A smart approach to side-hung drawers

BY CHRIS GOCHNOUR

I like side-hung drawers for their simplicity, for how smoothly they slide, and for the clean look they let you achieve. When I built my recent sideboard (see pp. 32–41), I wanted the three drawer fronts to be uninterrupted by dividers, and side-hung drawers made that possible. I find that side-hung drawers operate smoothly even when heavily loaded—like the ones in my tool chest, which are still sliding nicely decades after I built them. It's also a boon that the runners of side-hung drawers serve as adjustable drawer stops.

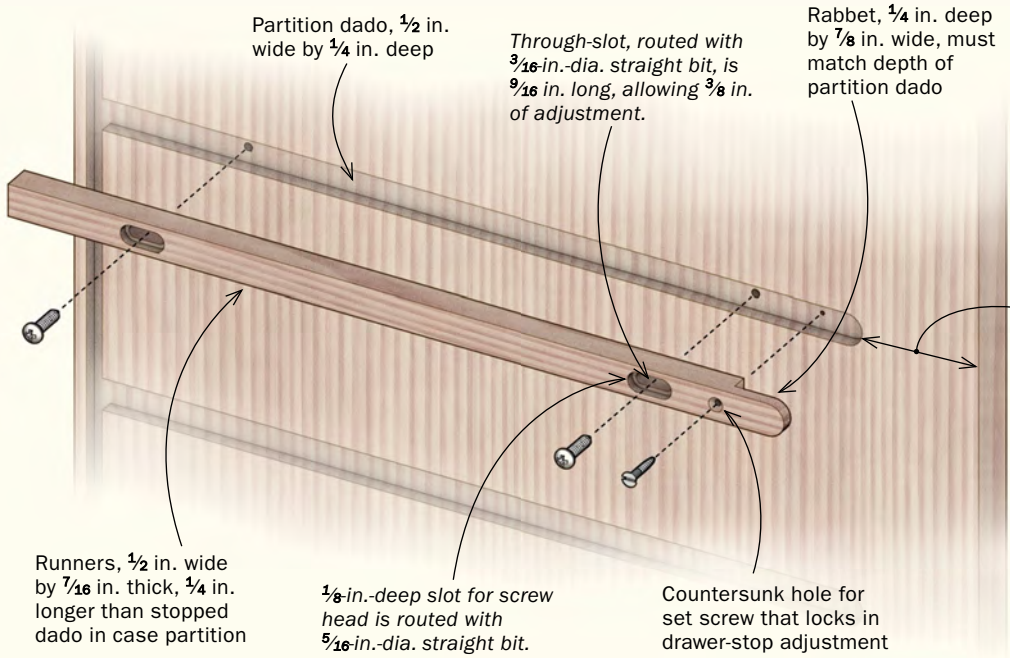
I typically make the drawer runners from the same hardwood I'm using for the drawer sides. I've often used beech or maple, but I've also made them from medium-density woods like alder, and that worked well too.

The way I build them, the runners of side-hung drawers are meant to support the drawer, but not to center it in the opening. The drawer is built to fit snugly side-to-side in the drawer opening, and the case guides the drawer. I take off a few whispers with a plane and do some sanding to finish with a side-to-side fit with virtually no play.

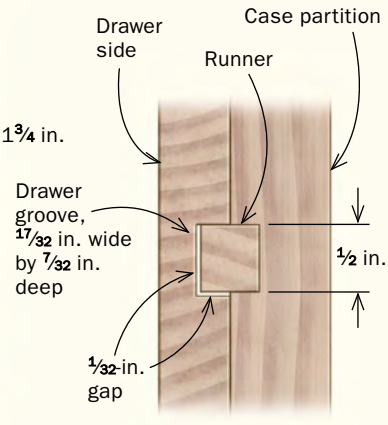
Chris Gochnour builds furniture in Salt Lake City, Utah, and teaches across the country.

ADJUSTABLE RUNNERS ARE THE SECRET

The runners not only carry the drawers but also act as stops for them. Slots for the screws enable you to set the stopping point precisely. A set screw at the front lets you lock in the adjustment.



