



Wine Cabinet

Our wine rack doubles as a serving bar. It has storage for bottles below, and accommodates lots of glasses above. The bottom opens for extra storage, and the tile surface serves as an instant bar, saving those constant treks to the kitchen for mixing drinks.



Materials

- 2 4 x 8-foot sheets of $\frac{3}{4}$ " plywood
- 5 linear feet of 1 x 1 pine
- 22 linear feet of 1 x 3 pine
- 42 linear feet of 1 x 4 pine
- 8 linear feet of 3-1/4 inch-wide crown molding
- 8 linear feet of 3/4 inch-wide cove molding
- 1 4 x 4-foot sheet of $\frac{3}{8}$ " plywood
- Ceramic tile, enough to cover 3.5 square feet
- Small container of ceramic tile adhesive
- 7-lb. bag of sanded tile grout in the color of your choice
- Grout Sealer

Hardware

- 120 1-5/8" wood screws
- 6 1-1/2" 4d finish nails
- 55 1" drywall screws
- 15 1-1/4" drywall screws
- 30 1" (2d) finishing nails
- 8 cabinet door hinges
- 4 drawer pulls
- 4 magnetic door catches

Special Tools

- Trowel for applying tile adhesive
- Rubber tile float
- Bar clamps
- Miters

Notes on Materials

Most tiles sold at building-supply stores are now "self-spacing"; they come with small projections on their edges so that when you lay the tiles out, the grout lines between them will be even.

Because individual tile manufacturers determine the spacing, we recommend that you buy enough tiles to cover the square foot area specified. If the tiles do not fit exactly, you will also need to purchase a tile cutter to cut the necessary tiles at the back and one Side of the Shelf.

Cutting list

Code	Description	Qty.	Material	Dimensions
A	Side	2	$\frac{3}{4}$ " plywood	63-1/4" x 15-1/4"
B	Top/Bottom	2	$\frac{3}{4}$ " plywood	33-3/8" x 15-1/4"

C	Shelf	3	3/4"plywood	31-7/8" x 15-1/4"
D	Vertical Trim	2	1 x 4 pine	64-3/4" long
E	Horizontal Trim	3	1 x 4 pine	26-3/8" long
F	Horizontal Wine Trim	2	1 x 4 pine	26-3/8" long
G	Ledge	1	1 x 4 pine	31-7/8" long
H	Upper Panel	2	3/8"plywood	19-3/4" x 11-3/8"
I	Upper Vertical Trim	4	1 x 3 pine	21-3/4" long
J	Upper Horizontal Trim	4	1 x 3 pine	8-3/4" long
K	Lower Panel	2	3/8"plywood	15-1/4" x 11-3/8"
L	Lower Vertical Trim	4	1 x 3 pine	17-1/4" long
M	Lower Horizontal Trim	4	1 x 3 pine	8-3/4" long
N	Wine Bottle Support	2	1 x 4 pine	31-7/8" long
O	Side Base Support	2	1 x 4 pine	17-5/8" long
P	Front Base Support	1	1 x 4 pine	35-1/4" long
Q	Stem Supports	5	1 x 4 pine	10" long
R	Connectors	5	1 x 1 pine	10" long
S	Frame Supports	2	1 x 4 pine	31" long
T	Top Molding		3-1/4"-wide crown molding	cut to fit
U	Base Molding		3/4"-wide cove molding	cut to fit

