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Chippendale Sofa Table

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Chippendale Sofa Table

Good design never really goes of out style. This Chippendale accent table testifies it. Taken from an 18th-century Chippendale catalog, we remain faithful his excellent sense of proportion and detail. Ours is made of common red oak, but you could use mahogany for even more historical accuracy.

Even posthumously, Thomas Chippendale continues to make sales. When our author's wife wanted a new sofa table for their family room, the couple settled on a design from Chippendale's 1762 catalog. This sideboard table certainly proves its timeless appeal. The fanciful leg brackets— typical of Chippendale's later work—are still attractive today.

Chippendale worked almost exclusively in mahogany throughout his long and illustrious woodworking career, but we built our reproduction out of red oak to blend with today's more common furniture woods.

Making the Legs and Aprons

The first step in building this table is to cut all the parts to size according to the dimensions given in the *Material List* on page 91. With that done, milling can begin with the four legs (pieces 1), which are fashioned from solid stock that is ripped and jointed square to 2¾". Use your table saw to cut a 45° chamfer on the inside corner of each leg (see the *Corner Detail Drawing* on page 90 for dimensions), then lightly joint the chamfered face to remove any saw kerf marks. Set the legs aside for a few minutes and move on to the aprons (pieces 2 and 3). Machine tenons on both ends of each apron, using a sharp dado set and your table saw's miter gauge.

The mortises that house these tenons will also accommodate the scroll-sawn corner brackets, so this is a good time to make those brackets. Refer to the *sidebar* on page 88 for complete instructions. When your brackets are completed, turn your attention back to the mortises.

Begin by installing a 1/4" straight bit (spiral fluted works best) in your table-mounted router, and set the fence using the dimensions shown in the *drawings*. To stop the mortises at the correct length, scribe pencil lines on both the router fence and the legs where each cut starts and finishes (see the *drawings* for this dimension). Remove the stock (see *Figure 1*, below) in three passes until the mortise is 5/8" deep. When all four legs are mortised, use the same fence setting and bit to make similar mortises in the bottom edges of the aprons: These will house the tenons on the tops of the brackets, and their dimensions can be found on the *drawings*.

CHIPPENDALE DESIGNS

In his earlier work, London furniture builder Thomas Chippendale (1718-1779) made extensive use of cabriole legs and ornate carving.

As his craft matured, he turned increasingly toward straight legs and scrollwork. Chippendale gained lasting fame in 1754 with the publication of his book of furniture designs, "The Gentleman and Cabinet-Maker's Director."

Adding Decorative Milling

In the Chippendale tradition, the legs on this table are fluted. The flutes are stopped before they reach the top or bottom of each leg (see the *Leg Detail Drawing* on page 91). To make them, install a 1/8" veining bit in the table router and use the same technique employed to stop the mortises for the brackets: Use pairs of matching

Figure 1: *Mortises in the legs (they house tenons on the brackets and aprons) are cut on a router table using a 1/4" spiral-fluted straight bit.*