HOW THE RUNNER MEETS THE DRAWER



Photos: Jonathan Binzen; drawings: John Hartman

Lower and lift. *Because the dadoes for the runners are stopped front and back, Gochnour lowers the partition onto the router bit at the start of the cut and lifts it off the bit at the end. To control the length of the cut, he draws pencil lines on the router fence (showing the location of the bit) and at both edges of the workpiece (marking the ends of the dadoes).*

ROUT DADOES IN THE CASE

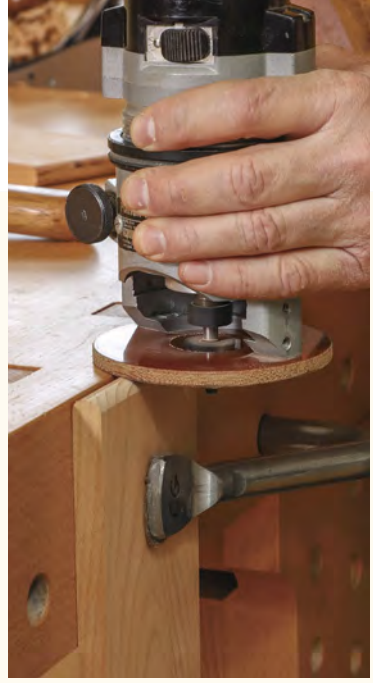
Gochnour cuts the runner dadoes in the case partitions just before assembling the piece. With side-hung drawers, the runner dadoes are always stopped at the front; on this sideboard they are stopped at the back as well because the rear edge of the partition is exposed in the elegant frame-and-panel back.

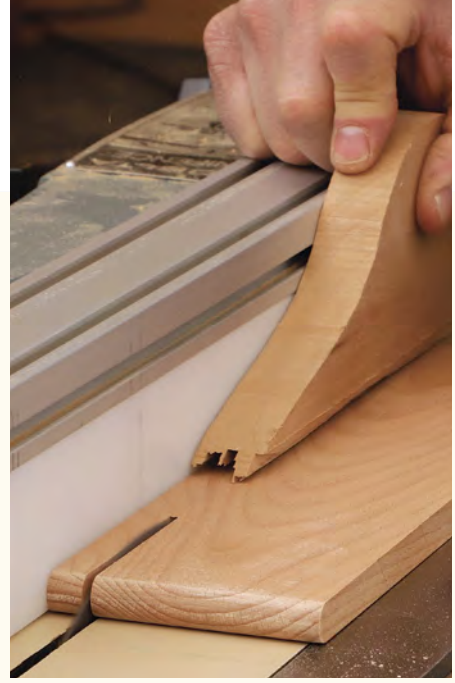
Equidistant drawers. *Since all three drawers are the same height, Gochnour can use the same fence setting to rout the dadoes for the top and bottom runners. Next he'll reset the fence to cut the dado for the center drawer.*

On to assembly. *Once all the runner dadoes are routed, the case can be glued up.*

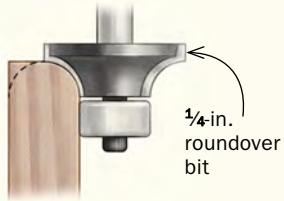
CREATE CUSTOM RUNNERS

The runners for side-hung drawers can also act as drawer stops. Gochnour makes his runners into adjustable stops by cutting two slotted screw holes in each runner. He builds a simple MDF jig that lets him rout both the through-slot and the wider, shallower slot for the screw's head.



