

# *nakashima-inspired*

# TABLE

The first furniture to come from harvesting a backyard cherry tree pays tribute to master woodworker, furniture designer and national treasure, George Nakashima.

Most of the lumber used by George Nakashima was sawn from the log under his supervision, stacked in the order in which it was cut, then stickered and left to air dry before kiln drying. At his disposal then were thousands of boards which were sawn "through and through," retaining each board's waney or "free" edge and unique shape. And because the logs were not sawn for grade, which is when the log is turned time and again during the sawing to avoid defects like knots and splits, these "defects" were retained and often became an important feature in the use of the board.

Needless to say, most woodworkers don't have easy access to wood that has been processed this way. But I had the opportunity when a black cherry in my backyard fell prey to a hard, late frost and succumbed. Within a few weeks I engaged the operator of a Wood-Mizer portable band saw mill and had the log sawn where it fell. The going rate for this work is about 45 cents a board foot. About 18 months later, having stacked it carefully for air drying, I was ready to start working it. Now if you don't have access to lumber like this, you could always make a rectangular top.

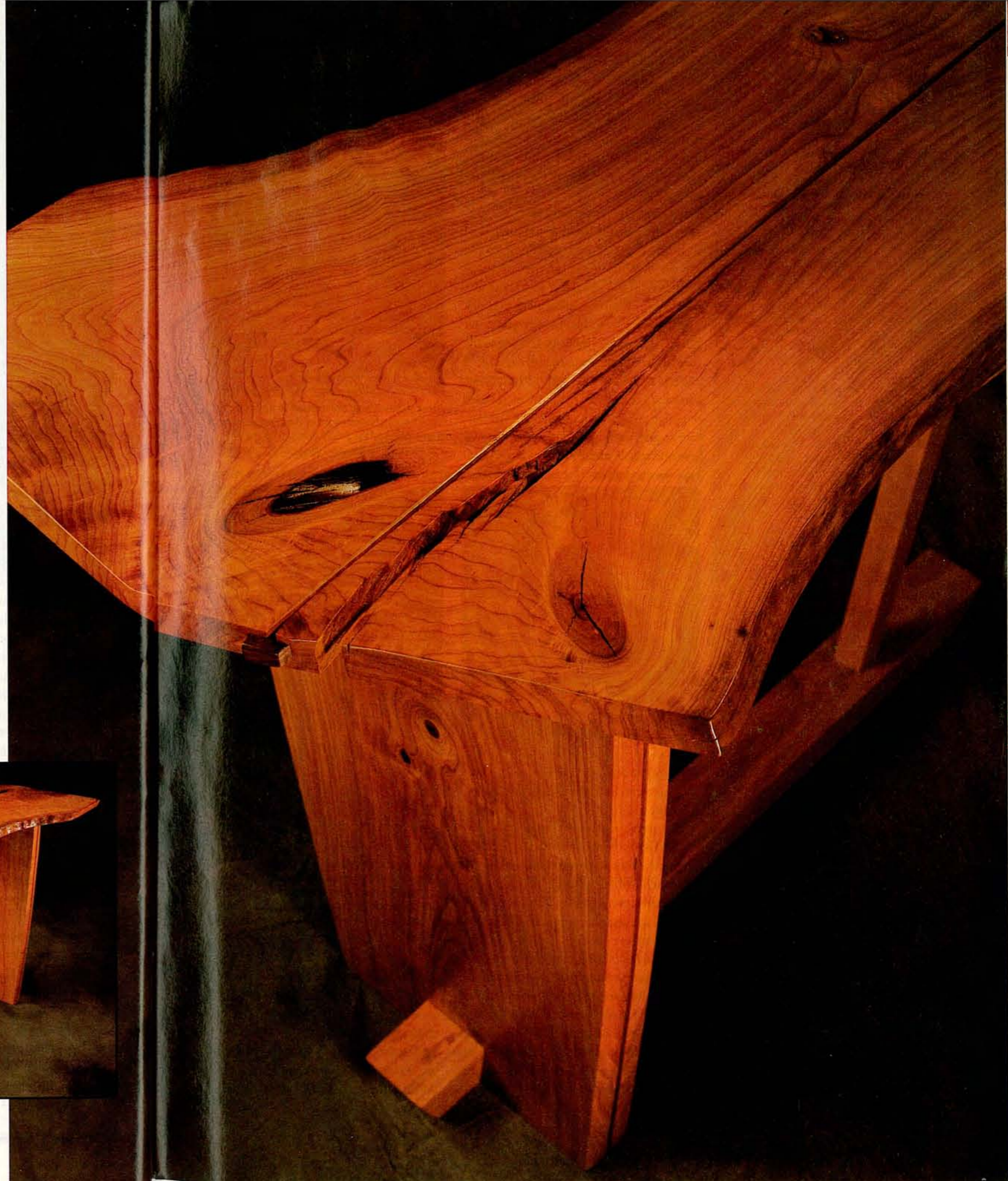
From my boards I selected a shorter one that came from the top of the log where the tree began to branch. This area is referred to as a "crotch" and usually yields nicely figured material. But this part of tree also has a lot of stress in the lumber and often wants to split during drying. True to form, a wide check occurred on the end. Never mind, I decided, I'll work with it. The grain is just too pretty to toss in the scrap box.