MAKING THE BRACKETS

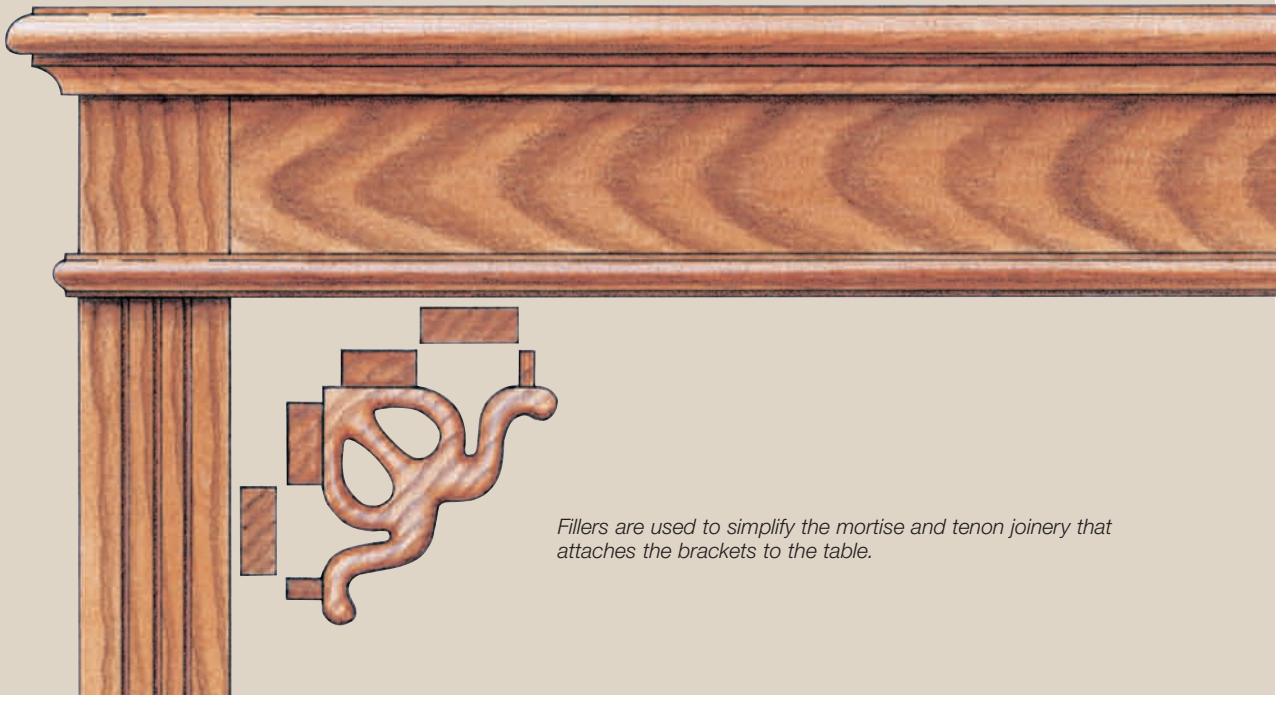
Round over the scroll sawn edges of the brackets with a piloted 1/4"-radius roundover bit in a table-mounted router.

Start making the brackets (pieces 4) by ripping enough straight-grained 5/8"-thick lumber (see *Material List* on page 91) into 3½" wide strips to make eight bracket blanks. Cut the strips into triangles on your table saw using the miter gauge, and make sure the two short sides of each triangle are exactly at 90° to each other or you'll have problems during assembly.

The completed brackets will be attached to the rest of the table with mortise and tenon joinery, so stay at your table saw to make tenon shoulders on the two short edges of each triangular blank. Begin by setting your dado blade's height to 3/16" and remove enough material from each side of the blank to leave 1/4"-thick tongues, as shown in the top two *photos* (above right). Transform these tongues into tenons (right) by adjusting the dado blade height to 5/8" and removing enough waste to define the tenons. Make photocopies of the design (see the *Full-size Pattern* on the *Pinup Shop Drawings*) and glue them onto the blanks with a low-tack spray. Then drill holes through the interior cutout areas and complete the fretwork using a scroll saw or jigsaw. Cutting out the area between the tenons makes final shaping a lot easier. Do that shaping (see the two *photos* above left) on your router table with a 1/4" roundover bit.

Use your table saw to create tongues on the short sides of the triangular bracket blanks, as shown in the two photos at left. Begin by making a pass to define the tenon (using a sharp blade to combat tearout), then remove the rest of the waste in subsequent passes.

After changing the blade height, use your miter gauge to complete the tenons. The waste between them will be replaced by fillers (pieces 8) during assembly.



Fillers are used to simplify the mortise and tenon joinery that attaches the brackets to the table.

