End Table with Delicate Details

Turning, carving, and contrasting woods elevate a traditional form

BY DAVID LAMB

The neoclassical carving requires few tools.

Leg is tenoned to receive turned foot in contrasting wood.

This little end table is a functional combination of a simple form with subtle but considered detail. Most notable may be the carving, which while very straightforward in both layout and execution contributes a layer of elegance to the table's Shaker roots. The turned legs have a pleasing taper with a slight swelling near the top, similar to neoclassical designs. The final feature is the use of contrasting material, butternut and its darker cousin, walnut. If you choose to use different species, consider how they'll resonate with the overall form. For example, the tabletop may be a nice spot for quiet and straight grain, or a statement piece that is highly figured. Speaking of changes, while this version doesn't have one, the table also lends itself well to a drawer.

Turn the legs and feet

The legs comprise two turned elements: the butternut legs and the walnut feet, which are drilled with a mortise to attach to the leg's tenon. Neither element is particularly challenging technically, but pay attention to the leg's swells and transitions. On such a delicate piece, the flow of these legs plays a huge role.

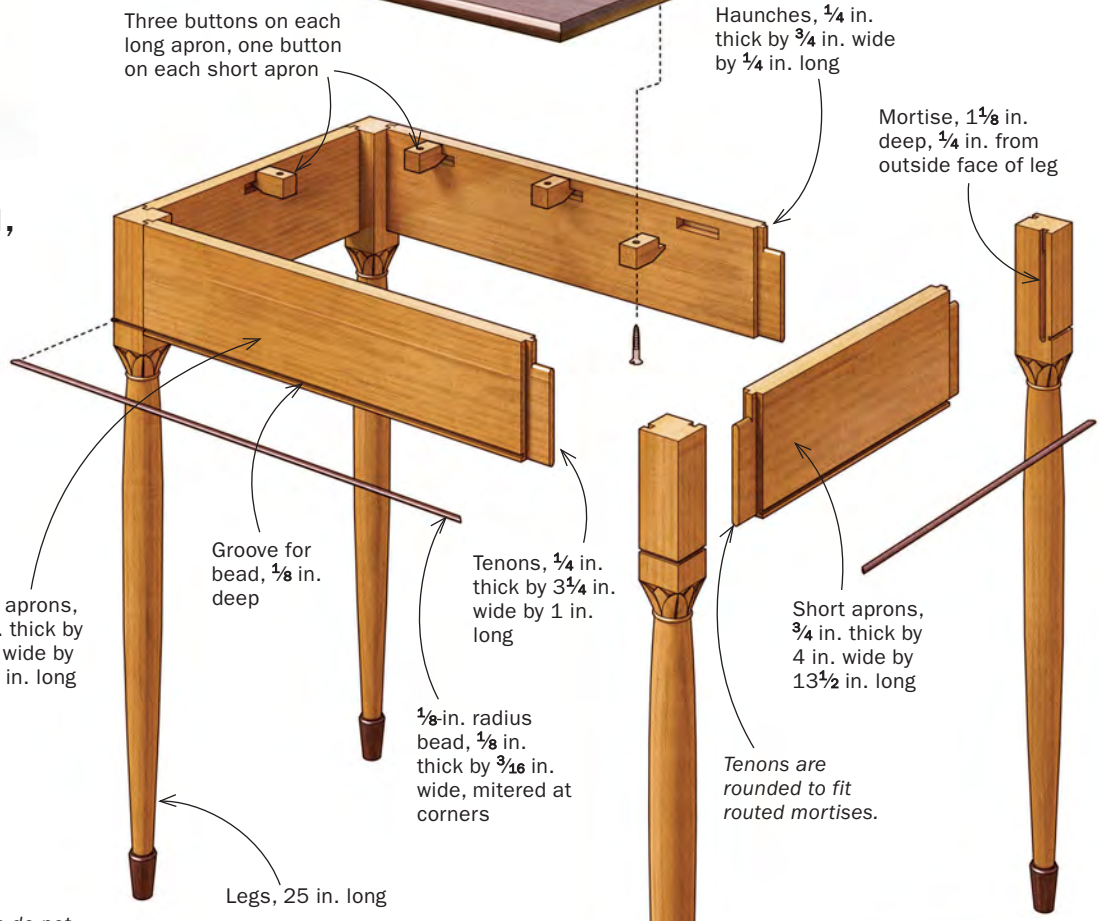
I start with the legs, milling them into 1½-in.-sq. blanks. To lay out the transitions

