# Arts and Crafts Sideboard

Traditional joinery and modern fasteners team up to simplify construction

BY GREGORY PAOLINI

sideboard is a welcome piece in the dining room, where its drawers are perfect for linens and silverware, its cupboards accommodate serving trays, and its top is a staging area for the dishes to be served. It's no surprise, then, that sideboards were common in Arts and Crafts dining rooms. The version I make here is scaled down from the original pieces that inspired it, so it will fit into tighter spaces (not everyone has a large, formal dining room these days). However, it retains their muscular design and is made from quartersawn white oak, just like the originals.

When it comes to joinery, Arts and Crafts furniture relies heavily on the strength of the mortise-and-tenon. It's the primary joint in this sideboard, too, which is made almost entirely with frame-and-panel construction.

It's not difficult to cut a bunch of mortise-and-tenon joints, but taken together, those joints can create serious headaches while assembling a piece of furniture with as many parts as this sideboard. To avoid problems, I broke the sideboard down into subassemblies that can be added one at a time. I also joined these subassemblies with screws, which makes the glue-up much easier.

#### Cut all of the casework joinery first

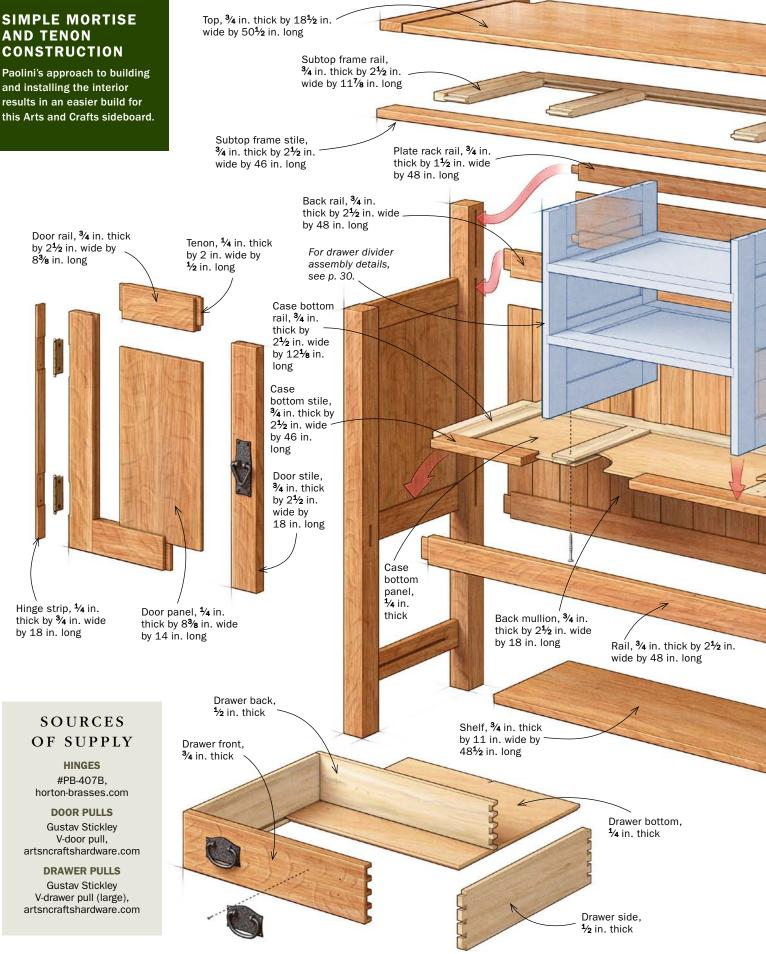
I begin by cutting all of the mortises. I use a router and a ¼-in.-dia. spiral upcut bit, with an edge guide to keep the bit cutting in a straight line. There is nothing new about my technique. Plunge





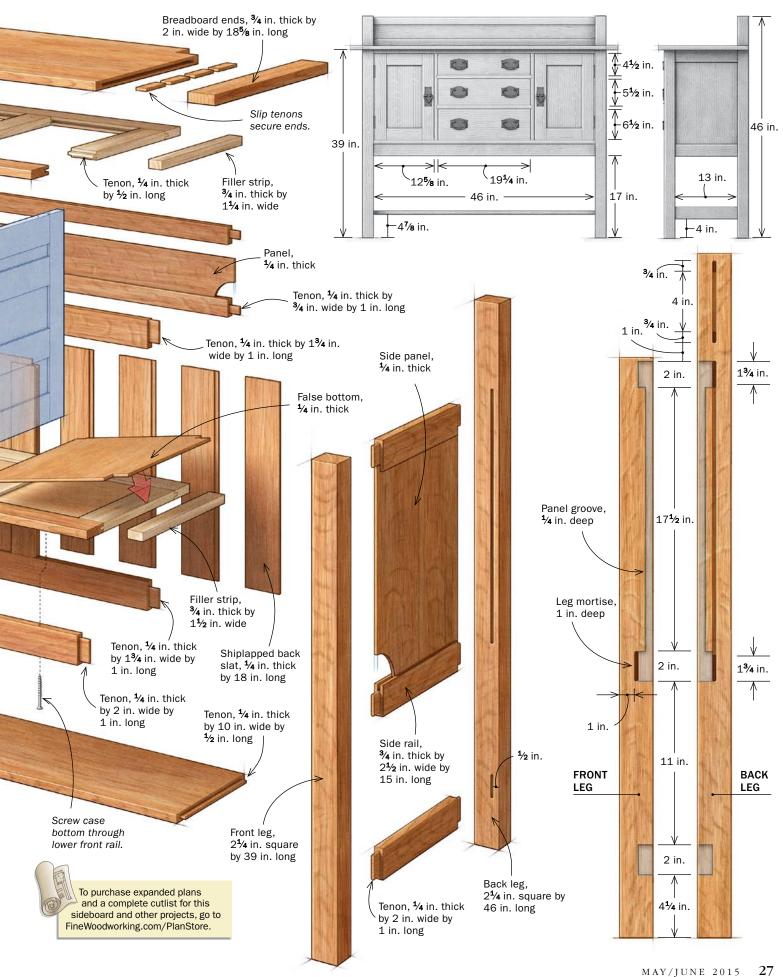
# **AND TENON**

and installing the interior results in an easier build for this Arts and Crafts sideboard.