Constructing the Cabinet

1. Cut two Sides (A) from 3/4"plywood, each measuring 63-1/4 x 15-1/4 inches.
2. Cut two Top/Bottoms (B) from 3/4"plywood, each measuring 33-3/8 x 15-1/4 inches.
3. Place the two Sides (A) on edge on a level surface parallel to each other 31-7/8 inches apart. Fit the Top/Bottoms (B) over the ends of the Sides (A) to form a rectangle, measuring 64-3/4 x 33-3/8 inches as shown in *Figure 1*. Apply glue to the meeting surfaces, and screw through the Top/Bottoms (B) into the edge of the Sides (A). Use 1-5/8"wood screws spaced about every five inches.
4. Cut three shelves (C) from 3/4"plywood, each measuring 31-7/8 x 15-1/4 inches. Place the first Shelf (C) 24 inches below the top (B), as shown in *Figure 1*. Screw through the Sides (A) into the edges of the Shelf (C). Use 1-5/8"wood screws about every five inches.
5. Repeat Step 4 to attach the second Shelf (C) 41-1/2 inches below the Top (B).
6. Repeat Step 4 to attach the third Shelf (C) 2 inches above the Bottom (B).

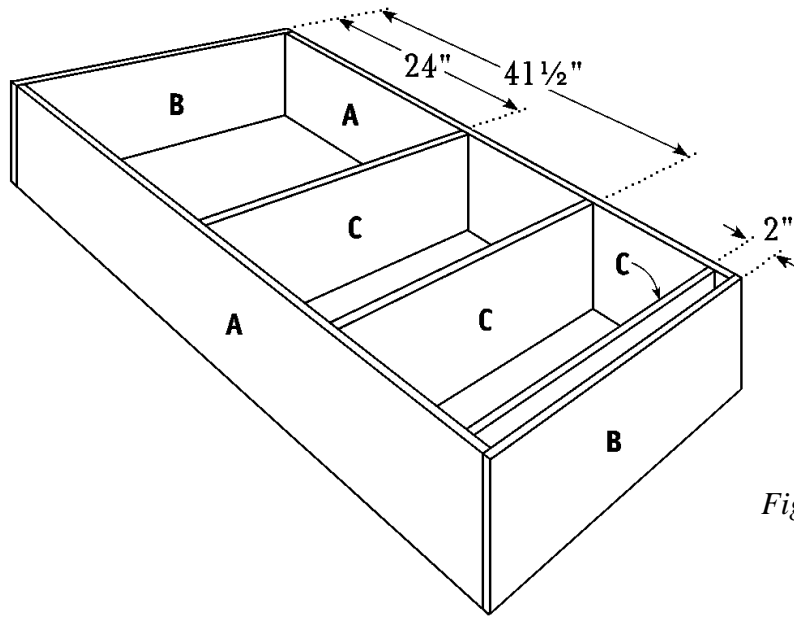


Figure 1

Adding the Front Trim and Ledge

1. Cut two Vertical Trims (D) from 1 x 4 pine, each measuring 64-3/4 inches. Apply glue to the meeting surfaces, and place one Vertical Trim (D) over the edge of one Side (A). Screw through the Vertical Trim (D) into the edge of Side (A) as shown in *Figure 2*. Use 1-5/8" wood screws about every 5 inches.