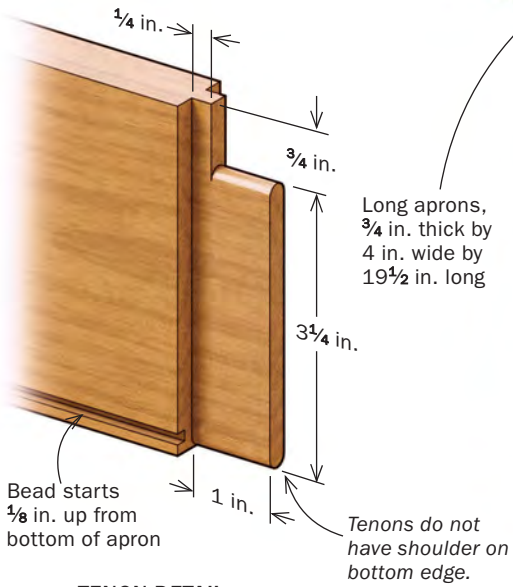
Photos: Barry NM Dima

SIMPLE CONSTRUCTION, TASTEFUL DETAILS

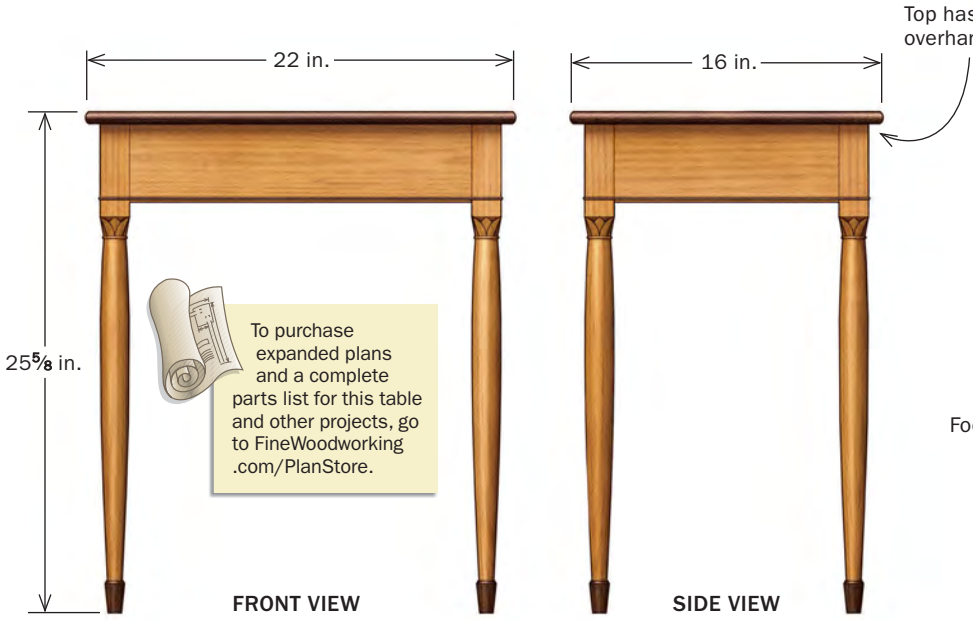
Straightforward turning, carving, and proportions come together to make a table greater than the sum of its parts.

TOP DETAIL





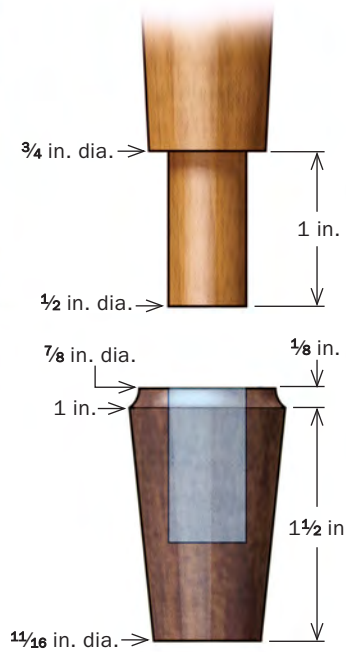
TENON DETAIL



To purchase expanded plans and a complete parts list for this table and other projects, go to FineWoodworking.com/PlanStore.

