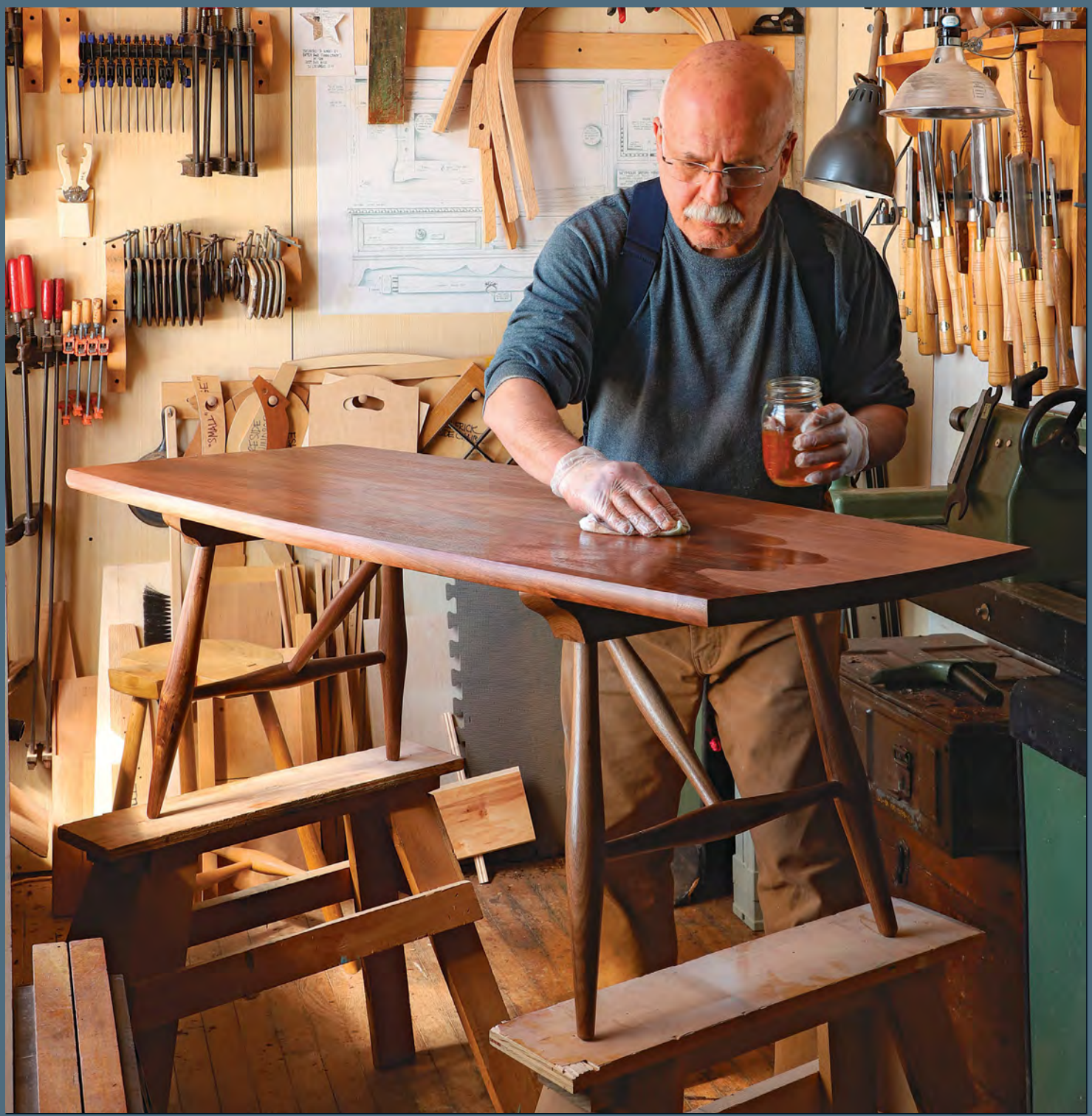
Scandinavian Modern Table

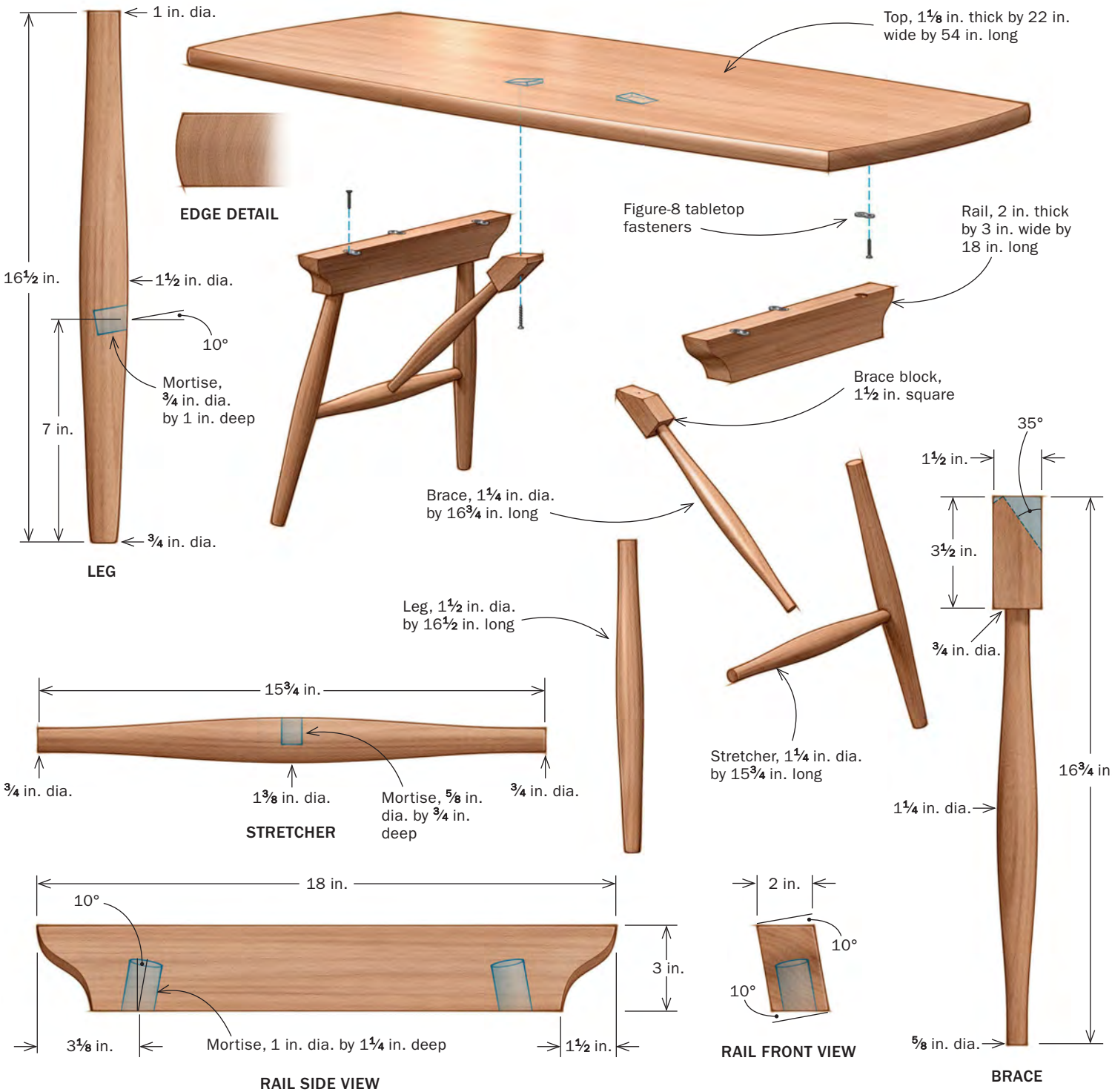
It's inviting, versatile, and built to last

BY MARIO RODRIGUEZ



Photos: Jonathan Binzen

COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021



I originally designed this piece as a low worktable for my wife, Nicole, who teaches fiber crafts, and her students, who sit around it while they work. Having built the first one, I could see that with its ample, rounded top and unobtrusive undercarriage, it could work beautifully as a coffee table as well, and I decided to make another for that purpose. For the new table, I chose walnut for its deep warmth and rich color. The top is a single walnut board cut from a big plank I'd been dragging around for over 