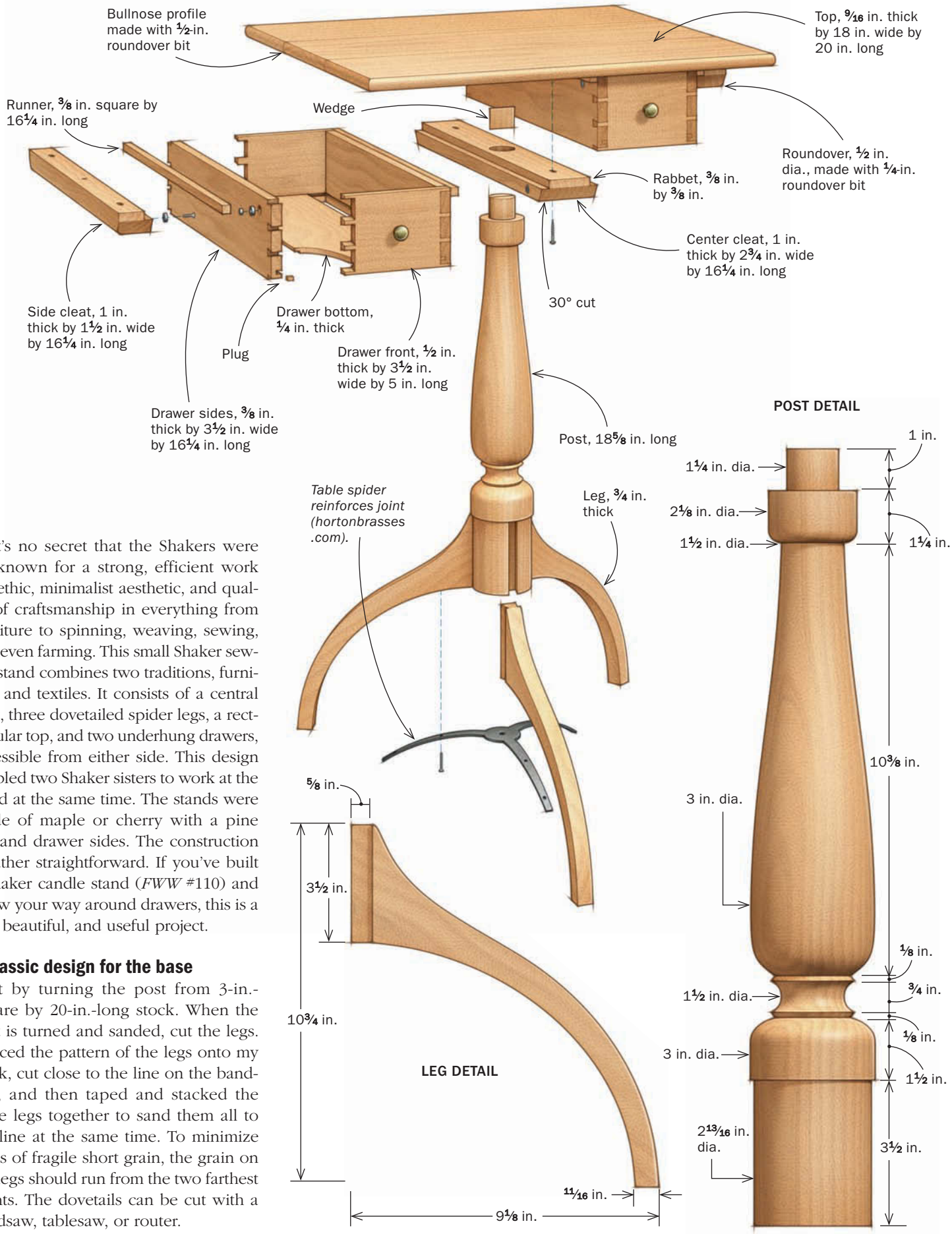
Shaker Sewing Stand

This classic piece is steeped in tradition

BY CHRISTIAN BECKSVOORT



It's no secret that the Shakers were known for a strong, efficient work ethic, minimalist aesthetic, and quality of craftsmanship in everything from furniture to spinning, weaving, sewing, and even farming. This small Shaker sewing stand combines two traditions, furniture and textiles. It consists of a central post, three dovetailed spider legs, a rectangular top, and two underhung drawers, accessible from either side. This design enabled two Shaker sisters to work at the stand at the same time. The stands were made of maple or cherry with a pine top and drawer sides. The construction is rather straightforward. If you've built a Shaker candle stand (*FWW* #110) and know your way around drawers, this is a fun, beautiful, and useful project.