FRONT VIEW

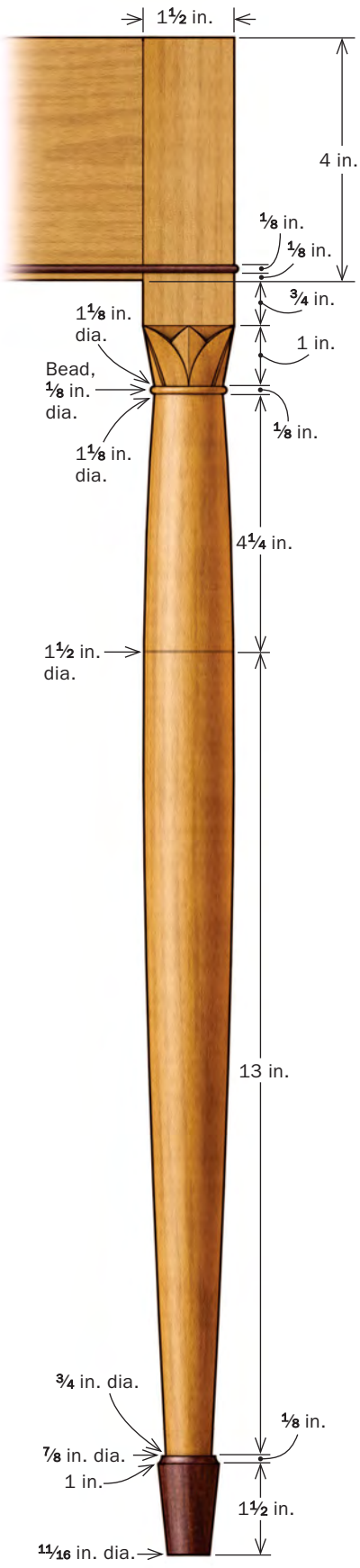
SIDE VIEW



FOOT DETAIL

Drawings: John Hartman

LEGS



Size the diameter right below the bead. *After roughly defining the bead at the top of the leg, Lamb uses a parting tool to bring the area below it to final diameter. He checks his progress regularly with calipers.*

Refine the carving area. *Use a gouge to carefully turn the transition right above the bead. You'll carve this area later, so aim for a good surface.*

Turn the tenon for the foot. *This tenon creates a solid connection between the leg and its applied foot. Carefully use a parting tool to sneak up on the final diameter (left). Frequently check the tenon's fit in a test block (right).*

Use a plug when turning most of the foot. *After drilling the foot blank's mortise, insert a plug with a matching tenon. This will let you better secure the blank in the lathe.*

Turn the foot. *The foot's shape echoes the gentle taper of the leg above, and its delicate cove marks the transition between the two pieces.*

Use the lathe as a clamp when gluing the foot to the leg. *After applying glue to the leg's tenon and slipping on the foot, Lamb slowly advances the tailstock to close the shoulder and hold the parts in place while the glue dries.*

and joinery, I use a pattern stick. I always make a full-size drawing for pieces, and making this pattern stick from the drawing is easy and helps ensure repeatable results.

Next, define the diameter below the bead with a parting tool before using the point of a skew chisel to lightly score the corners at the bottom of the bead. This helps prevent unwanted corner breaks that could run to the upper leg square. Then, above the bead, use a gouge to carefully turn the transition from square to round. Finish the top by defining the bead.

Form the tenon at the bottom of the foot with a parting tool. Regularly check its diameter in a scrap block you drilled with the same bit you'll use for the foot's mortise. I frequently check the shoulder with a straightedge.

Below the bead, use a parting tool to define transitions before blending them with a gouge. Remember, the upper part of the leg is somewhat bulbous and the lower part is mostly a straight taper. Blend the turning with 120-grit sandpaper before refining to 220. No need to sand the carving area though.

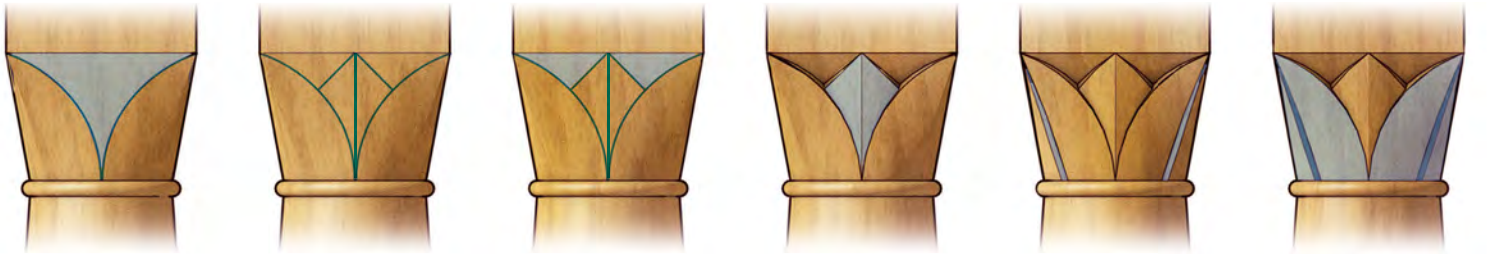
Lastly, with the skew, lightly score a line around the thickest part of the leg. It's a small detail that adds greatly to the design.