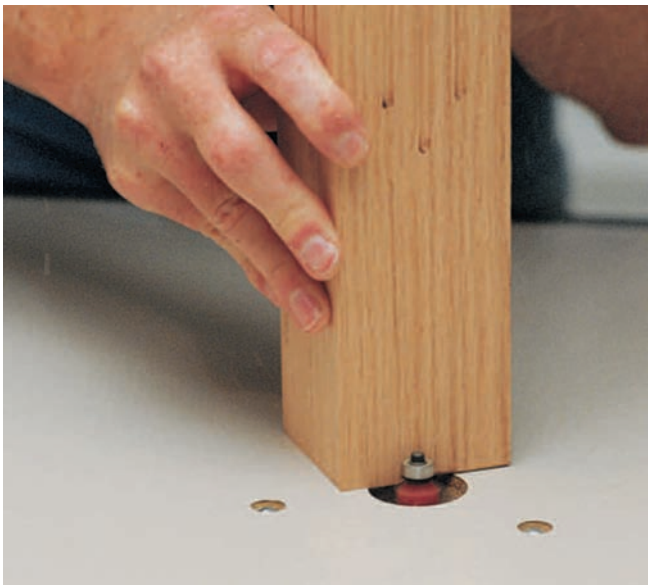


Figure 2: *Ease the bottom edges of the legs with a 1/8" roundover bit. At 31¼" long, these legs are short enough to perform this operation while holding each leg vertically on the table.*

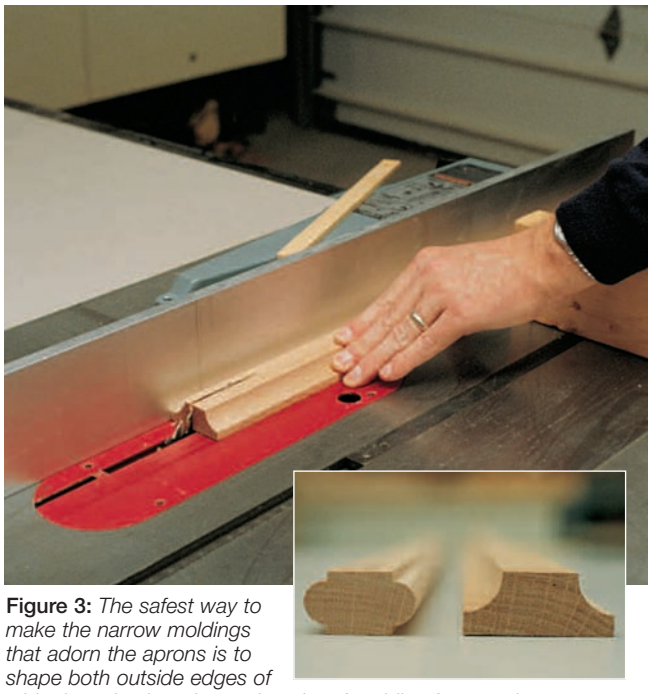


Figure 3: *The safest way to make the narrow moldings that adorn the aprons is to shape both outside edges of wider boards, then rip two lengths of molding from each.*

pencil marks on the router table fence and the workpiece.

Stay at the router table to ease the bottom edges of the legs with a 1/8" roundover bit (see *Figure 2*, above), then move to the table saw and create 3/32" grooves for the tabletop fasteners (pieces 5) on the inside faces of the aprons. These are cut with a thin-kerf saw blade, and their locations and depths can be found on the *Edge Detail Drawing* on page 91.

Fashioning the Moldings

True to Chippendale's original 1762 design, decorative moldings are used to dress up the apron. A cove molding (piece 6) runs around the top of each apron, while a wide bead molding (piece 7) adorns the bottom edge. The safest way to make these narrow moldings is to shape both edges of a board (see *Figure 3, inset*), and then cut off the shaped piece. While routing, make several passes, ending up with a last light pass that both eliminates chatter and minimizes sanding.