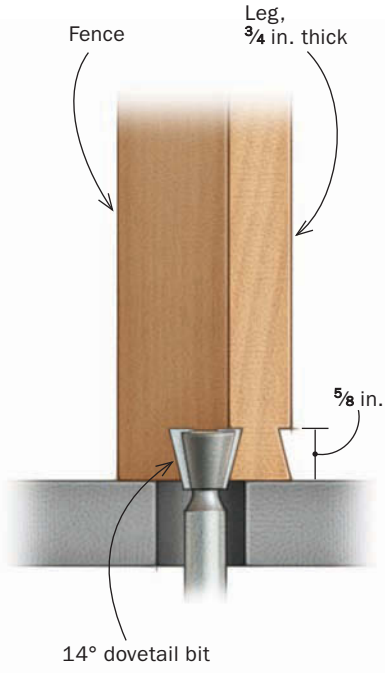
A classic design for the base

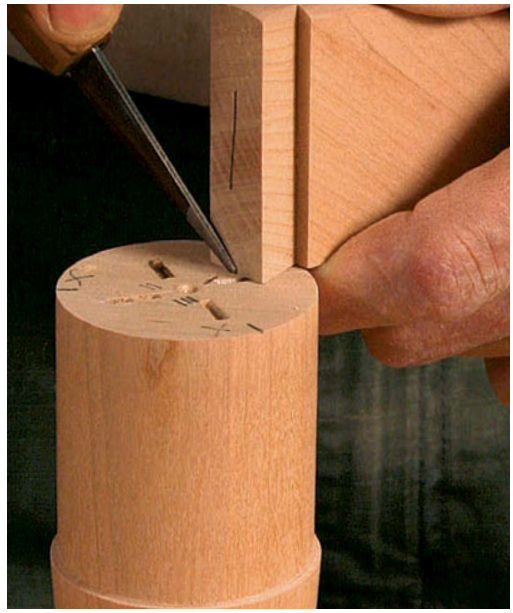
Start by turning the post from 3-in.-square by 20-in.-long stock. When the post is turned and sanded, cut the legs. I traced the pattern of the legs onto my stock, cut close to the line on the bandsaw, and then taped and stacked the three legs together to sand them all to the line at the same time. To minimize areas of fragile short grain, the grain on the legs should run from the two farthest points. The dovetails can be cut with a handsaw, tablesaw, or router.

Photos: Anissa Kapsales; drawings: Christopher Mills

DOVETAIL THE LEGS TO THE POST

Router and handwork combine to create this sturdy joint.

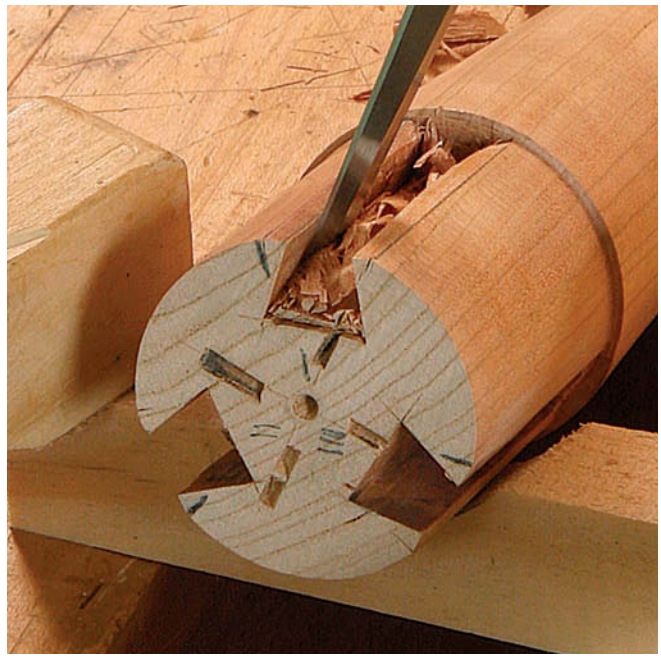




Rout and transfer the tails. *Cut the sliding dovetail keys at the router table, using a dovetail bit and a tall fence. Then, with the post inverted in the vise, scribe around the dovetail key. Finally, use a small square and a pencil to carry the scribed lines down to the shoulder.*