25 years, just waiting for the perfect project. At 22 in. by 54 in., the tabletop provides a generous surface. But the curves along its ends and sides make it friendlier, more approachable, and better suited to its purpose.

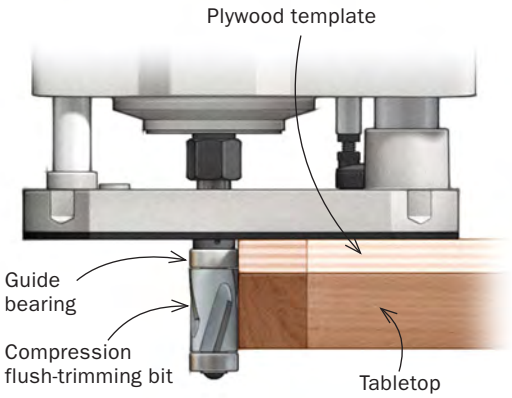
The undercarriage is composed of two turned leg assemblies. Canting the slender legs let me provide stability along with a large cantilever at the ends. To stabilize and strengthen the leg assemblies, I added an angled brace that engages the stretcher and has a square block at the top end that sockets into the underside of the tabletop. The brace creates a rock-solid structural triangle and eliminates the need for a medial stretcher running the length of the table, helping keep the undercarriage uncluttered.