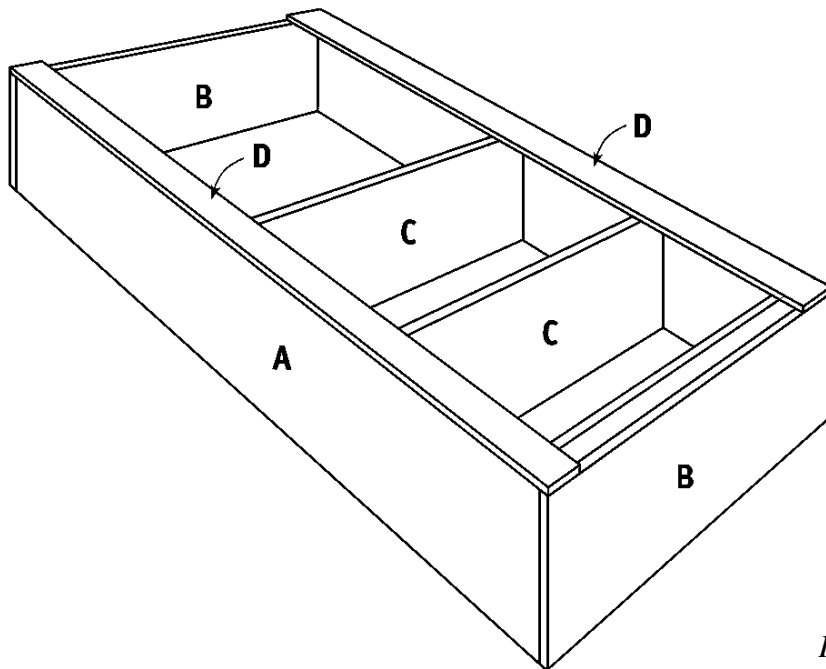


Figure 2

2. Repeat Step 1 to attach the remaining Vertical Trim (D) to the opposing Side (A).
3. Cut three Horizontal Trims (E) from 1 x 4 pine, each measuring 26-3/8 inches.
4. Apply glue to the meeting surfaces, and attach one Horizontal Trim (E) over the edge of the Top (B), as shown in *Figure 3*. Screw through the Horizontal Trim (E) into the edge of the top (B). Use 1-5/8" wood screws spaced every 5 inches.

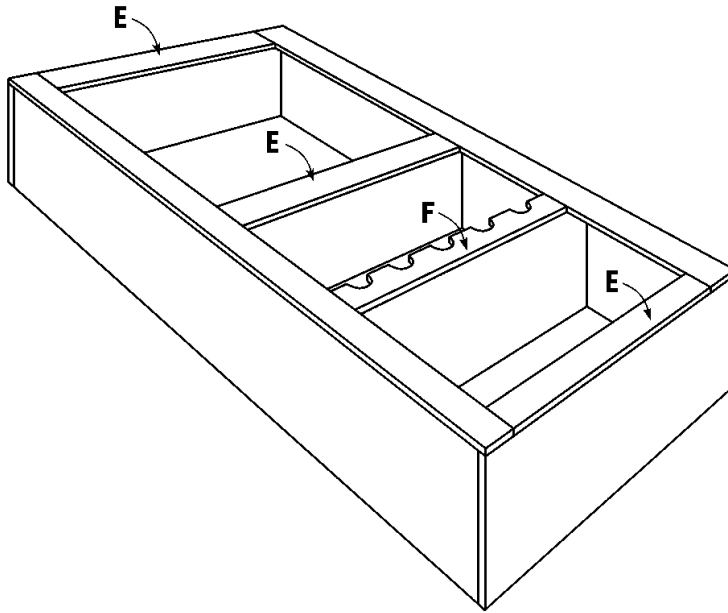


Figure 3

5. Repeat Step 4 to attach the remaining two Horizontal Trims (E) flush with the upper edge of the Shelf (C) and flush with the lower edge of the bottom (B). See *Figure 3*.
6. Cut two Horizontal Wine Trims (F) from 1 x 4 pine, each measuring 26-3/8 inches.

