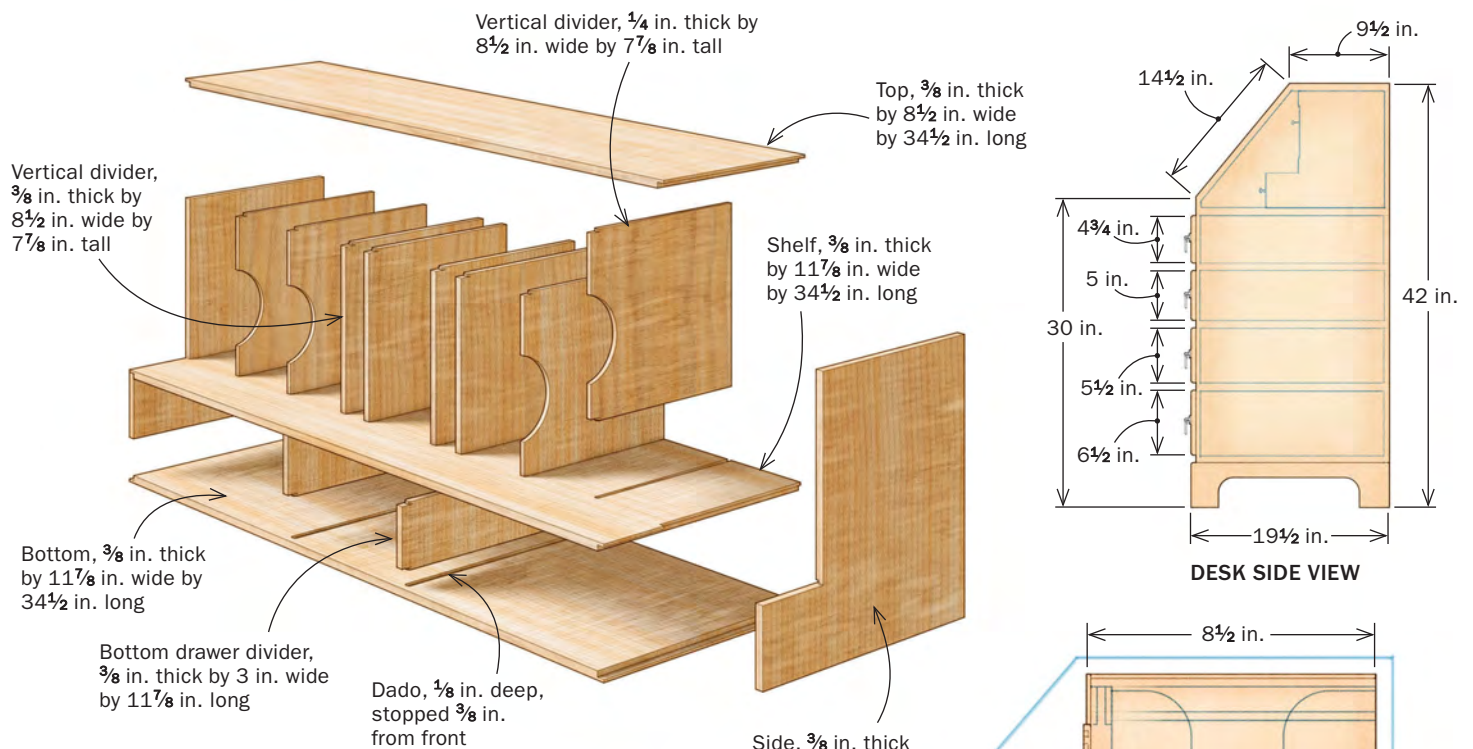


Add a Gallery to a Desk

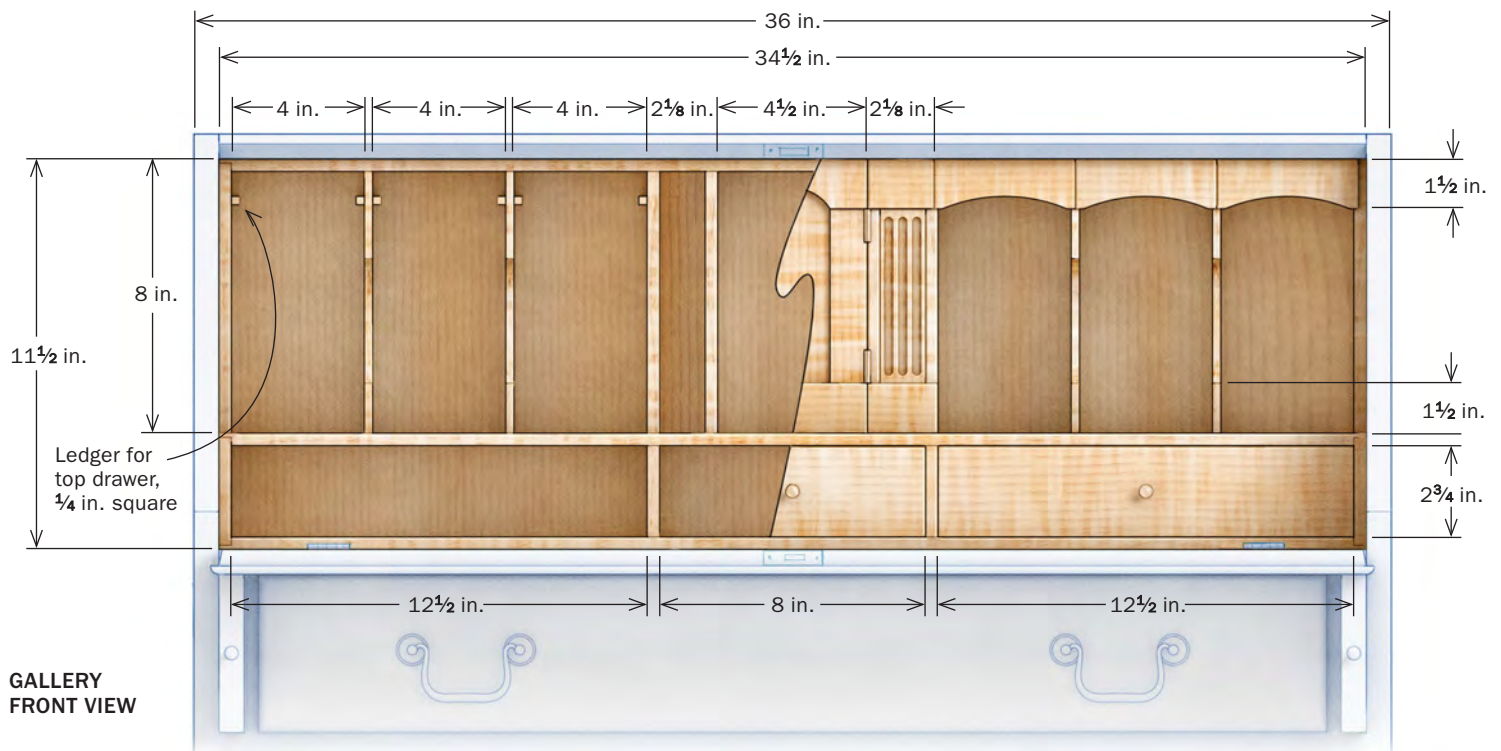