Drawings: Christopher Mills

COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021

A TOP WITH SUBTLE CURVES

TEMPLATE-ROUT THE CURVED TOP



Creating the curves. *Rodriguez routs the curved sides and ends of the tabletop using a plywood template and a straight flush-trimming bit with a top bearing. He screws the template to the underside of the top.*

Seeking an elegant profile. *Wanting neither a squared-off edge nor a common bullnose, Rodriguez gave the table's edge a thumbnail profile. Using a Queen Anne bit with a guide bearing (right), he routed in two passes, first with the router riding on the underside of the tabletop, then on the top.*

Making a boat-shaped top

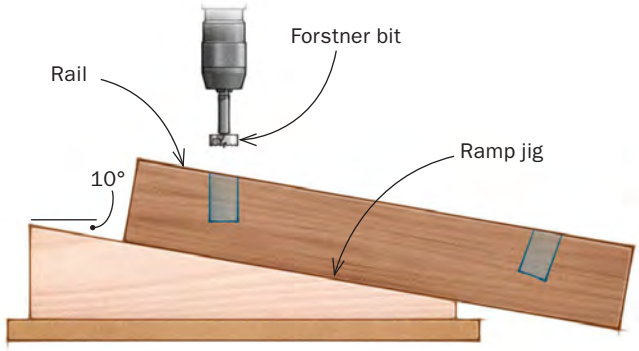
I used templates to help shape the broad, shallow curves along the sides and ends of the tabletop. To make the template for the long side curves, I bent a thin strip of wood until I arrived at a pleasing arc and traced it onto a piece of ½-in. plywood. Then I cut the arc with a bandsaw and sanded to the line. I used the same springing technique to make the router template for the ends of the tabletop with its shorter arc.

Once the templates were completed, I traced them to lay out the boat shape of the top. With a jigsaw, I rough cut to within ⅛ in. of the outlines. Then I screwed a template to the underside of the tabletop and used an Infinity flush-trimming bit (item no. 06-692; infinitytools.com) to create a clean, smooth edge. Any tiny blips left after routing were faired with a block plane and then sanded.

Custom curve. *To clean up the slight offset in the thumbnail profile where the two passes of the router met at the middle, Rodriguez made a concave sanding block that matched the thumbnail.*

COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021

ANGLED DRILLING JIG



Rail blank on the ramp. *To give the legs their outward splay, the mortises for them are drilled at 10° using a shopmade ramp jig on the drill-press table.*

Thumbnail profile softens the edge

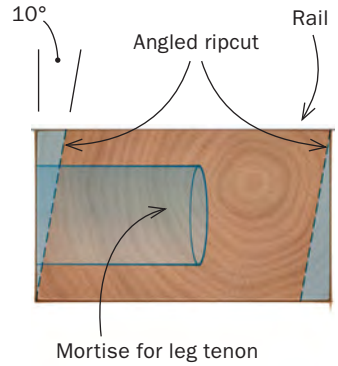
I didn't want a standard-issue bullnose profile for this table. I wanted something tighter, more deliberate; a thumbnail profile would work nicely. This detail softens the edge slightly by forming a gentle arc yet still leaves a crisp shadow line that clearly distinguishes the surface of the top from that of the edge.

I created the thumbnail profile using a Queen Anne bit (Infinity no. 10-500) with a guide bearing. Because I made the cuts in two passes, first with the router riding on the bottom of the table, then the top, I made a sanding block to fair out the slight flat at the middle of the profile's arc. To make the block I coved a long scrap at the tablesaw, creating a concave curve that matched the convex arc of the table's thumbnailed edge. Then I cut off a section of the scrap and added a fence.