The feet come last. Mill a long piece of walnut 1 in. square and chop it to short blanks. After marking the centers, bore the ½-in. mortise at the drill press. After that, you can turn and then sand the foot. When turning these small feet, I make a simple wood plug. The plug itself is tapered, letting it fit snugly into the hole in the top of the foot. With it, the spur center engages the plug rather than the foot itself.

Once turned, the feet are ready for glue. Clamp carefully and ensure a good, close fit all around. Instead of trying a balancing act I use my lathe as a clamp. Easy and effective.

Carving adds classical flair to top of leg

The leaf carving is a simple motif that benefits from a methodical approach. It requires a small tool kit and a handful of steps.



File each face flat.

Draw and knife in leaf outlines and centerlines.

Shallow gouge removes chips behind leaves.

Shallow gouge shapes minor leaves.

V-tool forms center vein of major leaves.

Shallow gouge shapes major leaves.

CARVING SEQUENCE

LAYOUT

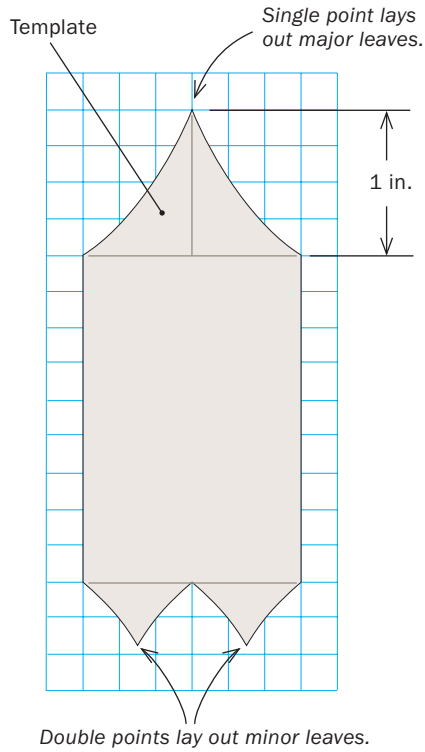
Use a template to lay out the major and minor leaves. *After filing a flat on each face, Lamb traces the shape of the leaves onto the legs, using alignment marks to position the template. Then he draws the centerline (bottom).*

Let's carve

The leaf carving is a small detail with big payoff. It also doesn't require many tools, just a file, a knife, a shallow gouge, and a small V-tool. But on top of looking great, it also teaches some good lessons about carving, such as how to create depth and the correct order of cuts.

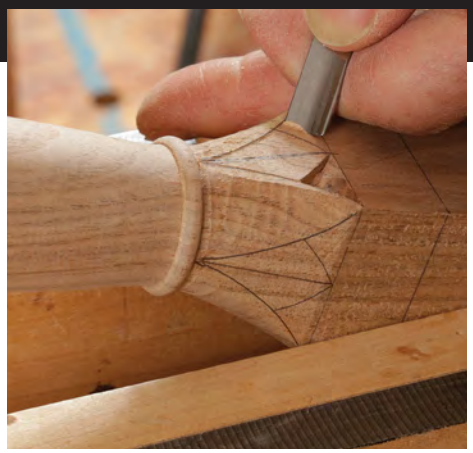
Before you pick up a gouge, file the turned area into flat triangles. This enhances the transition between it and the turning below. Then, using a cardboard pattern, lay out the leaves with a pencil.

Then knife over your pencil lines. I like a standard, thin-blade utility knife. Deepen the lines in several passes; don't go for



MINOR LEAVES

Knife in the outline. *Begin by using a thin-bladed utility knife to score along your pencil lines. For the best results, take multiple passes, starting light and going deeper each time.*



Remove the chips behind the minor leaf. *Use a 5⁄16-in.-wide #4 gouge to remove the triangular areas between the leaves. These cuts taper, deepening to about 3⁄32 in. at the edges.*

The minor leaf's faces are concave. *Slightly hollow the minor leaf on each side, leaving the center raised. Use the same shallow gouge.*

full depth on your first shot. Next, use a 5⁄16-in.-wide (or so) No. 4 gouge to remove the tapered triangular areas between the leaves.

