



# Wine-Glass Cabinet

Tapered stiles and glass panels lighten an ash cabinet

BY SCOTT GIBSON

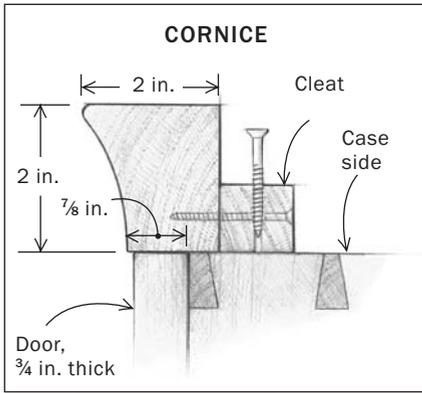
**W**all cabinets are relatively small. That's one of their beauties. They can be used in many spaces that would be too cramped for larger pieces of furniture, and their scale makes them familiar and approachable. A wall cabinet also can be made from scraps and offcuts of prized lumber that would be unusable elsewhere.

Wall cabinets lend themselves to many variations in design, depending on where they will be installed and what they will be used for. This cabinet is made of quartersawn white ash. It is for wine glasses and is intended for a dining room. It is less than 7 in. deep. With the exceptions of the cornice and the matching base, the cabinet is rectilinear. Door stiles are tapered slightly on the inside edge to help the cabinet appear lighter at the top. A coved cornice gives the top of the case some heft, and small windows at the tops of the doors give you a peek inside. There's minimal hardware, so the wood is really what's on display.