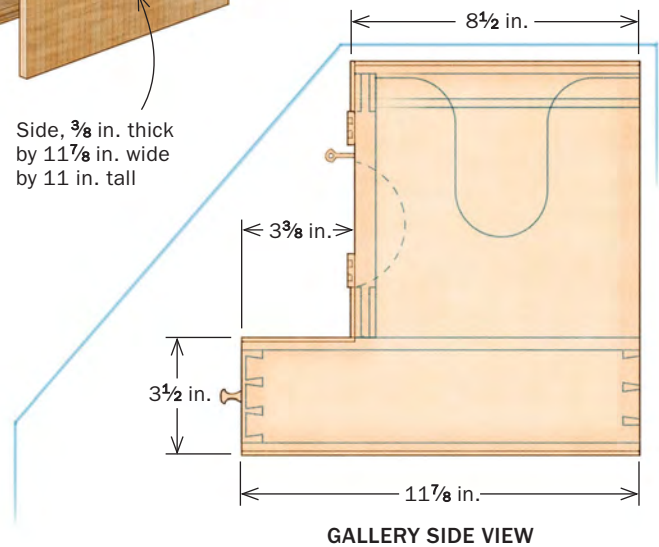
Step-by-step guide to building a gallery that's full of functionality and eye-catching details