Mill and drill the undercarriage

For the undercarriage parts I selected the cleanest walnut I could find with a deep uniform color and

ANGLE RAIL AFTER MORTISING



Adding another angle. *The legs are canted as well as splayed, and to create that outward angle, Rodriguez rips the top and bottom edges of the rail with the tablesaw blade tilted to 10°.*

Scrollwork. *The ends of the rails get a scrolled treatment. You can cut it on the bandsaw, then clean it up with a stationary sander or hand tools.*

Drill the rail for hardware. *The rail will be attached with figure-8 fasteners, which permit the top to move with the seasons. Rodriguez mortises for them by cutting a circle with a Forstner bit in a hand drill and then making a flared opening to the mortise with a chisel.*

COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021

SHAPE THE LEGS

DRILL THE MORTISES FIRST

Because the legs will be splayed, the mortises for the stretchers must be angled, too. Rodriguez uses the same 10° ramp jig to cut them (right). Remove the ramp jig before drilling the mortise in the stretcher that will accept the brace (far right).

Establish important diameters. *When the turning begins, Rodriguez hangs his drawing right next to the lathe so he can easily transfer dimensions to the workpiece with calipers. He turns these simple shapes largely by eye, but a few key diameters, sized with a parting tool and calipers, guide the way.*

straight grain. I milled the legs to 1¾ in. square and the stretchers to 1½ in. square. I milled the rails to final thickness but left them a little over width.

I drilled the mortises in the legs, stretchers, and rails while the stock was still square. This ensured that the alignment and registration of the parts would be precise regardless of their final shapes. I made a ramped jig for the drill press so the mortises in the legs and rails would be angled 10°. When it came time to cut the mortise in the stretcher that receives the brace, I removed the ramp jig.

Next I ripped the top and bottom edges of the rails at the tablesaw with the blade angled 10°. Then I used the bandsaw to saw out the scrolled end details on the rails and sanded them smooth.

A furniture maker's turning tool. *Rodriguez, who turns only when he needs parts for furniture, relies on a familiar bench tool to smooth tapers on the spinning lathe.*

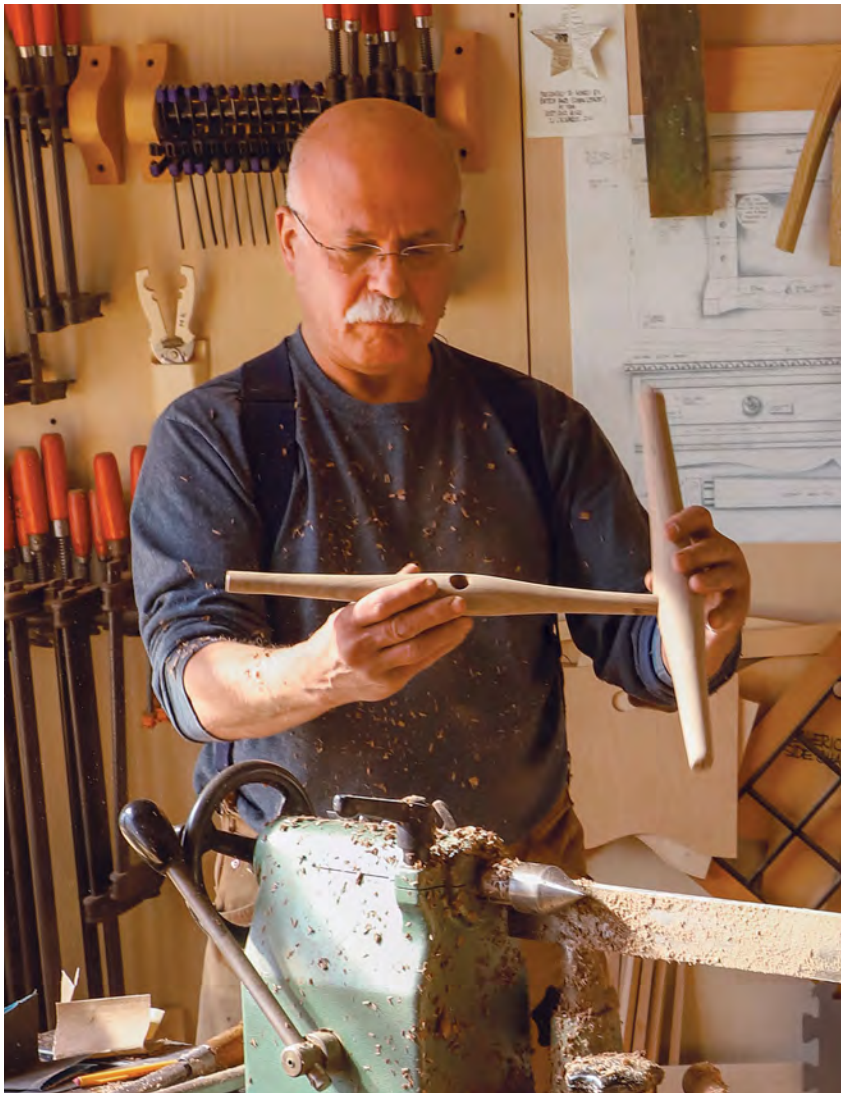
Online Extra

To see video of Rodriguez using a block plane on the lathe, go to **FineWoodworking.com/291.**

COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021

TURN THE TENONS

Sizing wrench. *You can use an open-end wrench to simplify sizing tenons.*



Test and tweak the tenon's fit. *If the fit of the tenon is tight, remount the part on the lathe and use a fine file to make a slight adjustment.*

Turning the legs, stretchers, and braces

I turned the legs to a mild, Mid-Century taper with a gentle swell where they receive the stretchers. It's a simple pattern. My aim was to have the top end taper to a 1-in. tenon, and the other to a fine, light foot, while maintaining a thickness in the middle sufficient to secure the stretcher.

I don't consider myself a turner, more like a furniture maker who turns when necessary. So after using gouges to take square stock close to its finished form, I often rely on a block plane (used on the spinning workpiece) to remove any bumps and achieve a smooth taper. There's no danger of ruining the work or damaging your plane. Set the blade for a light cut

COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021

Angle cut the brace block. *Rodriguez saws the block end of the brace at 35°, then smooths the sawn surface with a disk sander.*

Make way for the screw. *Drill a clearance hole and countersink for the screw that you'll drive through the brace and into the tabletop.*

Mortise layout. *Locating the mortise for the brace block requires first assembling the leg unit. With the unit together, position the rail on a crossline and trace around the brace block.*

and press the plane against the spinning workpiece. This technique sometimes leaves very light spirals, but they are easily removed by sanding.

I often size round tenons with an open wrench. It gives me a slightly oversize tenon that is easily tweaked for a tight fit. I turned all the parts here to die smoothly, shoulderless, into their mortises. I think it's a cleaner, more attractive look. Before removing each part from the lathe, I took the opportunity to sand to 220 grit.

Stages of assembly

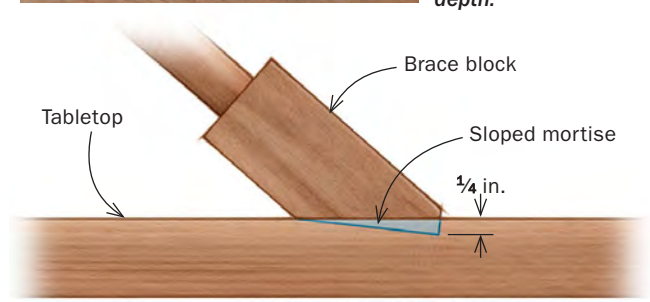
Even with all the parts turned and prepared, I had one more bit of mortising to do. For maximum strength, the block end of the brace gets screwed into a shallow ramped mortise in the underside of the top, and I needed to lay that out and cut it. To establish the location of the brace mortise, I dry-fitted the leg assembly and set it in place on the underside of the top. After tracing the brace block, I hand-chopped the ramped mortise. Then I inserted the brace and drove a screw through it into the top.

Finding the exact position of the leg assembly and the brace can require a bit of back and forth. I didn't finalize the position of the rail, by drilling for and screwing down the figure-8 fasteners, until the brace was mortised into the underside of the top. When all the screws were driven, I removed them and took everything apart for the glue-up.

Since the table would receive fairly heavy use, I decided on a rub-on poly finish. This user-friendly finish will allow occasional repairs to be made in place. □

Mario Rodriguez makes furniture and teaches woodworking in Philadelphia.

Chopping and checking. *Rodriguez cuts the ramped mortise by first chopping across the end, next chopping the sides, and then paring the angled bottom face. The process involves multiple fittings to get to the right depth.*



COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021

Locate the rotation. *With the base dry-assembled and screwed in place, make matching marks on the leg and stretcher so it's easy to align them properly during glue-up.*

First step in the glue-up. *Apply glue to the leg and stretcher tenons and push the legs partway home, keeping an eye on the rotation alignment marks.*

Driving home. *Tip the leg tenons into the rail, pull the legs tighter to the stretcher, and then use a mallet to drive the legs home in the rail.*

Attach the rail. *After inserting the brace tenon into the stretcher, fit the brace block into its mortise in the tabletop, and then drive screws through the figure-8 fasteners.*

The final fixing. *Drive a screw through the brace block and into the tabletop, locking the whole assembly tight.*

COPYRIGHT 2021 by The Taunton Press, Inc. Copying and distribution of this article is not permitted. • Fine Woodworking #291 - SEP/OCT 2021