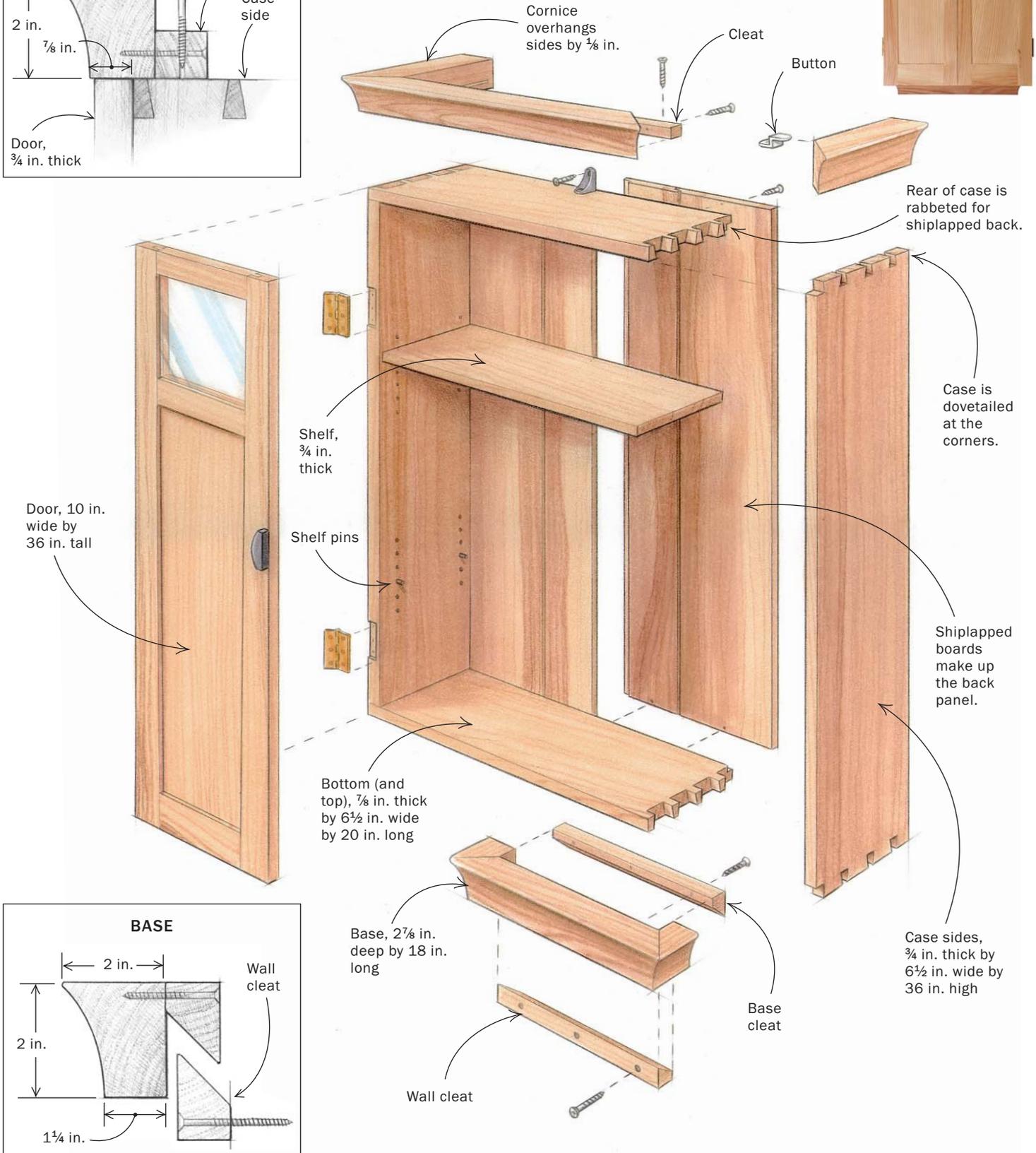
## Size the cabinet to fit the glasses

Unless the cabinet has no specific use, it makes sense to size it carefully for the things that are to be stored there. Wine glasses

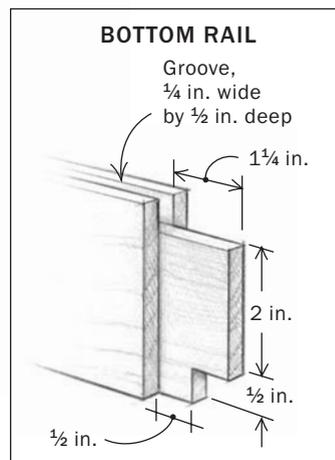
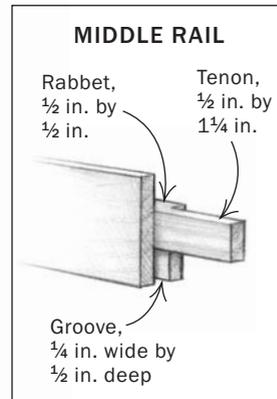
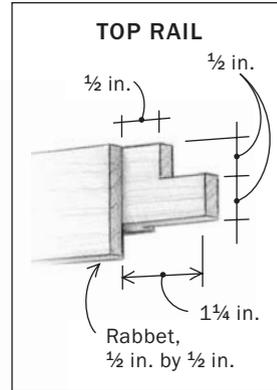
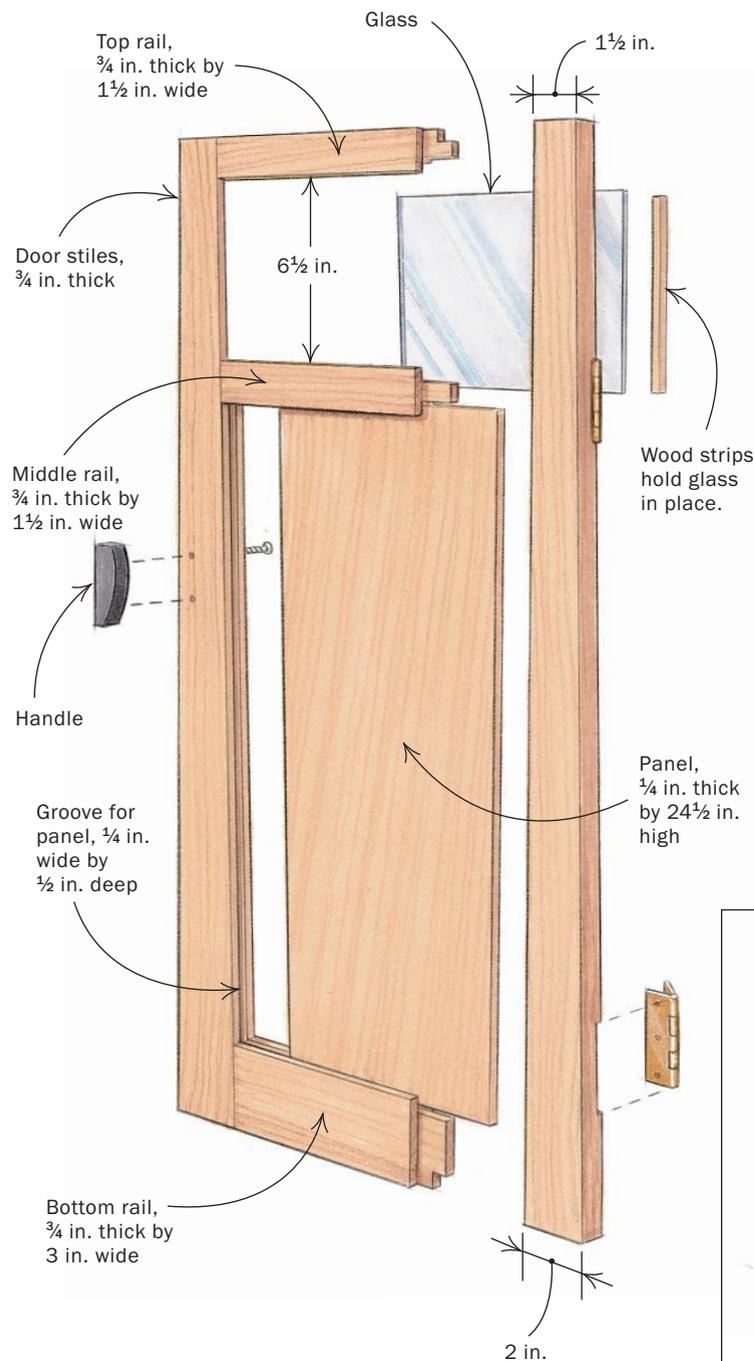
# BASE MOLDING SUPPORTS THE CABINET



