the hinges.

The turn buttons, which hold the doors closed, are roughly made and are more attractive for it. Whittle or sand the buttons to a shape that pleases you. Drill screw shank holes in the centers and screw them to the center stile with #8 × 1½-inch roundhead wood screws. Use washers between the stile and turn buttons for easier operation.

18 Cut the drawer joinery. In the original, the drawer sides are nailed into rabbets in the drawer fronts and the backs are nailed into rabbets in the drawer sides as shown in the *Drawer Detail*. Rout the rabbets with a table-mounted router.

Rout the drawer bottom grooves in the drawer fronts and sides. If you're using solid wood for the drawer bottoms, hand plane a bevel on the edges of the bottoms so they will fit the grooves.

19 Assemble the drawers. Sand the inside surfaces of the drawer parts. Glue and nail the sides to the fronts and backs. Check that the assemblies are square, then slide the drawer bottoms into the grooves. Nail the drawer bottoms to the backs with a couple of 1-inch brads.



DOOR DETAIL

You can turn the drawer and door knobs on a lathe if you have one, or buy them at most hardware stores. The knobs on the original are shown in the *Knob Detail*. Assuming that you buy or turn knobs that attach with a screw, drill screw shank holes in the center of each drawer front and in the door stiles as shown in the *Front View*. Install the knobs on the drawers and doors.

20 Complete the dry sink. Soften any hard edges on the dry sink with sandpaper. Round-over the top edge of the sink face board with a block plane and sand it smooth.

Remove the doors and drawers to apply the finish. Dust the dry sink, first with a brush and then with a tack cloth. Stain the dry sink if you wish. When the stain has thoroughly dried, apply a penetrating oil (such as tung oil), varnish, or polyurethane.