To better distinguish the minor and major leaves, carve their surfaces differently. The minor leaves should be slightly hollowed, and the major ones slightly rounded over.

Base is standard construction

The legs and aprons are typical haunched mortise-and-tenon construction. The base will look plain at first, but the inset walnut bead that runs around will elevate the appearance. To make sure that bead wraps cleanly around the base, it pays to not underestimate the simple base.

I cut the tenons at the tablesaw and rout my mortises. For both operations, I find it helpful to use test pieces when setting the machines. Cut the mortises 1⁄8 in. deeper so the tenons don't bottom out. Before assembly, cut the grooves for the buttons that will attach the bullnosed top to the base.

Assembling the base starts with gluing two opposite sides. Alignment and keeping parts square is critical, especially since there is no reveal between the legs and apron. Their outside faces are all flush.

For small parts like these, I apply glue to the entire mortise-and-tenon, including the shoulder. Any movement across the 4-in. apron is very minimal. Allow the glue to set overnight before gluing the remaining parts. Double-check for square and that there is no twist.

Once the glue has cured, level the top edges and blend all joints flush.

MAJOR LEAVES

Carve the major leaf's center vein. *Use a small V-tool and carve from the tip of the leaf down. This will likely require multiple passes.*

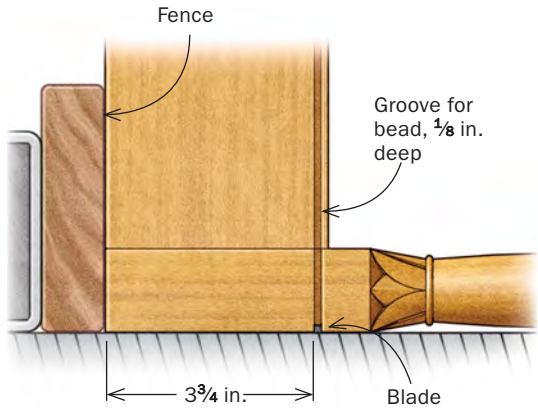
Round over the major leaves. *To contrast these leaves with the concave minor ones, Lamb uses the #4 gouge to model their faces slightly convex.*

Easy assembly, but mind the details

Glue up the base. *After gluing up the two short ends, Lamb brings the whole assembly together with the long aprons.*

Level the legs to the aprons. *After chamfering the insides of the legs to avoid blowout, plane the legs and aprons level. Finish with a continuous pass around the whole base assembly. This is your reference surface for sawing the bead groove, so you want it to be perfect.*

Cut the groove for the bead using the tablesaw. *This can feel hair-raising, but it's safe, effective, and fast. Keep even pressure by pressing down on the inside face of the apron, and keep the assembly tight to the fence.*



Add a bead for the final flourish

Scratch stock shapes the bead. *After thicknessing the wide bead blank to a press fit in the groove, use a scratch stock to mold its two edges. Lamb uses his middle finger to keep the scratch stock centered.*

Rip off the beads. *Leaving the stock overwide until now makes the workpiece both easier and safer to handle.*

Base ends with a bead

Using the tablesaw, cut ⅛-in.-deep grooves on all four sides. Reference the top of the table, which you just trued up, against the fence.

For the bead, first thickness the blank for a good fit in the apron groove. Leave the blank wide for now. This makes it easier to shape, and you can safely rip off the beads afterward. To shape the bead, I use a scratch stock made from a piece of shaper steel to hand scrape the profile, followed by sanding to 220 grit.

Once the bead stock is prepared, I cut, fit, and glue it into the table one side at a time. The bead strips are mitered at the corners. I use a small miter box and backsaw to cut these.

After gluing, clean up squeeze-out and soften the corners slightly. At this point, you can attach the top.

Don't overdo the finish

There are a number of good finishes out there. Because an end table can be a high-use piece, I recommend a waterproof topcoat such as an oil varnish. The base can be shellacked. I'd go for a hand-rubbed effect on this piece and not over-finish it, as it is rather casual, and too much finish on the carvings is not good. □

David Lamb is a member of the New Hampshire Furniture Masters.

Miter the bead stock. *Lamb clamps a small miter box in his vise and makes the cut with a backsaw.*

Install the bead around the table. *Check each piece's fit before gluing it in. The pieces should sit 1/16 in. proud of the surface, and the miters should close tightly.*