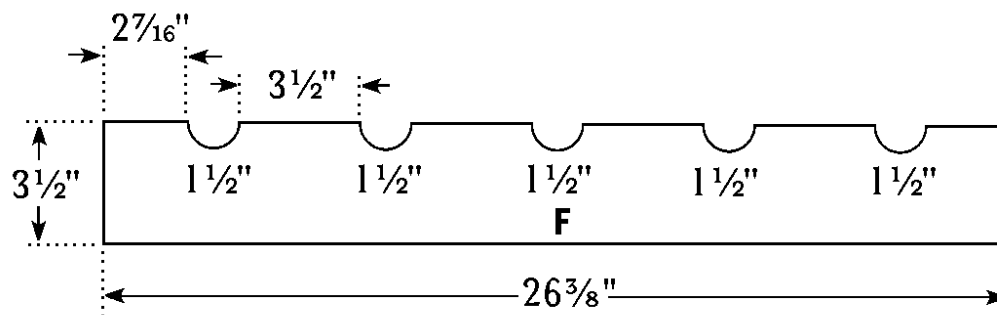


Figure 4

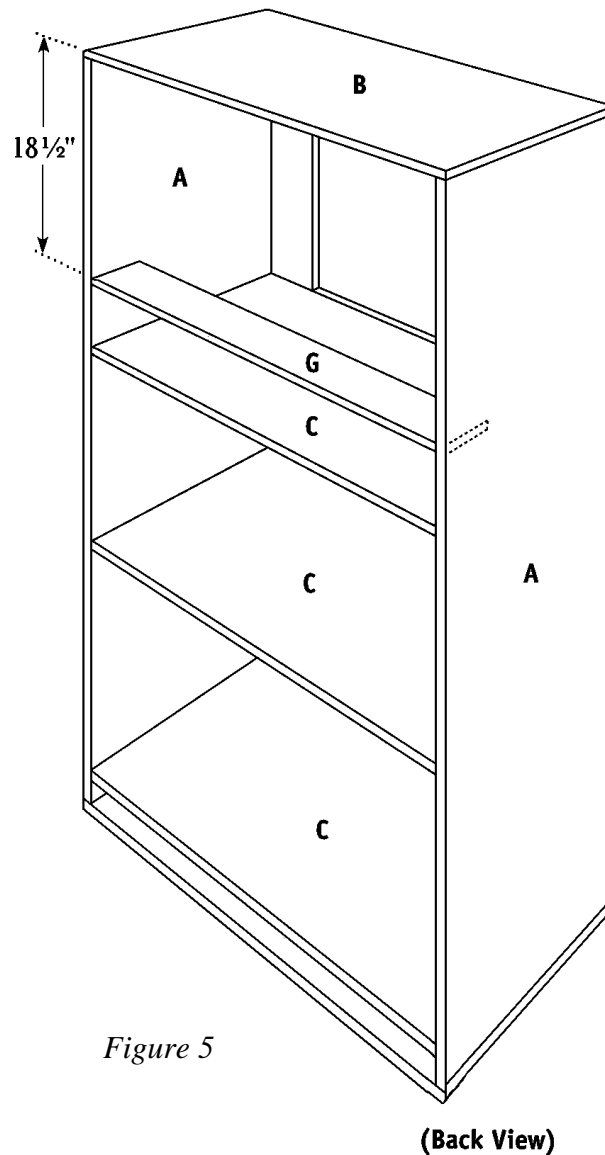
7. Referring to *Figure 4*, mark and cut the semi-circular cuts that will hold the tops of the wine bottles. Apply glue to the meeting surfaces, and attach one of the Horizontal Wine Trims

(F) on the edge of the lower Shelf (C), as shown in *Figure 3*. Use 1-5/8" wood screws spaced about every 5 inches.

8. Repeat Step 7 to attach the second Horizontal Wine Trim (F) 5-1/2 inches above the first Horizontal Wine Trim (F). Apply glue to the meeting surfaces, and fit the second Horizontal Wine Trim (F) between the two Vertical Trims (D). Toenail through the Horizontal Wine Trim (F) into each of the Vertical Trims (D). Use 1-1/2" finishing nails.
9. Cut one Ledge (G) from 1 x 4 pine measuring 31-7/8 inches. Place the Ledge (G) between the two Sides (A) 18-1/2 inches below the Top (B) as shown in *Figure 5*. Use 1-5/8" wood screws to attach.

Making the Door Panels

1. Cut two Upper Panels (H) from 3/8" plywood, each measuring 19-3/4 x 11-3/8 inches.
2. Cut four Upper Vertical Trims (I) from 1 x 3 pine, each measuring 21-3/4 inches.
3. Cut four Upper Horizontal Trims (J) from 1 x 3 pine, each measuring 8-3/4 inches long
4. Position two of the Upper Vertical Trims (I) face down on a level surface, parallel to each other and 8-3/4 inches apart. Position two of the Upper Horizontal Trims (J) between the Upper Vertical Door Trims (I), as shown in *Figure 6*. Apply glue on the meeting surfaces. Hold the trims in place temporarily using bar clamps.
5. Center one Upper Panel (H) over the trims (I and J) as shown in *Figure 7*. Apply glue to the meeting surfaces, and screw through the Upper Panel (H) into horizontal and Vertical Trims (I and J) using 1" drywood screws spaced every



five inches.