Clamp the post upside down in the vise, using pine pads to cushion the turning. Before marking the dovetail slots for the legs on the bottom, decide whether you want to undercut the dovetail shoulders to conform to the round post, or flatten ⅛ in. of the area on both sides of the dovetail. Either method is acceptable. Divide the bottom of the post into thirds, using a compass or wrapping paper around the circumference. Place each leg, one at a time, on the same side of the marks, making sure that the dovetail shoulders touch the circumference of the post at the bottom. While holding the leg, carefully mark around the dovetail with a knife. With all three legs marked, use an adjustable square to bring the edge of the dovetail marks down the post to the shoulder.

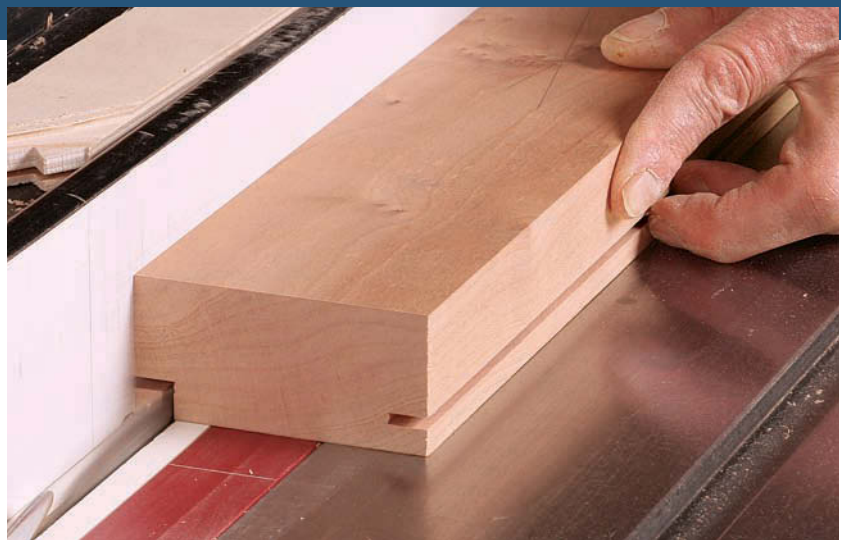
Reposition the leg in the vise. Carefully saw between the pair of lines for each leg, down to the shoulder but not beyond. Chisel out as much of the waste as possible. Pare the outline of the dovetail at the bottom to get the first part of the leg inserted into the slot. Mark the leading edge of the leg dovetail with a pencil, and re-insert it into the slot, shoving it in as far as possible. Carefully pare the darkened areas in the slot, and repeat until the leg is fully and securely seated up to the shoulder of the post. Repeat with the other two legs. Glue in the legs, and when dry, rasp, file, and sand the dovetails flush with the bottom. I add a table spider



Saw and chop the sockets. *Cut a kerf just inside the pencil lines and as deep as you can without hitting the shoulder. Establish the shoulder of the socket with a chisel and several mallet hits, then chisel away the waste.*

CLEATS DO MORE THAN CARRY DRAWERS

A center cleat and two side cleats support the drawers and allow them to open from either side. The cleats also keep the top flat and attached to the base.



