

Keep Your Doors Closed

Handmade latches add function and flair to your furniture

BY CHRISTIAN BECKSVOORT

Wooden spinner latches for doors are fun and straightforward to make, yet they exemplify the finer details of handmade furniture. In their most rudimentary form, spinners are mounted on the outside of case pieces; for a cleaner look, they can be placed inside the door and operated by twisting the door knob. I've always preferred the interior, back-mounted variety, but over the years the spinners on my cabinets have evolved from very basic to more sophisticated.

Many of my ideas were borrowed from Shaker pieces I've had the pleasure of restoring. One of my first cabinets had the simplest form of interior spinner, a pointed oval. It worked, but since you could turn it 360° as you twisted the knob, you had to "feel" when the spinner actually engaged behind the cabinet frame.

To solve that problem, I added two small dowels on the inside of the door stile to act as stops for the open and closed positions. Then it dawned on me that if I left one square corner on the spinner, a single dowel could serve as stop for both open and closed. I used this method of keeping doors closed for many years. Then I chanced upon a small Shaker cabinet with a spinner mortised into the edge of the door stile. Quite a bit more work, but so elegant, so understated, so clean and clever. Soon I was putting that type of spinner on many of my cabinets.

Whichever type I'm making, I first create the knob, giving it a 1/2-in.-dia. or 3/8-in.-dia. tenon, depending on the size of the case. I start by cutting the tenon with a tenon-cutter on the drill press. (For tips on making knobs, see "Authentic Shaker Knobs," *FWW* #196, or "How to Turn Pulls Without a Lathe," *FWW* #240.)

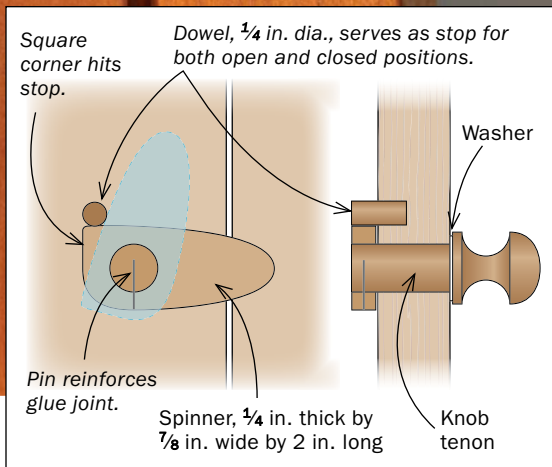
Christian Becksvoort makes spinners and the furniture for them in New Gloucester, Maine.

TWO OPTIONS

Both mortised and interior spinner latches operate with a twist of the knob, and disappear when the door is closed. The interior spinner (right), which engages the inside of the face frame or a slot in the cabinet side, is simpler to make. The mortised spinner (above), which requires a deep mortise into the edge of the door, rewards the extra effort with elegance.



Interior spinner



An interior spinner is easy to make and install. Make the knob, then drill a knob hole for it through the door stile with a bit $\frac{1}{64}$ in. larger than the diameter of the tenon. Then, using $\frac{1}{4}$ -in.-thick stock, make a rectangular blank about $1\frac{1}{4}$ in. wide and 4 in. long. The extra length makes the blank easier to handle on the drill press and bandsaw. Drill a hole in the blank that's a snug fit for the knob tenon, centered in the width of the blank and about $\frac{3}{4}$ in. from one end. Draw the spinner by eye, bandsaw it out, and fair the edges on the disk sander.

To find the location for the stop dowel, dry-fit the spinner and turn it to the open position (up), and then make a pencil mark on the door stile along the back edge of the spinner. Turn the spinner to the closed position (out), and mark along the top edge. Drill a $\frac{1}{4}$ -in. hole centered on the vertical line and just above the horizontal one. After gluing in the dowel stop, reinsert the knob tenon in its hole through the stile, apply some glue to the inside of the hole through the spinner, and push it onto the knob tenon.

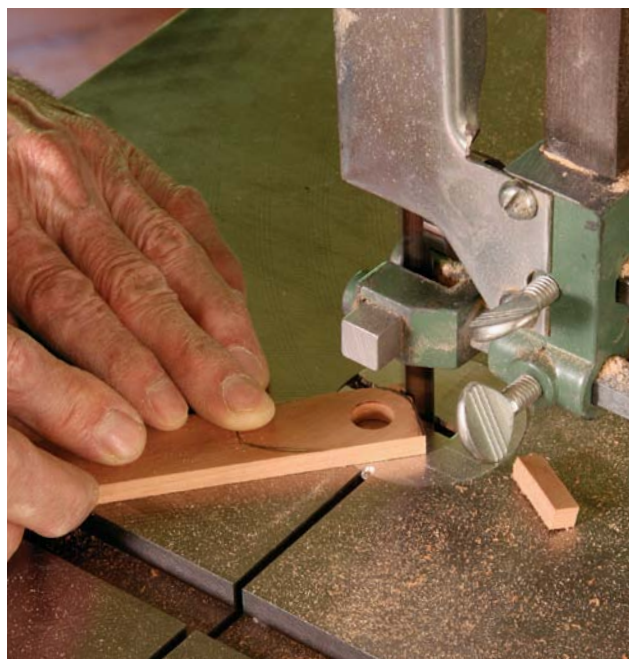
In closed position, the spinner fits behind the face frame. If the cabinet has no face frame, cut a slot into the case side to receive the tip of the spinner.