BY CHRISTIAN BECKSVOORT

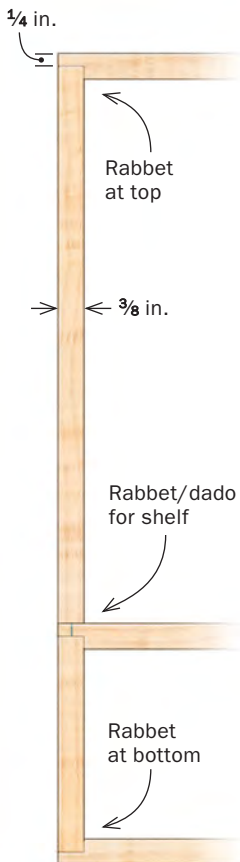




A slant-top desk is a classic and beautiful piece of furniture. Adding a gallery elevates the desk into a customized storage center with shelves, tiny drawers for pens and stamps, larger drawers for stationery, plus doors and secret compartments. Fitting the gallery case into a slant-top desk can be a challenge. Usually made of thin stock, it needs to slide into place without buckling, yet be tight on all sides. In this article I focus on building and fitting the gallery case and its dividers. While you may see desks with visible galleries, the gallery in the desk shown here can be concealed with the drop-down front, which becomes the work and writing surface. You can also modify the design and use



Make the gallery case first



CASE JOINERY
FRONT VIEW

Trim the sides at the top. Clamp the case top and bottom in the desk, set the side in the bottom rabbet, and mark the height from the top rabbet (right). Then cut to length and check the fit by sliding it into the case (far right).



Size the gallery case pieces to the desk. To find the length for the top and bottom of the gallery case, scribe directly from the back of the desk.



Rabbet the top and bottom. Use the sides to mark the width of the rabbet on the ends of the top and bottom. To cut the rabbet, make two cuts on the tablesaw, one with the piece on end, one with the face on the table.



Joinery for the shelf. To cut the dado in the L-shaped sides, Becksvoort runs multiple sawkerfs on the tablesaw, bumping the fence over until he gets the right thickness. The bottom of this dado must align exactly with the top of the L portion of the side piece.



Assemble the case. The case is put together with glue and brads. Becksvoort predrills for the brads (above) before nailing and gluing (right). After, he sets the nails below the surface (bottom).

the same techniques in a different-style desk.

Start with the case parts

I make the gallery case before the back of the desk has been attached but after the desk has been glued up. This allows me to slide in the structure from the back, avoiding potential scratches on the writing surface.

The joinery in the case is simple. I use rabbets and dados cut on the tablesaw. For assembly I use glue and brads. None of this will show, since only the front edges of the gallery will be visible. All the grain runs in the same direction in the gallery case so that all the wood movement will be front to back.

To start, I cut the case top and bottom to length. Both should fit tightly, but still have enough room to slide into position. Then I cut rabbets on their ends to accept the two sides. The sides are L-shaped. I cut the shape with two stopped cuts on the tablesaw. This does leave sawmarks where the cuts meet, but I orient the side pieces so those marks go against the desk sides and are never seen. To determine the exact height of the sides, I clamp the bottom and top of the gallery inside the desk (photos, opposite page). I then use a knife



