# Stylish Details Enliven a Low Dresser

Frame-and-panel design keeps the look light and the construction manageable

BY MICHAEL PEKOVICH



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dresser is really just a big box stuffed with smaller boxes. Because of that, dressers tend to look, well, boxy. When I set out to build a chest of drawers for the magazine, I really wanted to get away from the stale, boxy look that is typical. My first strategy was to go with a frame-and-panel design. This allowed me to add legs to the case, lifting it off the floor. Second, instead of stacking the drawers in a tall case, I arranged them side by side to create a wide, low case. This keeps the dresser from looking too tall and dominating the room. Both elements, while creating a nice design, also add to the complexity of the project. The good news is that none of the joinery is particularly challenging. By breaking down the construction into bite-size pieces, you can simplify the build and reduce headaches.

I chose white oak for the legs, frame, and top, and butternut for the drawer fronts, side panels, and back panels to provide subtle contrast. The overall design is simple, but a few playful details give the case personality. There is a subtly curved taper to the outside faces of the legs, and the top rails are coved at the ends and overlap the legs. The top is curved on the ends and has a slight underbevel. Finally, pegged joinery and ebony pulls add a little pop.

There are a lot of parts to mill and joints to cut in this project, so I've simplified construction by using consistent dimensions for parts and joinery where possible. This

## Mortise-and-tenons first

Double mortise-and-tenons join equal-width rails and legs. Centering the joints means both sides can be cut with one setup.



**Outside mortises, then inside.** Pekovich uses a hollow-chisel mortiser to cut the frame mortises in the legs (above). Set the fence to cut the outside mortise, then rotate the leg for the second mortise. Use the same setup for the double mortises in the rails (right). The remaining single mortises in the legs can be cut with the same fence setting.





**Tenons next.** With the rip fence set to the tenon length, use a miter gauge and dado blade to cut perfect 90° shoulders (above). Then use a bandsaw to cut the inside cheeks (right), and a coping saw and chisel to remove the waste between the tenons.





**Rear rails get notched for runners and kickers.** The drawer supports are tenoned in the front and rabbeted to fit notches in the back rails. This allows them to be installed after the case is glued up.



Drawings: John Hartman

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#### FRAME-AND-PANEL DRESSER

The white oak legs and frame add strength to this dresser, while butternut panels and drawer fronts soften the look and lighten the load.





cutlist for this dresser and other projects, go to FineWoodworking.com/PlanStore.

## Bridle joints for the top rails and legs

Instead of being dovetailed to the legs, the top rails are notched to fit dadoes in the legs. The overhanging ends of the rails are then coved to create a nice design detail.







Notch the leg tops for the top rails. Clamp the leg in a tenoning jig and use a dado blade narrower than the notch to cut one face. Rotate the workpiece to finish and center the cut (left). Later, the outside edges of the legs will get tapered, but for now, just notch the top outer edge of each to final width (above) so you can fit the top rails.



**Then notch the rails.** Start with the shoulders. Clamp a stop block to the fence for the outside shoulder and attach a hook stop for the inside shoulder (above). Remove most of the waste at the bandsaw, then slide the workpiece across the tablesaw blade to skim off the remaining material.



**Notch the bottom the same way.** Using the same stop blocks as before, lower the blade and cut the bottom of the notch.



**Profile the ends.** Cut the cove at the bandsaw, and use the offcut as a sanding block to smooth the shape. Use the first end as a pattern to lay out the remaining ends.

## Finish the leg joinery and shaping





**Groove, then taper.** Install a side rail into the leg and set a combination square to the groove location (left). Use the square to set the router-table fence and rout a groove in the leg between the mortises (above). Finally, bandsaw the taper on the outside face of the leg (right), and plane or sand the surface smooth.



minimizes machine setups, speeds milling and joinery, and ensures accuracy.

#### Rock-solid frame means a long life

The double tenons that connect the rails to the legs provide plenty of glue surface and are all 1 in. long, so you can cut them all efficiently with a single setup. The bottom rails are wide, thick beams that help prevent sagging, and the vertical dividers are also connected with strong double tenons. I decided to attach the top rails to the legs with a bridle joint. The overhanging ends of the rails are coved to create small corbels below the overhanging top, a small detail that adds a lot of personality to the dresser.

To simplify the machine setups for the joinery, all of the face-frame parts are ripped to match the legs. After the joinery is complete, the parts are ripped to final thickness, creating the offsets between the components.

All of the case components tie into the legs, so that's a good place to start. You'll need to cut double mortises for the bottom rails and front rails, single mortises for the side rails and back rails, and grooves for the side panels and back slats. The legs are also notched on top for the top rails. Once the joinery is complete, you'll finish the legs by tapering the outside faces.