6. Repeat Steps 4 and 5 to create the second door panel.
7. Cut two Lower Panels (K) from $\frac{3}{8}$ " plywood, each measuring $15\frac{1}{4} \times 11\frac{3}{8}$.
8. Cut four Lower Vertical Trims (L) for the door from 1 x 3 pine, each measuring $17\frac{1}{4}$ inches.
9. Cut four Lower Horizontal Trims (M) for the door from 1 x 3 pine, each measuring $8\frac{3}{4}$ inches.
10. Position two of the Lower Vertical Trims (L) face down on a level surface parallel to each other and $8\frac{3}{4}$ inches apart. Position two of the Lower Horizontal Trims (M) between the Lower Vertical Trims (I) $12\frac{1}{4}$ inches apart, as shown in *Figure 6*. Apply glue to the meeting surfaces, and use bar clamps to hold the horizontal and vertical door trims (L and M) in place temporarily.

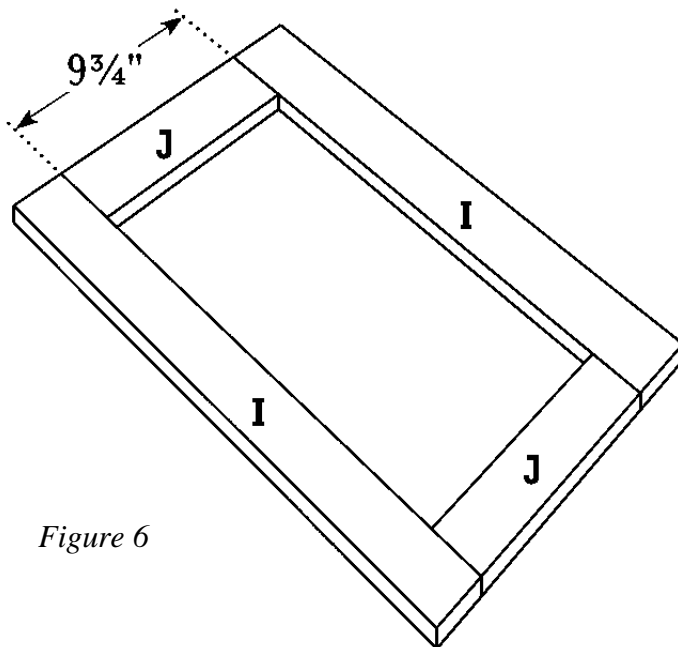


Figure 6

11. Center one Lower Panel (K) face down over the door trims (L and M), as you did for the Upper Trims (I and J). See *Figure 7*. Apply glue to the meeting surfaces and screw through the edges of the Lower Panel (K) into the Lower Vertical and Horizontal Trims (L and M) using 1" drywall screws spaced every 5 inches.
12. Repeat Steps 10 and 11 to construct another lower door.

Adding the Bottle Supports

1. Cut two Wine Bottle Supports (N) from 1 x 4 pine, each measuring $31\frac{7}{8}$ inches. Referring to *Figure 8*, cut five semi-circular cutouts to accommodate the bottom of the wine bottles. Each cutout has a radius of $4\frac{1}{4}$ inches. (Coincidentally, the cutout is the same diameter of a one-quart paint can). Use $1\frac{5}{8}$ " wood screws to attach the Wine Bottle Supports (N) level with and six inches behind the Horizontal Wine Trims (F). Screw

through the Sides (A) into the end of the Wine Bottle Supports (N), using two screws for each end.