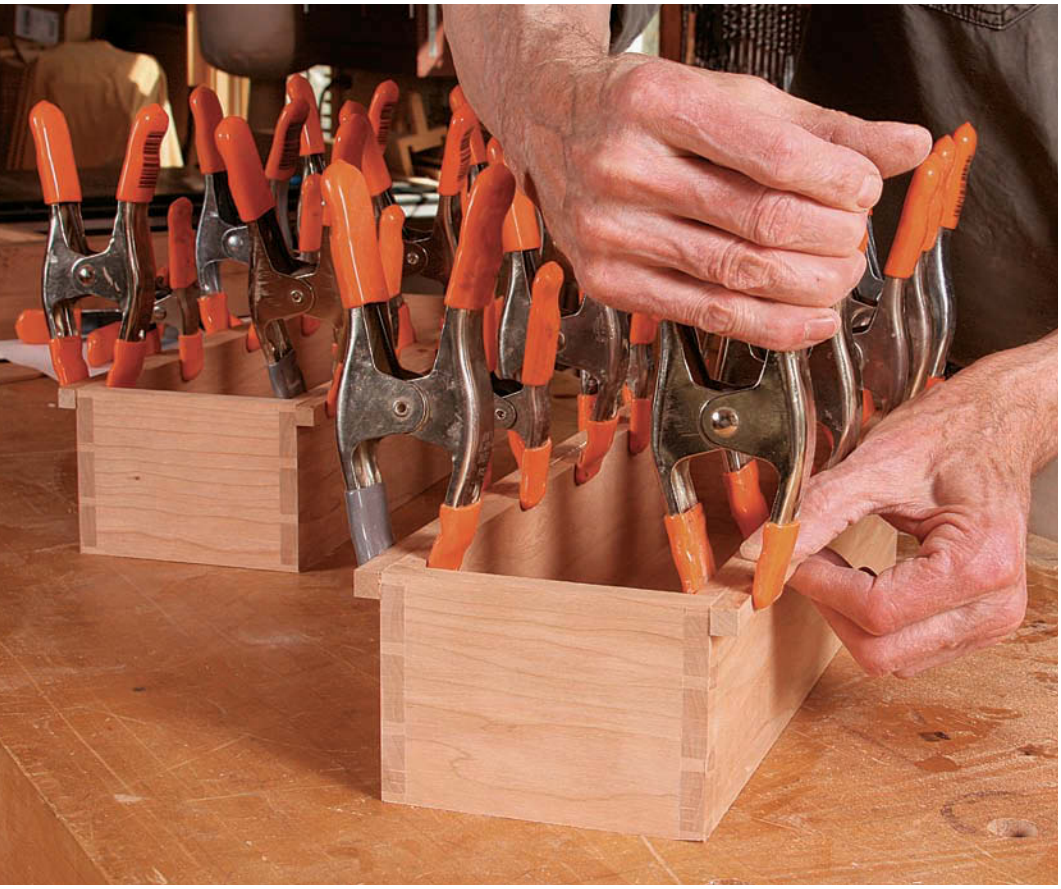
A rabbet to run on. *Two quick rips on the tablesaw create the channels for the drawer guides to sit in (left). The outside edges of the side cleats are exposed, so knock off the sharp edges with a roundover bit (above).*

Drill and attach the center cleat. *Use a Forstner bit to cut a through-mortise for the post in the center cleat (top). Each cleat also gets a hole on each end (above). Elongate the holes with a file to accommodate wood movement. Finally attach the center cleat to the post (right). Glue and wedge the mortise-and-tenon joint, aligning the cleat so it's centered with one of the legs. Then trim it flush.*

DRAWERS OPEN ON EITHER SIDE

The drawer runners ride the cleats. They are simply glued to the drawer sides.

Two-faced drawers. *Through-dovetails are visible on the fronts and sides of these drawers. Because there are two fronts, a rabbeted drawer bottom gets inserted during the glue-up (above). Use an end-grain plug to fill the exposed drawer bottom grooves on the drawer faces. A simple long-grain to long-grain glue joint is strong enough to attach the runner to the side of the drawer (below).*



(Horton-Brasses.com, no. TS-5) to the underside of the base. The spider reinforces the leg-to-post joint.

Top and cleats create the framework for drawers

After you glue up the top, cut one center cleat and two side cleats out of hardwood. The center cleat is wider than the side cleats and has a mortise drilled in the center for the tenon on the post. The two side cleats have a rabbet along one edge, and the center cleat has a rabbet on each side. Round the opposing corner of the side cleats, and cut an angle on the front and back of all three.

Drawers run in both directions

The drawers on the original Shaker stand have through-dovetails on all four corners, and that's what I do. Half-blinds will also work. Use quartersawn pine for the bottoms; in this case the grain runs front to back. Glue and sand the drawers and then make and attach four knobs. Glue a hardwood strip along each top edge of both drawers. These rails on the drawer sides will guide the drawers in the corresponding notched cleats.