Start with the double mortises. I use a hollow-chisel mortiser with a 3%-in. chisel, setting the fence to cut the mortise farthest from the fence. To cut the second mortise, rotate the workpiece. This centers the mortises, which makes tenoning easier. The double mortises on the front and bottom rails and the single mortises for the side rails and back rails are all cut with this same setup.

To notch the top of each leg, use a <sup>1</sup>/<sub>2</sub>-in.-wide dado blade and tenoning jig at the tablesaw. Then use the tablesaw to cut a flat at the top outside face of each leg.

## Fit the vertical divider



Notch the divider and rail where they intersect. The lower divider is tenoned to the rails above and below it. and is half-lapped to the middle rail. Start by notching the rail, then dry-fit the case to locate the notch in the divider (left). The divider can slip partway into the rail notch, allowing for an accurate knife line.

JULY/AUGUST 2015 51

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## Assemble the case

The dresser has a lot of parts, and gluing them all up at once would be a nightmare. So Pekovich finished all of the parts with a thin coat of shellac prior to assembly, then glued up the case in stages.



**Case ends first.** Start by gluing the side assemblies (above). Then glue the front frame together and glue it to one side assembly. Add the rear rails and then the opposite side (right).

CAUTION

To cut the double tenons in the bottom rails and front rails, start with the outside cheeks. Install a dado blade and use a miter gauge to run the stock along the rip fence to ensure consistent shoulders. Cut one cheek, then flip the workpiece for the second cheek. Next, cut the top and bottom faces of the tenons by lowering the blade but leaving the fence at the same setting. Finally, cut the inside cheeks at the bandsaw, and clean up the waste with a coping saw and chisel. With the dado blade and rip fence in the same position, cut the single tenons on the back rails.

Next cut the half-lap joint where the lower vertical divider and lower middle rail intersect. First notch the rear edge of the rail, then dry-fit the case together and mark the notch in the vertical divider.

The runners and kickers have double tenons spaced around the vertical dividers in the front, and are notched into the tops of the inner back rails. This allows them to be installed after the case is assembled. Both the tenons in the front and laps in back are <sup>3</sup>/<sub>4</sub> in. long, making them fast to cut with one tablesaw setup. The upper kickers are tenoned into both top rails, and are installed as a single unit.

After all of the joinery is cut, rip the rails and dividers to their final widths. On the top rails, trim <sup>1</sup>/<sub>16</sub> in. off the rear edge of the decorative ends as well—it will center the rails visually on the legs.

#### Sides and back complete the case

The case sides are frame-and-panel construction. To cut the grooves for the panels in the side rails and stiles, use a ¼-in. dado set in the tablesaw. Then dry-fit the side assemblies and measure for the stopped grooves in the legs. Set up a router table with a straight bit and rout the grooves, stopping at the mortise locations. Finally, bandsaw the taper on the outside faces of the legs and smooth them with a block plane. The panels are rabbeted on the inside and outside faces to create a tongue that fits into the groove. The case back consists of tongue-and-groove panels that fit into grooves in the top and bottom rails.

With the router still set up for grooves, rout grooves in the back legs, top rail, and bottom rear rail for the back panels.

#### Glue up in stages

After prefinishing the parts with a washcoat of shellac, glue up the case sides using just enough clamp pressure to close the joints. Next connect the sides—first glue and preassemble the drawer rails, bottom rail, and lower vertical divider, then glue this assembly and the back rails between the two sides. Install the kickers and runners, gluing them at the front and back. Then add the short vertical dividers, slide the back panels in place (no glue), and drop the top rail and kicker assembly onto the case. Once dry, add the drawer



Drawer supports come next. The runners and kickers are tenoned into the front rails and drop into notches in the back rails. Taper the bottom edge of the tenons with a block plane to make installation easier.





Top off the case. Install the upper dividers and slip the back panels into their grooves (above). Assemble the top frame and drop it onto the case (left), and clamp until the glue dries. Finally, glue the guides in place, then use a combination square to align the guides with the dividers (below). Rub the guide back and forth to create a vacuum and let it dry.



guides. As a final touch, drill the legs at tenon locations and drive in pegs, leaving them slightly proud of the surface.

To shape the top, cut a shallow curve on the ends at the bandsaw, then clean up the sawcut and give it a slight underbevel with a block plane. Attach the top with screws through the upper kickers. Elongate the front and rear holes to accommodate seasonal movement.

The drawers are traditional dovetail construction. The finish is multiple coats of wiping varnish rubbed out with fine steel wool and brown paste wax. 

Michael Pekovich is a furniture maker, instructor, and FWW's executive art director.