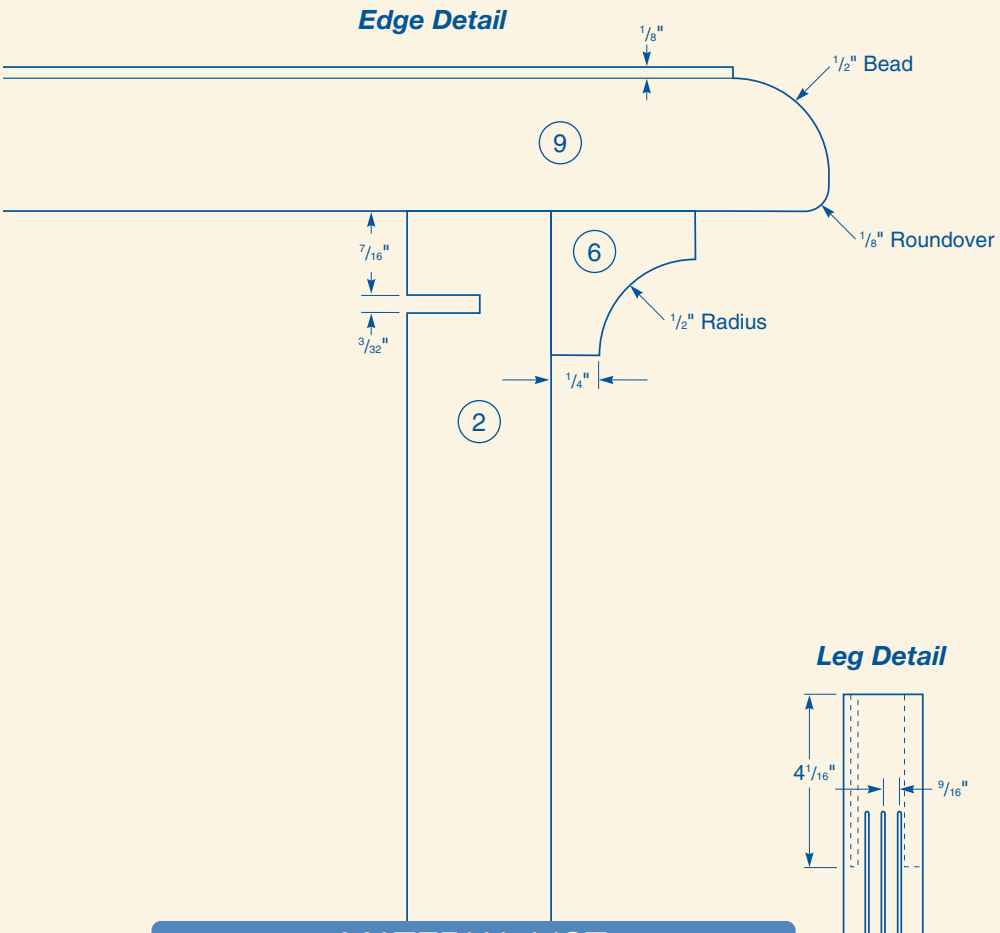
QuickTip

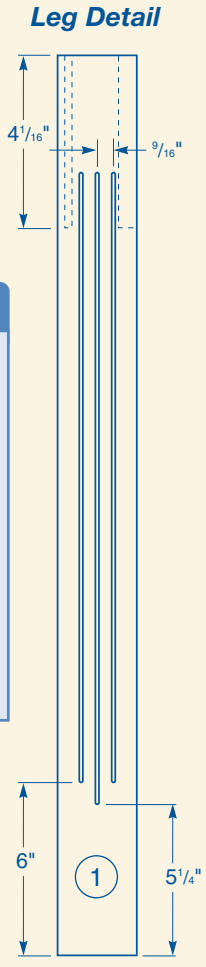
Use the Fence to Keep Your Bearings when Routing Some Profiles

You can't mill a bullnose on the edge of a board with a bearing guided bit, at least not if you just rely on the bearing. After making the first cut, you've removed most of the bearing surface for the second cut, so it will be offset (the bit will remove more stock on the second cut than the first). The answer is to make both cuts using the same bearing-guided bit, but you have to rely on your router table's fence, instead of the bearing, to guide the cuts.