Glue the center cleat to the post tenon, aligning it with one of the legs. When the top is trimmed to size and sanded, screw the center cleat to the top from underneath, positioning it in the center and perpendicular to the grain. With the stand upside down, position the drawers against the center cleat and place the side cleats against the outside of the drawers. Leave about 1/16 in. of clearance, then screw the side cleats to the top.

Magnet catches

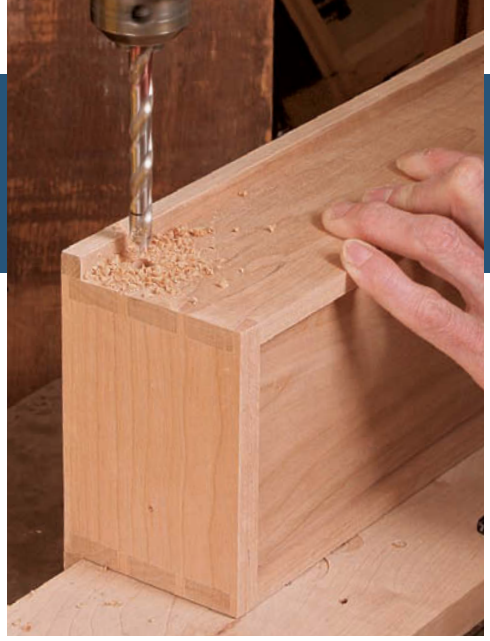
For the magnet catches, I use a rare-earth magnet, cup, and washer set from Lee Valley (no. 99K33.10). The magnets are set into the outside faces of the drawers. Once the drawer is made and fitted, the location of the magnets is carefully transcribed onto the corresponding locations on the outside of the drawer sides. Holes for the washers are drilled and the washers screwed into place on the sides of the center cleat.

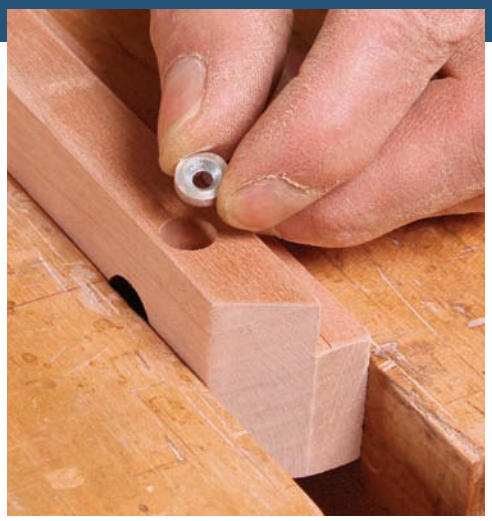
For the finish, I use Tried & True varnish oil, mixed with equal parts spar varnish. □

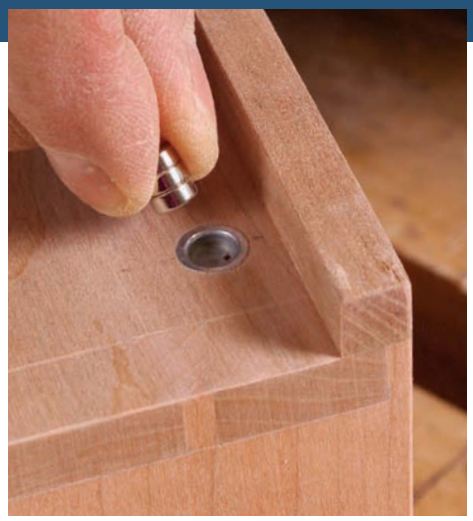
Longtime contributing editor Christian Becksvoort makes furniture in New Gloucester, Maine.

INSTALL MAGNET STOPS BEFORE ASSEMBLY

Traditional sewing tables obviously didn't have rare-earth magnets, but they work perfectly to stop the two-way drawers right where they need to be.







Magnet cups make installation easy. *Drill a shallow hole for the cups in the drawers and cleats (above). Then screw in the cups and washers and drop the magnets in place (right).*

The cleats bring the table together. *Use a square to align the center cleat on the top, and predrill and screw it in place (above). Then place the drawers against the center cleat. Position the side cleats against the drawer, and attach them (right). A strip of tape on the drawer side gives you a little wiggle space once it's removed.*