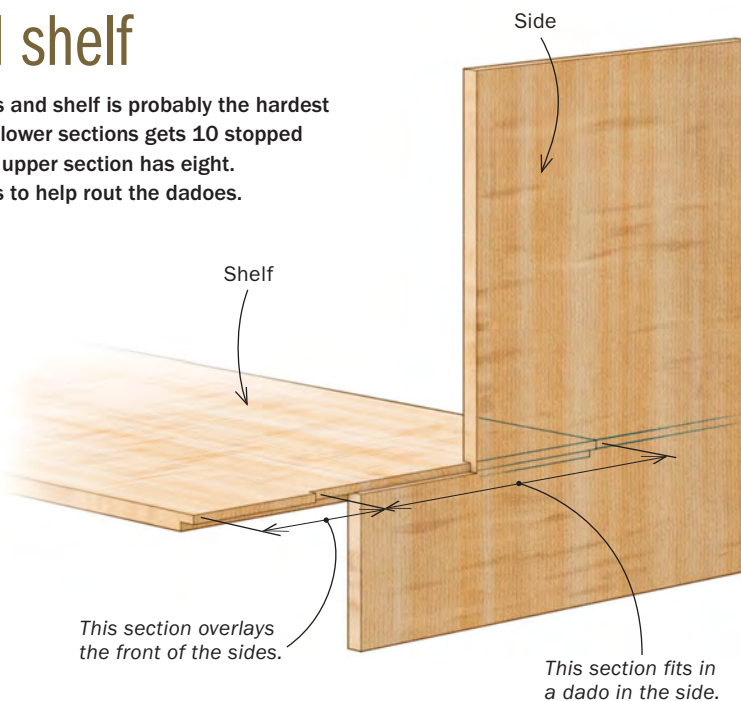
Cut joinery for the dividers and shelf

Keeping track of all the parts and where to cut the dados for the dividers and shelf is probably the hardest aspect of this project. The shelf that separates the gallery into upper and lower sections gets 10 stopped dados. The bottom section of the case has two vertical dividers, and the upper section has eight. Becksvoort uses blue tape to mark the parts and uses plywood templates to help rout the dados.

SHELF JOINERY IS THE MOST FUSSY

Extralong tongue.

On both ends of the shelf, cut a tongue long enough to overlay the case side and thick enough to fit the dado in the case side.



Notch the tongue.

In order for the tongue to fit the dado but also overlay the front of the sides, you'll need to cut it shorter in the back section. Use a line on the fence to know where to stop your cut. Then use a handsaw to square up the cut (below).



to mark the height of the sides so they'll fit between the top and bottom rabbets, and I cut the sides to size. I also cut the dado in the sides for the gallery shelf.

After dry-fitting all the case parts in the desk, glue and nail the case together. Recheck the fit after assembly to make sure it slides in tightly and without much effort.

Add the shelf

With the gallery case completed, I make the shelf. The first step is to

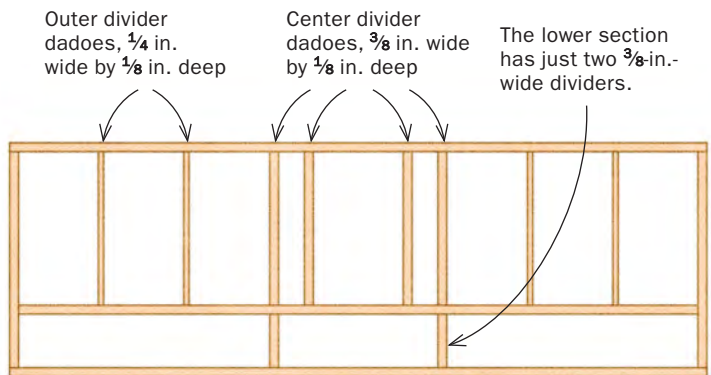


Dry-fit the shelf to make sure it fits well. But don't glue it in place yet, because you still need to cut the dados for the vertical dividers.



CUT DADOES FOR THE DIVIDERS

Becksvoort uses a plywood template to guide his trim router as he cuts the 20 stopped dados for the vertical dividers that create the framework for all the drawers, doors, and compartments in the gallery.



Four templates from one. Becksvoort begins with a wide template and cuts the four dados for the $\frac{3}{8}$ -in. dividers on either side of the door. Then he cuts that template down and routs $\frac{3}{8}$ -in. dados for the outside dividers of the document drawer and for the drawer dividers in the lower section (1). Cutting the template again and switching to a $\frac{1}{4}$ -in. bit, he cuts the dados for the dividers that are second from the ends in the upper section (2). Finally, he cuts the template to final width and routs the $\frac{1}{4}$ -in. dados for the dividers closest to the ends in the upper section (3).