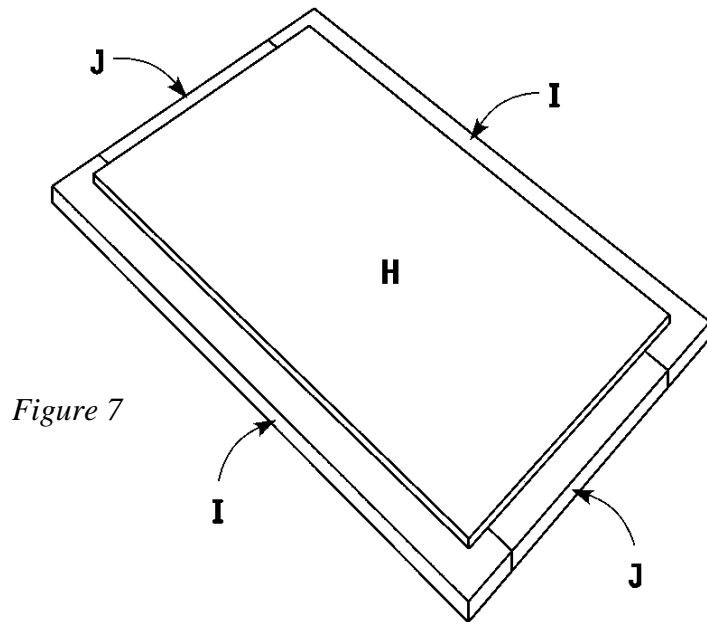


Figure 7

2. Cut two Side Base Supports (O) from 1 x 4 pine, each measuring 17-5/8 inches.
3. Miter one end of each of the base supports (O) at a 45-degree angle, as shown in *Figure 9*.
4. Cut one Front Base Support (P) from 1 x 4 pine, measuring 35-1/4 inches. Miter the ends of the Front Base Support (P) at opposing 45-degree angles, as shown in *Figure 9*.

5. Apply glue to the meeting surfaces and attach the Base Supports (O and P) to the bottom (B), as shown in *Figure 10*. Use 1-5/8" wood screws spaced about 5 inches apart.

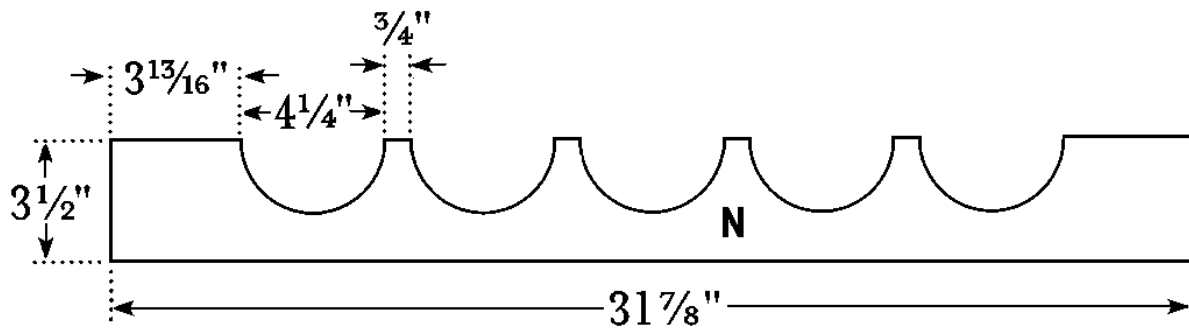


Figure 8

Adding the Glass Holders

1. Cut five Stem Supports (Q) from 1 x 4 pine, each measuring 10 inches.
2. Cut five Connectors (R) from 1 x 1 pine, each measuring 10 inches.
3. Cut two Frame Supports (S) from 1 x 4 pine, each measuring 31 inches.
4. Apply glue to the meeting surfaces, and center one Connector (R) lengthwise over one Stem

Support (Q), as shown in *Figure 11*. Nail through the Connector (R) into the Stem Support (Q) using four evenly spaced 1-5/8" wood nails.