Table Exploded View

Corner Detail





MATERIAL LIST

		T x W x L
1	Legs (4)	2¾" x 2¾" x 31¼"
2	Front and Back Aprons (2)	3/4" x 4¼" x 47¼"
3	Side Aprons (2)	3/4" x 4¼" x 10¼"
4	Brackets (8)	5/8" x 3½" x 8⅜2"
5	Tabletop Fasteners (10)	Steel
6	Cove Molding (1)	3/4" x 3/4" x 150"
7	Bead Molding (1)	3/8" x 3/4" x 150"
8	Bracket Fillers (16)	1/4" x 5/8" x 1 11/16"
9	Tabletop (1)	1" x 17" x 54"

Building the Frame Assembly

The legs, aprons, brackets, fillers (pieces 8) and moldings can be glued up now. Start by gluing the brackets and fillers to the aprons, lining up the brackets with a combination square while the glue is still wet (see *Figure 4*). When aligned, clamp them in place.

After the glue has dried, fasten the front and back aprons to the legs. To do so, apply glue to their tenons, insert the tenons into the leg mortises and clamp them in place with pipe clamps (see *Figure 5*). To ensure that the legs remain parallel during clamping, insert a spacer between them, down at the bottom. Then, before the glue sets, check the entire assembly for squareness by measuring diagonally.

The two side subassemblies are joined to the shorter apron rail in the same manner, using scrap spacers to ensure parallel joinery. Since the final frame assembly must be checked for squareness on three planes (the top and both ends), you may want to practice this procedure a couple of times until you can do it quickly and accurately, before applying any glue.

After the glue cures, apply masking tape over the legs except where the flutes are, then highlight the flutes with a spray can of flat black lacquer. Remove the masking tape, then sand the entire assembly to 220 grit. You can also give the moldings a final sanding, then trim them to length on your table saw or miter box. Glue the moldings and clamp them in place with spring clamps placed about every five or six inches along their length (see *Figure 6* on the next page).

Making the Tabletop

The top (piece 9) is made from 1"-thick boards of various widths, matched for both color and grain pattern. After

Figure 4: *When gluing the brackets to the aprons, a combination square helps line up everything while the glue is still wet.*

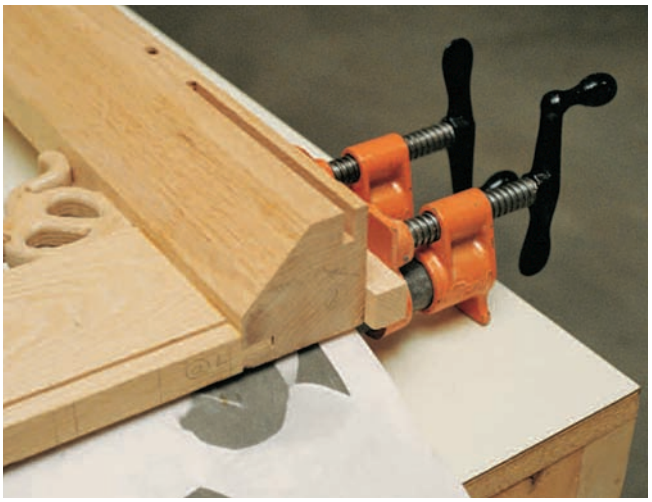


Figure 5: *When attaching the legs to the aprons, two pipe clamps will yield a better joint than one. During this process, a few scraps of paper under the wood will keep glue off the clamps.*

jointing their edges, arrange the boards so the grain patterns on their ends alternate (one crown up, the next down, etc.). For aesthetic reasons, it's a good idea to never have a joint running right down the center of the top — the glue line and any grain mismatch will be noticeable and distracting. Apply a liberal amount of glue to both edges of each joint, and alternate your clamps (one above the top, the next below) to avoid cupping. Tighten the clamps until the joint is snug, but don't overtighten them or you'll squeeze out too much glue.