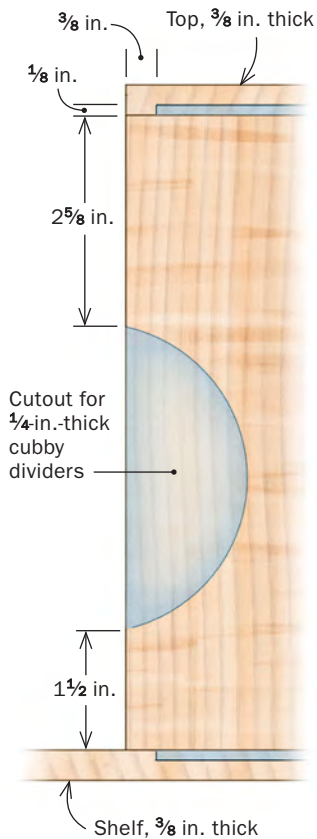
cut it to length. I cut long tongues on each end to fit into the dados in the gallery sides. At the front of the shelf, the tongue will remain long and overlay the section of the gallery side that is notched out. From there back, the tongue gets trimmed to fit the dado in the case side. Mark the section of the tongue to be trimmed, then cut and dry-fit it. At this point set the shelf aside. You'll need to rout dados in it for the vertical dividers, which are made next.

Tackle the vertical dividers

There are a lot of stopped dados for the vertical dividers, 20 in all. Twelve dados are $\frac{3}{8}$ in. wide and eight are $\frac{1}{4}$ in. To cut the dados I use a simple plywood template to guide my trim router. Rather than making four separate templates, I first make the widest template I'll need and cut all the dados on all



Install all the dividers



VERTICAL DIVIDER
SIDE VIEW



Notch first. The dadoes for the dividers are stopped, so you must notch the front edges of the dividers at the top and bottom. Becksvoort does this on the tablesaw, using a miter gauge to support the work.



Slide them in from the back. After notching the dividers (and cutting the profile in the cubby dividers), slide them in and secure them with glue at the front 1/2 in. of the dadoes on the top and bottom, and brads through the top.





the parts that use that template. Then I trim that template down to the next widest size I need and use it for the second set of dados, etc.

Getting the height of the vertical dividers right is important. Start with all vertical dividers cut to the same length, taken directly from one of the end dados. In theory, they should all be the same size. If for some reason, when you test the fit in the dados, you find any that are too long or short, trim or shim them as needed. Once the heights are dialed in, I stack the dividers that get shaped, and I cut them on the bandsaw and sand them. When everything is cut to size and shaped, dry-fit the gallery. If everything looks good, glue and nail all the parts together, and insert the gallery. A small screw on each side will secure it. Now you can get to the good stuff—the door, drawers, and secret compartments (for details, see pp. 42–43).

Christian Becksvoort is a furniture maker in New Gloucester, Maine.



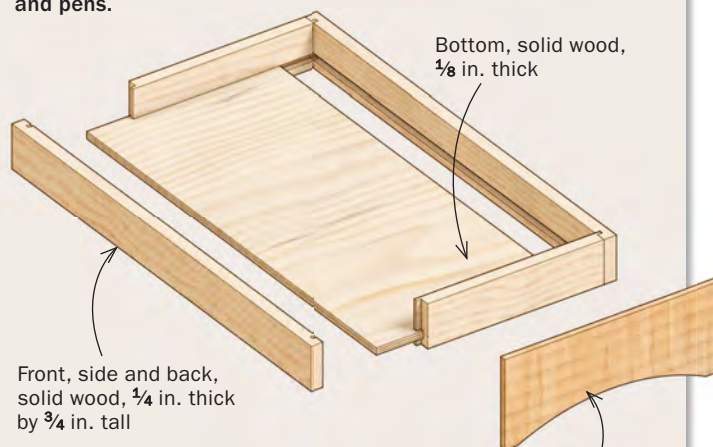
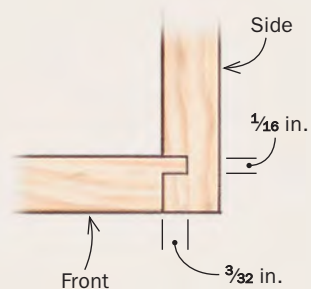
Install the whole gallery. Once all the dividers have been added, slide the assembled gallery into the desk from the back. Secure it with one screw on each side.

Make and fit the drawers and door



TOP DRAWERS

The scalloped strip at the top of the gallery is actually a series of false fronts for the drawers and door, designed to ensure continuous grain across the front of the gallery. The top drawers are perfect for small items, like stamps and pens.