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**Rout the mortises and stopped grooves.** Use a <sup>1</sup>/<sub>4</sub>-in.-dia. spiral upcut bit. The router's edge guide locates the bit and keeps it cutting straight (above). Cut through-grooves for the panels at the tablesaw (right) using a standard-kerf blade. Make the groove in two passes, registering the opposite face on the fence for the second cut. This centers the groove on the part's thickness.

to the full depth at each end of the mortise, and then use a series of passes to gradually rout the waste in between.

The legs have stopped grooves for the panels. Rout these after the mortises. Don't change the edge guide location, because the panel grooves are in line with the mortises. Cut to their final depth in multiple passes. Now rout the stopped grooves that hold the shelf. The remaining grooves are through-grooves, cut at the tablesaw using a standard-kerf blade. You can cut the full 1/4-in. width of the groove with a single fence setup by flipping the workpiece so that the opposite face is against the rip fence for the second cut.

I cut the tenons at the tablesaw using a miter gauge and a dado set. Then I cut all of the panels and back slats to their final dimension. Now you're ready for assembly.

#### Assemble from the outside in

The general assembly procedure is this: Glue up the outer frame of the case first, including the ends and the back. Next, drop in the case bottom and the drawer-







**Quick tenons with a dado set.** Cut the end of the tenon first. Register the opposite end of the board against a stop block to cut the shoulder (left). This ensures that all of the tenons are the same length. Paolini uses a utility knife to knock off the corners (above), allowing the tenons to fit into the rounded mortises.

Photos, except where noted: Matt Kenney

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## **GLUE UP THE CASE**

This is where things get nontraditional.

Assembly is from the outside in, which works because the drawer dividers, case bottom, and subtop are screwed to the casework.



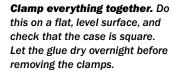
**Glue up the end assemblies.** Put them in clamps and let them sit overnight before continuing the glue-up.



**Put in the back.** The mullions are already glued in place. Because the slats float in the grooves, hold them in the side panel as you lower the tenons into their mortises.



The shelf and plate rack come next. Then put in the remaining back slats, and spread glue on all of the exposed tenons before adding the second end assembly.



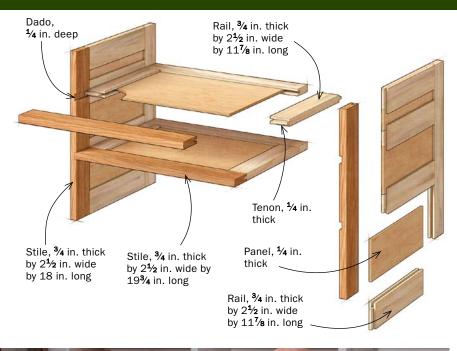




**Drop in the case bottom.** Attach it by screwing up through the front rail. In the back and on the sides, it simply rests on the lower rail of the frame.

### ADD THE DRAWER DIVIDERS

This assembly is completely independent of the main case, so it can be built, glued up, and installed after the case has been put together.





**Build the drawer divider assembly.** After gluing up the horizontal dust frames and panels, glue them into the dadoes cut into the frame of the vertical partitions (above).





**No joinery means easy addition.** The drawer-divider assembly sits on the case bottom. Lower it into place (left) and then clamp it there. Lay the case on its back, and attach the divider assembly with screws driven up through the case bottom (above). Two screws on each side are enough.

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#### FINISH THE CASE

After the subtop frame is attached, drop solid-wood bottoms into the case, add hinge strips, and attach the top. Then make and fit the doors and drawers.





**Set the subtop in place.** The filler strips are glued to the end assembly (left). After screwing the subtop to the drawer divider assembly, lay (do not glue) the false bottoms on the case bottom (center). Then glue hinge strips—mortise them first—to the legs (right). Finally, place the top on the case (below), and secure it from below with screws.

divider assembly. The subtop frame goes on next, followed by the top. The doors and drawers come last.

Start by gluing up the two end assemblies. After the glue dries, connect them by gluing in the back, the plate rack, the shelf, and the front rail. This is a lot of joints at once, so use a glue like Titebond Extend, which has a long open time.

With the case in clamps, glue up the subtop frame and case bottom. The case bottom is a frame-and-panel assembly, while the subtop is just a frame that's covered by the sideboard's top. Glue the filler strips to the end rails.

Set the case bottom in place, and secure it with screws from beneath, through the front rail. Glue up the drawer divider assembly and set it down on the case bottom, securing it with screws from below. Install the subtop by screwing it to the drawer-divider assembly, and gluing the filler strips to the case. Place the top over it all and secure it from below with screws.

The doors can be hung now. Make and mortise a hinge strip and then glue it to the leg. Make, hang, and fit the doors. Finally, make and fit the drawers.

Gregory Paolini is the author of Arts & Crafts Furniture Projects (The Taunton Press, 2015), scheduled to go on sale in March 2015.