When the glue has cured, ask a local cabinet shop owner to run your top through their wide belt sander, taking it down to 3/4". Back at the shop, cut the tabletop to final size on your table saw, then sand a 1/2" radius on the corners with a belt sander. Form the top edges using a 1/2" beading bit in your router, and create the bottom profile with a 1/8" roundover bit. Then sand all the surfaces to 220 grit.

Finishing and Final Assembly

Stain the leg assembly and top with an oil-based stain. Allow it to dry thoroughly, then apply one coat of sealer. Follow up with three topcoats of brushable semi-gloss lacquer (for more on brushing lacquer, see page 28). The bottom

QuickTip

Toy-safe Finish

The best finish for children's toys may well be shellac, because it becomes totally non-toxic once it's dry. Shellac has even been approved by the Food and Drug Administration for certain ingestible applications, including drug and candy coatings. In similar fashion, most hard finishes become non-toxic when they fully cure.

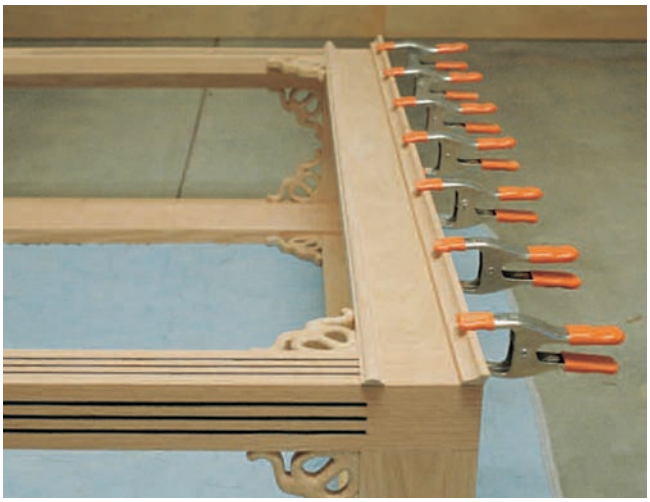


Figure 6: *A series of spring clamps is a sure-fire way of providing equal pressure along the length of molding when attaching it to the apron.*

COMPLETING THE SERIES

The author was so taken with Chippendale's design that he completed the series with an end table and coffee table. Each can be built using the sofa table instructions, with a few dimensional changes. You'll also need 128" of each molding for the end table, and 164" of each for the coffee table.

End Table

Legs	2¾" x 2¾" x 20¼"
Tabletop	3/4" x 30" x 30"
Aprons	3/4" x 4¼" x 23¼"

Coffee Table

Legs	2¾" x 2¾" x 16¼"
Tabletop	3/4" x 30" x 48"
Front & Back Aprons	3/4" x 4¼" x 41¼"
Side Aprons	3/4" x 4¼" x 23¼"

surface of the tabletop should receive the same treatment to minimize any tendency to cup during humidity changes. Each coat of lacquer must dry completely before you can scuff-sand between coats with 400-grit sandpaper.

After the third coat of lacquer is dry, place the top upside down on a padded workbench. Center the leg assembly on it and mark the locations of the tabletop fasteners. Then remove the leg assembly and drill pilot holes for the fasteners. With that done, reposition the legs and install the fasteners.

Finally, place your table behind your sofa and top it off with a hard-bound copy of "Gentleman and Cabinet-Maker's Director." After all, you never know when you may need to go "shopping" for a good project design.

Chippendale Table