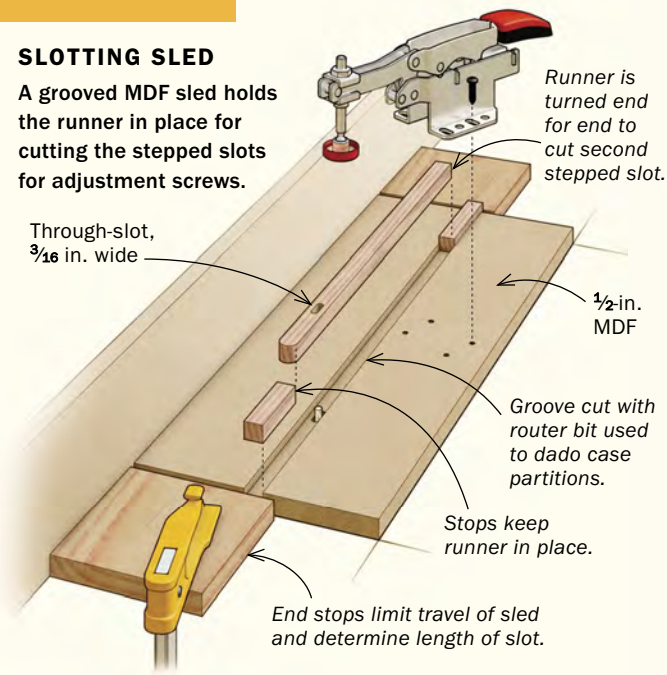


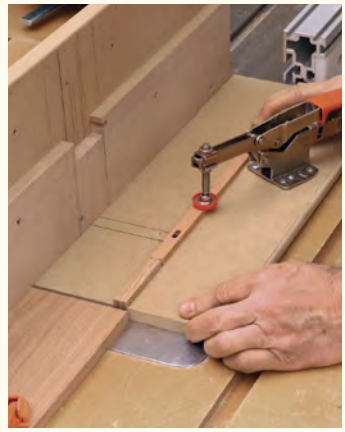
Make one blank for multiple runners. *Having milled the runner blank so its thickness just fits into the ½-in.-wide dado in the partition, Gochnour routs one end with two passes of a bearing-guided ¼-in. roundover bit. Then he rips the blank into runners.*



SLOTTING SLED

A grooved MDF sled holds the runner in place for cutting the stepped slots for adjustment screws.





Slot machine. *With the runner facedown, Gochnour cuts the through-slot, lowering the sled slowly onto the 3/16-in.-dia. straight bit. To cut the shallow slot for the screw head, he switches to a 5/16-in.-dia. straight bit.*

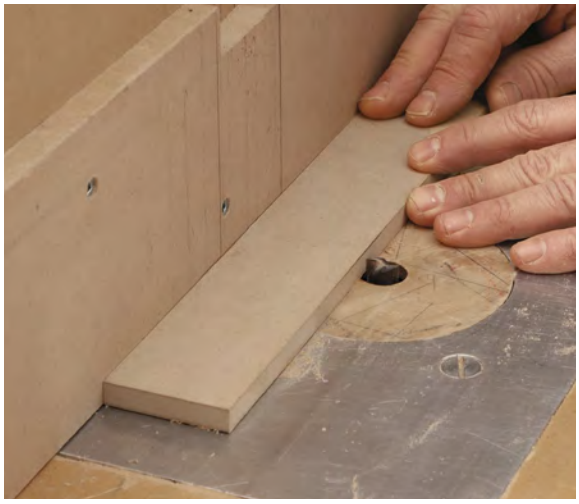
Countersink for a set screw. *On the drill press, cut a clearance hole and a countersink at the front end of the runner to accept the screw that will lock the runner's front-to-back adjustment.*

Clever rabbet. *In two passes with a dado blade, Gochnour cuts a rabbet into the front end of the runner. The rabbet's depth should exactly match the depth of the dadoes in the case partitions.*

GROOVE THE DRAWERS

With the case assembled, Gochnour mills the drawer blanks. He rips the sides so when all three are stacked on edge they just fit in the height of the drawer opening. Then he press-fits the runners into the partition dadoes and routs runner grooves into the drawer sides. MDF spacers guide the router fence setup.

Spacer setup. *Preparing to rout runner grooves in the drawer sides, rip an MDF spacer to fit just between the top runner and the top of the case.*