This simple box is accented by doors with tapered stiles, which gives the illusion that the piece has a slight V-shape. The cornice and the matching base also provide some weight to the piece and reinforce the tapered appearance.



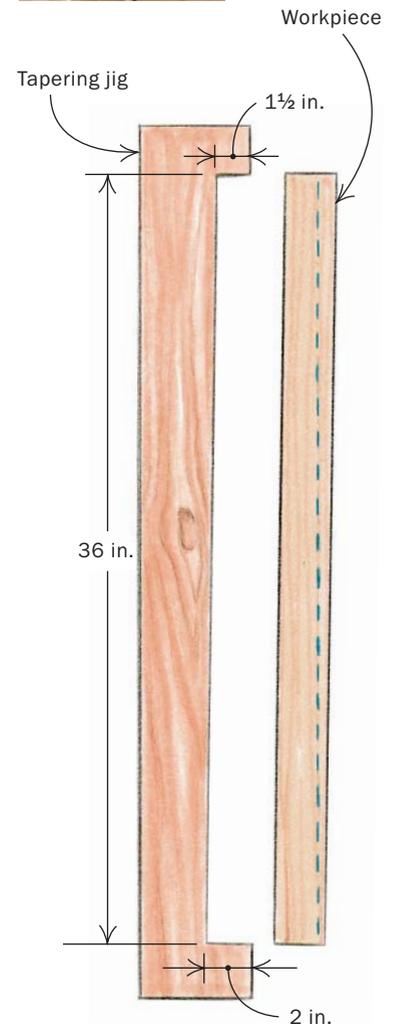
# DOORS WITH TAPERED STILES REQUIRE CAREFUL PLANNING



## 1 TAPER THE STILES



Use a jig to cut the 1° taper. Save the offcuts because you'll need them to help cut the rails.



come in many sizes and shapes, but those in the mixed collection my wife and I own are about 3½ in. wide and about 7 in. tall. Those dimensions became the rough guide for laying out the cabinet. Although adjustable shelves allow some flexibility in height, there is no way to fudge a cabinet that is too shallow.

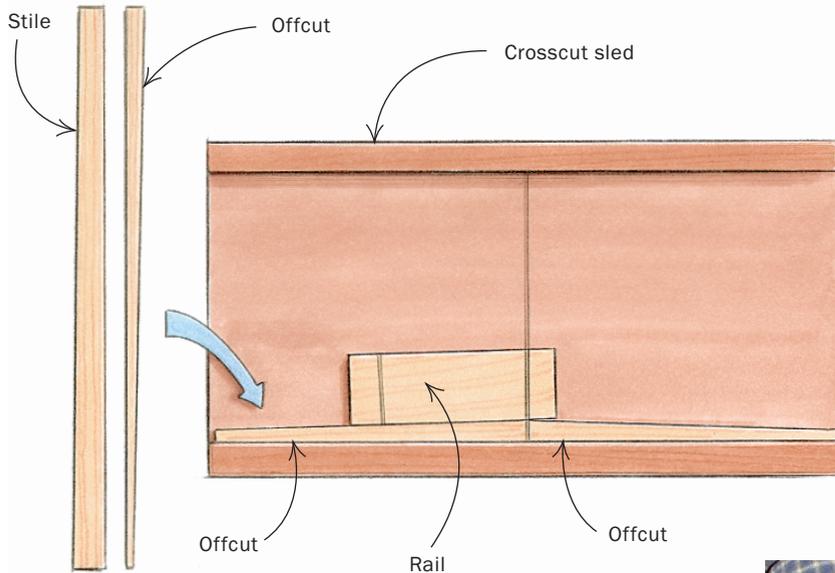
There are two other considerations: the thickness of the back, which is set into rabbets in the back of the case, and whether the doors will be inset or overlay. The back of this cabinet was made from four shiplapped boards. A frame-and-panel back was another good option, but shiplapping these boards was the best way to present the bands of browns and creams in the wood. Because the

boards were set into the back of the case, the overall depth of the cabinet had to be increased by at least that much. I added a safety margin of another ½ in. in case we ever get slightly larger glasses.