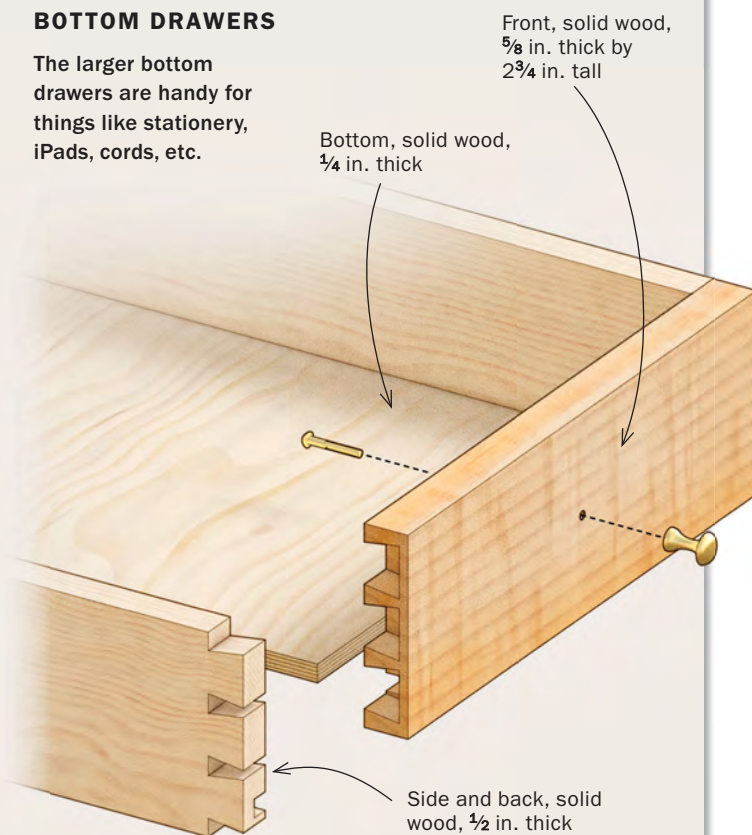


Drawer rides on 1/4-in.-square ledger strips, glued in front, tiny brads at back.



BOTTOM DRAWERS

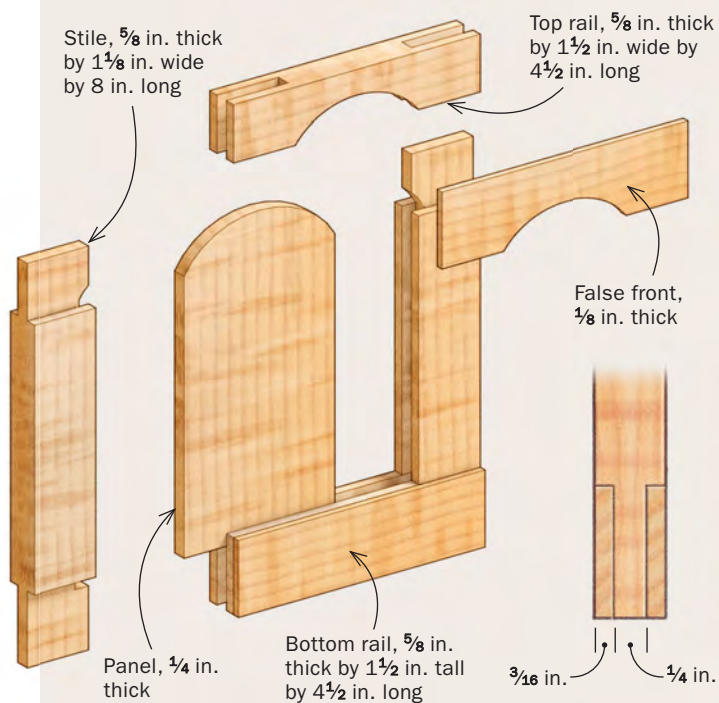
The larger bottom drawers are handy for things like stationery, iPads, cords, etc.



Photos, this page and opposite: Michael Pekovich

DOOR

Becksvoort flanks the door with fluted columns that look decorative, but they pull out for additional, stealthy storage.



DOCUMENT DRAWER

While the fluted columns are meant to appear decorative, they conceal secret drawers, which are a good place to stash passports, love notes, or a whole stack of Ben Franklins.