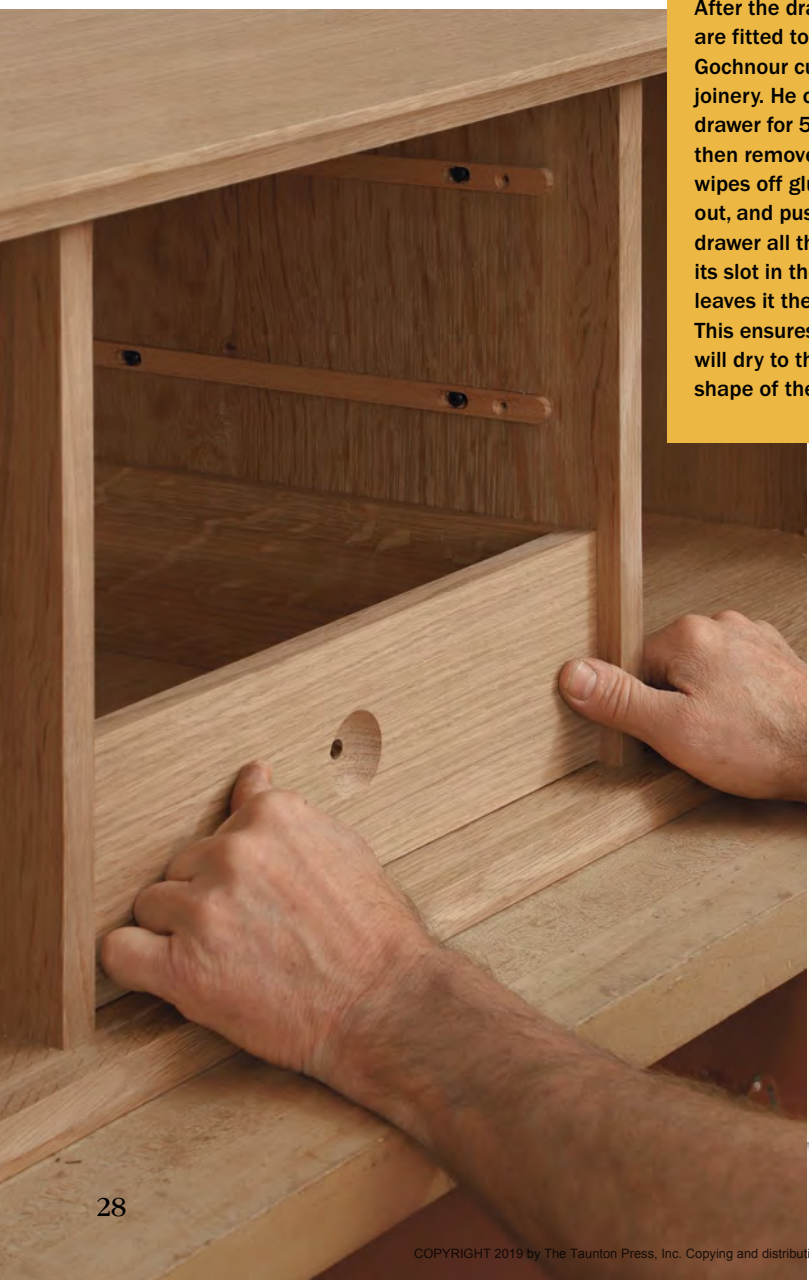
Spacer sets the fence. *At the router table, use the MDF spacer to set the distance between the fence and the $^{17}/_{32}$-in.-dia. straight bit (far left). The drawer side's top edge will ride against the fence. The runner groove goes through the back of the drawer side and is stopped at the front (left).*

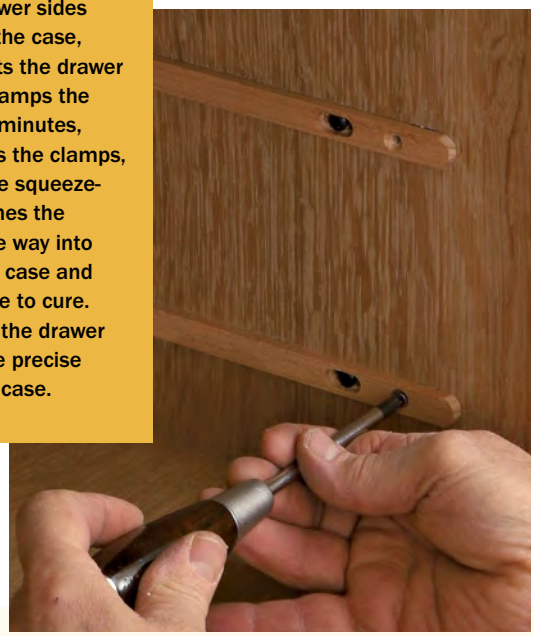
A second spacer. *After sliding the top drawer side onto its runner, cut another MDF spacer to fit between it and the middle runner (far left). Use this new spacer to set the router table fence to groove the middle drawer side. Repeat the process to fit the bottom drawer side. When they are all slid into place, the drawer sides should be a snug fit top to bottom—just able to slide.*

Revealing moment. *When the drawer joinery has been cut, Gochnour uses a handplane on the sides' top and bottom edges to produce even gaps between them. After assembling the drawers, he planes the drawer fronts and backs flush with the sides.*

FINAL FITTING

After the drawer sides are fitted to the case, Gochnour cuts the drawer joinery. He clamps the drawer for 5 minutes, then removes the clamps, wipes off glue squeeze-out, and pushes the drawer all the way into its slot in the case and leaves it there to cure. This ensures the drawer will dry to the precise shape of the case.





Set the stops. *After gluing up the drawers, loosen the slot screws slightly and pull the runners forward. Then push one drawer into place, stopping when you have the inset you want. Then remove the drawer, and tighten the slot screws. When you've adjusted the stops for all three drawers, remove the drawers and drive the set screws.*