If you choose inset doors—those that fit inside the case—they also must be factored into the depth of the case. Doors should be a full ¾ in. thick, so the sides of the case must be that much wider if this is the door style you choose. I chose overlay doors, which are attached to the outside edges of the case. One visual advantage of overlay doors is that they give the case a cleaner, less cluttered look—from the front, you see the doors, not the edges of the case. Another option is to make the top and bottom of the case wider

## 2 TENON THE RAILS

Tack portions of offcuts from the stiles onto a crosscut sled for your tablesaw. Place the thicker ends near the blade.



Trim the tapered shoulders on a sled. Nail offcuts from the stiles to a tablesaw sled or miter gauge. The offcuts will provide the correct shoulder angle.

than the sides by the thickness of the door. This allows the doors to cover the edges of the cabinet sides but fit inside the top and bottom pieces.

As for width, I wanted to fit five or six glasses side by side on each shelf. A little extra room here also is a good idea.

The carcass is just a four-sided box, dovetailed at the corners. The sides are  $\frac{3}{4}$  in. thick, and the top and the bottom are  $\frac{7}{8}$  in. thick. Although using half-blind dovetails would have kept the sides of the case cleaner, I'm still a sucker for at least some exposed joinery, so I used through-dovetails. I made the top a little thicker to allow slightly longer pins (these are cut with a 1:8 angle).

### Doors are the focal point

This cabinet is almost all door, so it pays to use the best wood you have for the panels and the door parts. I liked the idea of a cabinet that was tapered—slightly narrower at the top than at the bottom. But that seemed to create more problems than were worth solving, so I opted instead to taper the inside edges of the door stiles. The taper is gentle—about  $1^\circ$ —going from 2 in. wide at the bottom of each stile to  $1\frac{1}{2}$  in. wide at the top. A more severe taper would have made the stile too wide at the bottom or too narrow at the top to accommodate a tenon. Each door also was fitted with a trapezoidal window roughly 7 in. on a side.

The easiest way to lay out the mortise-and-tenon joints for the door was to use a full-sized drawing on a piece of paper or scrap of plywood. The length of each of the three rails was taken directly from the drawing. I just had to add an allowance for the tenons.

After cutting the rails to size, I made the cheek cuts on the tablesaw using a simple jig. Then I finished the tenons with the rails



Fit the middle rail. Dry-fit the door frame and fit the middle rail to the piece, using a full-sized drawing as a guide.

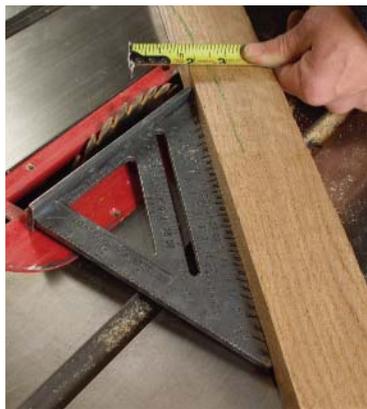
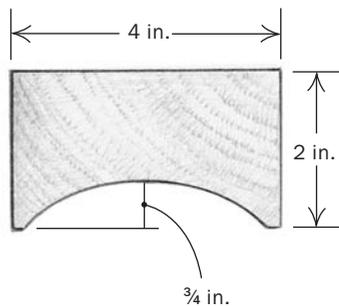
flat on a tablesaw sled. To get the right angle, I took the offcuts left over from tapering the door stiles and tacked them to the tablesaw sled. If the joints didn't fit perfectly, I adjusted them with a shoulder plane or put them back on the jig to remove a little more wood with the tablesaw. Making the door parts and dry-fitting them directly on the full-sized template simplified the process. But it did take some fussing to get three unequally sized rails into place while keeping the stiles parallel and the door square.