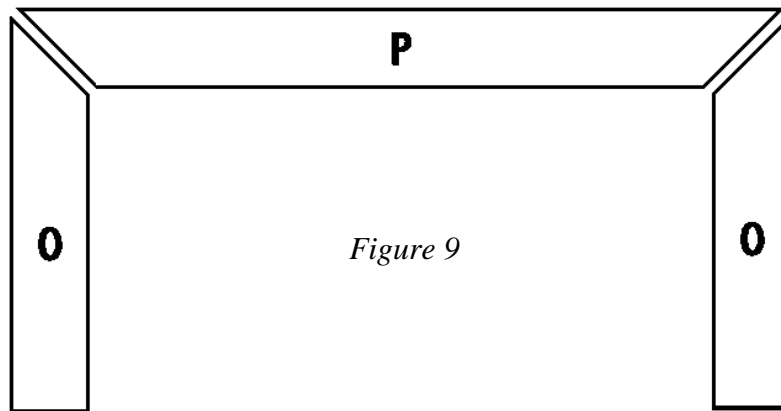


Figure 9

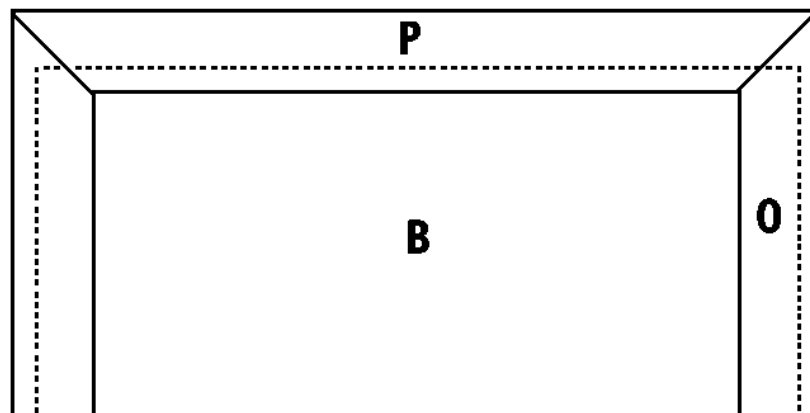


Figure 10

5. Repeat Step 4 four more times to attach the remaining Connectors (R) to the remaining Stem Supports (Q).
6. Place the five Connector/Support assemblies on a level surface, parallel to each other and 1 inch apart. Center the two Frame Supports (S) over the five connector/support assemblies, as shown in *Figure 12*. Note that the Frame Supports (S) will overhang the connector/support assemblies by 4-3/4 inches on each side.
7. Center the entire glass holder assembly inside the cabinet under the Top (B), flush with the back edge of the cabinet. Apply glue to the meeting surfaces, and screw through the two Frame Supports (S) into the Top (B). Use 1-1/4" drywall screws spaced about 5 inches apart.