Dry-fit the knob. The hole through the spinner blank should be a snug fit. But the hole in the door stile should be $\frac{1}{64}$ in. oversize to ensure smooth action.



Mark out the spinner. With the knob tenon inserted in the hole in the stile, Becksvort draws the shape of the spinner by eye. He uses an overlong blank so it is easy to control on the drill press and the bandsaw.



Don't cut that corner. As you bandsaw out the spinner, leave one of the inside corners square. This provides the surface that contacts the dowel stop in the closed position.



Shopmade washer. To reduce friction between the knob and the door stile, Becksvoort uses a slippery washer. He makes his own from very thin nylon weatherstripping—or, in a pinch, the lid of a yogurt container—using a hole punch and a pair of scissors.

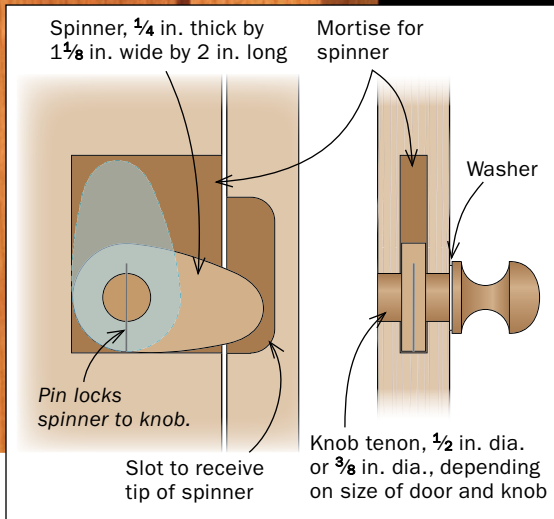


Add the stop dowel. To establish the location for the stop dowel, dry-fit the spinner on the knob and trace its flat side in both closed (far left) and open positions. Drill a hole centered on the vertical line and just above the horizontal line.



Glue and pin. After gluing the stop dowel in place, glue the spinner to the knob tenon, carefully applying just a small amount of glue inside the hole in the spinner. Then clinch the joint by drilling a hole through the edge of the spinner and into the tenon to receive a metal pin made from a brad.

Mortised spinner



The mortised spinner may be a lot more work, but it's a marvel to behold and a pleasure to use. To make it, begin by making the knob and then drill a hole in the door stile. Make the hole $\frac{1}{16}$ in. larger than the diameter of the knob tenon. Then drill a snug hole through the spinner blank to receive the knob tenon.

After bandsawing the spinner to shape, insert the knob tenon through it and into the hole in the door. This enables you to lay out the mortise in the door that will house the spinner. I use a drill to rough out the mortise and clean up with a chisel.

Other spinners can be glued to the knob, but with this one that's not possible. In place of glue, I use a pin. With the spinner in the vertical position, I drill a $\frac{1}{16}$ -in. hole through the edge of the spinner, through the tenon, and about $\frac{1}{8}$ in. into the other side of the spinner. Using nippers, I cut a 16-gauge brad to the right length, and then use needle-nose pliers to force the brad into the hole. That locks the spinner onto the shaft. I leave the head of the brad proud so I can remove the pin in the future if need be.

MAKE THE MORTISE

Rotating layout. With the knob dry-fitted to the spinner and resting in the hole in the door stile, turn the spinner to the open and closed positions to establish the top, bottom, and back edges of the mortise that will house the spinner.



Create the spinner mortise. Becksvoort uses a doweling jig (left) to guide his drill as he hogs out most of the waste in the spinner mortise. He follows up with chisels to chop and pare the sides clean (below).





PIN THE SPINNER

Pinned, not glued. It's not possible to glue the mortised spinner to the knob tenon, so Becksvooort uses a pin. He drills through the spinner and into the knob (left), then cuts a brad to length and pushes it home with needle-nose pliers (right). To make it removable, he leaves the head proud.



Trim the tenon. After the spinner is pinned in place, saw the tenon flush to the inside face of the door stile.



SLOT THE CASE



Mark and cut out the spinner slot. To lay out the slot in the cabinet side (or face frame) for the tip of the spinner, close the door and mark the farthest points the spinner reaches (top). Use a slotting cutter to make the mortise (bottom), following the layout lines on the edge of the cabinet.



Soften that sharp tongue. Sandpaper eases the edges of the spinner, allowing it to engage the mating slot more easily.