The little windows fit in a rabbet cut in the back of the middle rail, the top rail and the two stiles. This was a good place for a router. The rabbet can be created using a bearing-guided rabbet-

## COVERED CORNICE

### 1 CUT THE COVE ON THE TABLESAW

Make a  $\frac{3}{4}$ -in.-deep cove by taking very light cuts across the blade. It should take about 6 to 10 passes.



**Set your guide 2 in. from the crown of the blade.** This cut will be made at  $45^\circ$ .

**Cut the cove.** Move the stock over the blade at a slow but steady pace. Don't remove too much with each cut.



ing bit after the door has been glued up. Small strips of wood hold the glass in place. They can be secured either with brads or with hot-melt glue.

### Coved cornice can be cut on a table saw

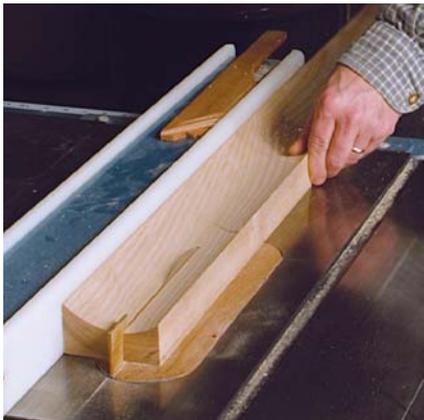
I don't own a shaper, but by passing the stock at an angle over the table saw blade, I was able to produce the coved cornices for this cabinet with ease. By varying the angle of the approach and the angle of the blade, this technique allows you to make profiles of amazing variety—from plain semicircular cuts to dramatic shapes that look like waves about to break. The trick is to clamp guides to the table saw so that the stock won't wander and to take  $\frac{1}{16}$ -in. or smaller bites.

The stock for the cornice was 2 in. thick, giving me plenty of material in which to cut the profile. After cutting the cove in the cen-

ter of the material, I ripped one edge to give the cornice its finished shape. The pieces were mitered and glued together as a unit before they were attached to the case. By hot-gluing triangular-shaped blocks on the two outside corners, I was able to use spring clamps to close the miter tightly. When gluing up the assembly, a spacer block can be inserted between the two short legs, if necessary, to keep the assembly in shape. I cleaned up the saw marks on the pieces before gluing them together.

Once the glue dried, I sanded the corners to remove any traces of squeeze-out and screwed the assembly to the top of the case. The front edge of the assembly overhangs the front of the case by about  $\frac{7}{8}$  in. The overhang covers the tops of the doors and allows for a small lip. A cleat attached to the back of the front cornice was screwed to the top of the case; on the two short legs of the cornice, tabletop buttons made a tight connection while allowing for cross-

## 2 RIP, MITER AND ATTACH THE CORNICE



**Rip to size.** Determine the height you want the cornice to be and rip it to width.



**Triangular blocks add bite to spring-clamp jaws to close up miters.** Attach the blocks with hot-melt glue, and chisel them off after the cornice is dry.



**Attach the cornice to the case.** The front cornice piece is screwed through the cleat. The side pieces are attached with buttons, which allow for wood movement.

grain seasonal movement in the case top. Attached this way, the front of the cornice won't move.

There is one other component made with the same material—the base that supports the cabinet on the wall. It is only  $2\frac{7}{8}$  in. deep, enough to give the cabinet a sturdy shelf but shallow enough that it doesn't make the cabinet look bottom-heavy. It is 4 in. narrower than the cabinet. After the three sides of the base piece were joined, I added a base cleat that meshes with a corresponding cleat screwed to the wall. Called a French cleat, this hanging system hides any fasteners, and it is simple to install and remove.

### Hang the doors and apply a finish

Depending on how the case is built, knife hinges would be a good choice for this cabinet. They are unobtrusive and strong. I've also used crank hinges (Whitechapel Hardware; 307-739-9478), which allow doors to be folded open all the way. I decided on good-quality extruded brass butt hinges.

Because the cabinet has overlay doors, the stops are already built in. To keep the doors closed, I used small, powerful magnets sold by Lee Valley (800-871-8158). They are less difficult to install than conventional bullet catches and will be unaffected by small seasonal changes in the doors.

Fitting overlay doors is not as finicky as fitting inset doors, but the outside edge of each door still should line up exactly with the edge of the case. Planing a bevel of a degree or two on the mating edges of the center stiles makes it easier to open and close the doors without having them bind.

For finish, a coat of Watco oil brings out the wood's color, and three or four coats of blond shellac or lacquer protect it. □

Scott Gibson is a freelance writer living in Maine.



**A French cleat bears the weight.** The base engages with the wall cleat, and the cabinet sits atop the base. The case requires only a single screw at the top to hold it securely to the wall.