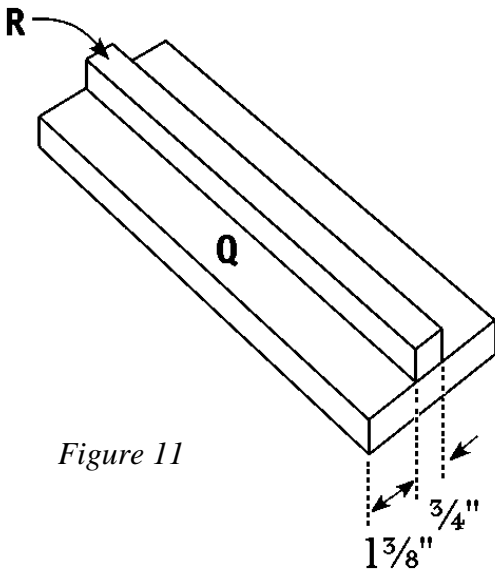
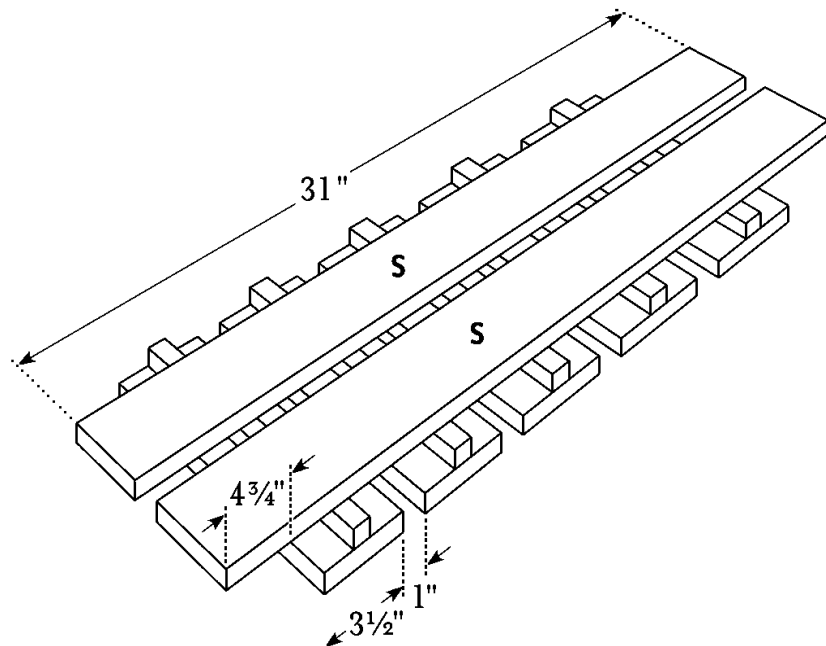


Figure 11

Installing the Doors

1. Place the completed cabinet on its back and fit the four cabinet doors over the front openings in the cabinet. Allow about 1/8 inch between the doors. Check to make certain that the doors are level, and fit evenly over the openings in the cabinet.
2. Attach the doors to the cabinet using two hinges on each door. Also attach door catches on each of the doors to make certain that they stay closed when you shut them.
3. Install a drawer pull on each of the cabinets, following the manufacturer's instructions.

Figure 12



Finishing

1. Stand the cabinet upright. Refer to the photograph when placing the molding. If you're not skilled in cutting molding please refer to the Tools, Techniques, and Materials on the home page of www.wowimadeit.com. Carefully cut 3-1/4"-wide crown molding (T) to fit around the top of the cabinet. Use glue and 1" finish nails (2d) about every five inches. The bottom

of the crown molding (T) overlaps the top of the cabinet by 1/2 inch.

2. Cut 3/4" wide cove molding (U) to fit around the bottom of the cabinet. Use glue and 1" finish nails about every 5 inches.
3. Fill all nail and screw holes, cracks and crevices with wood filler.
4. Sand all surfaces of the completed wine cabinet.
5. Stain or paint your cabinet with the color of your choice. We chose a cherry stain, and then sealed it with a clear polyurethane.

Adding the Tile

1. The last Step is to install the tile on the top shelf. Following the manufacturer's directions carefully and using a trowel, spread an even coat of tile adhesive over the surface of the top shelf.
2. Place the tiles on the adhesive one at a time, making sure that they are absolutely straight. Do not slide them or the adhesive will be forced up onto the sides of the tiles. Let the adhesive dry overnight.
3. Mix the tile grout according to the manufacturer's directions (or use pre-mixed tile grout).
4. Using a rubber-surfaced float spread the grout over the tiles with arcing motions. Hold the float at an angle so that the grout is forced evenly into the spaces between the tiles.



5. When the grout begins to set up, use a damp rag to wipe the excess from the tiles and joints. If you let the grout harden too long, it will be very difficult to remove. Use as little water as possible when removing the excess so that you don't thin the grout that remains. Let the grout dry overnight.
6. Use a damp rag to wipe the remaining film from the tile.
7. Apply grout sealer, following the manufacturer's directions, which may tell you to wait several days before applying the sealer to the project.