The 17"-wide board was also cupped starting at the heart's center. To flatten the board, even if I had a jointer or planer that wide, would have sacrificed too much thickness. However, sawing lengthwise along the heart, splitting the board in two, rendered two relatively flat pieces. It was at this point that I decided to use an open spline detail of contrasting walnut to join the pieces back together. The decision made the technical necessity of splitting the boards an interesting design element.

After the top was separated I smoothed and flattened the pieces using a Performax 22"-wide belt sander. When done, I routed a 1/2"



Photos by Al Parrish



by Steve Shanesy

## THE EXTRAORDINARY LIFE OF NAKASHIMA

Among woodworkers, none has expressed through design and use an unabashed reverence for wood as a material like George Nakashima. He strongly believed the objects he designed and built were giving a once-living tree a second life, and it was his objective to allow the natural beauty of the wood he was working to showcase itself.

His design skills in furniture were absolutely unique, forging cross-cultural and cross-generational lines. You see in his furniture the western influence of modernism, Arts & Crafts and Shaker styles wonderfully blended with the simple yet powerful Japanese design, expression of materials and the exacting execution of woodworking skills.

He was born in Spokane, Wash., in 1905, and was awarded a master's degree in Architecture from the Massachusetts Institute of Technology (MIT). Later he traveled by steamer to Paris and Japan where he lived for a number of years. While there he became immersed in his Japanese heritage and worked in the Tokyo office of an architectural firm owned by a Czech-American. He was sent to India by the firm to supervise the construction of a building at an ashram. He returned to Japan briefly before returning home in 1940. Two years later, he and his family were interned with most Japanese-Americans living on the West coast as the United States went to war with Japan. At the Idaho internment camp he learned traditional Japanese woodworking methods from an older resident.

He was released from the camp and moved to eastern Pennsylvania where he established a home, shop and design studio. Over the years his furniture was collected by numerous wealthy clients. His work was exhibited by most major art museums. In 1952 he was awarded the Gold Medal of Craftsmanship by the American Institute of Architects, and in 1979 he was named a fellow by the American Crafts Council. In 1989, the American Crafts Museum in New York selected his work as the first exhibit in a series called "American's Living National Treasures." He died the following year. His workshop and studio continue to operate today under the direction of his Harvard-educated daughter, Mira Nakashima-Yarnall. The expression of his work, design and philosophical approach to both is wonderfully captured in his book, "The Soul of a Tree" published by Kodansha International Ltd. In it he wrote, "Each plank... can have only one ideal use. The woodworker must find this ideal use and create an object of utility to man, and, if nature smiles, an object of lasting beauty."

x 5/8"-deep groove in the edges to be joined, and then I cut a walnut spline that was 1 7/16" wide. That left a 3/16" gap when the top was glued back together. Before gluing I used a block plane to make a slight chamfer on the top edges of the open joint.

### Working the Free Edges

Needless to say, the bark had to be removed from the edges of the board down to the sap wood. With dry wood, the bark pops off quite easily. You can use just about any tool from a chisel to a screwdriver to knock or pry the bark off. Just be sure you don't gouge the surface you want to eventually display. To further prepare the rear edge of the top, sand it by hand with 120 grit paper. On what I considered the front edge, I used a gouge to make small facets in the surface to give the edge a more interesting visual and tactile surface. Afterwards I sanded the edge lightly.

I moved on to the area of the big check on the end of the board. The inside surfaces of the crack were rough and needed smoothing. While I didn't want to make the edges look like a polished surface, neither did I want the torn fibers and rough surfaces. My solution was to use 100 grit C-weight sandpaper to get into the crack any way possible. At this point, except for final sanding of the top and ends, the hardest part of the job was completed.

### The Base

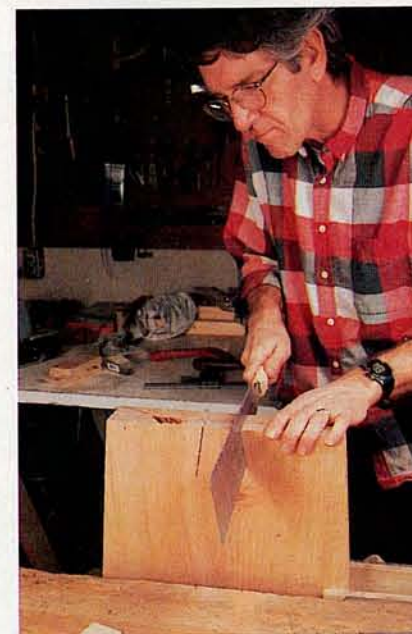
The base is absolutely simple to construct, even easier than a conventional table with legs and aprons. A slab end, a dovetail shaped beam and a tapered, angled leg is all there is to it.

To make the slab end I started with two panels that were about an inch thick each. My plan was to glue them together as a sandwich with a 5/16"-thick build up in the center that, when set back from the edge, created a reveal that mimicked the spline detail on the table top.

To do this, I first made a template of the gently curved convex taper for the slab edges. I then penciled the shape on to the individual pieces and cut the shapes on the band saw. Next I used the panel's edge to transfer the shape to the build up pieces to make the reveal. These were band sawn and the face edge cleaned up with a hand plane. I cut one additional piece of build



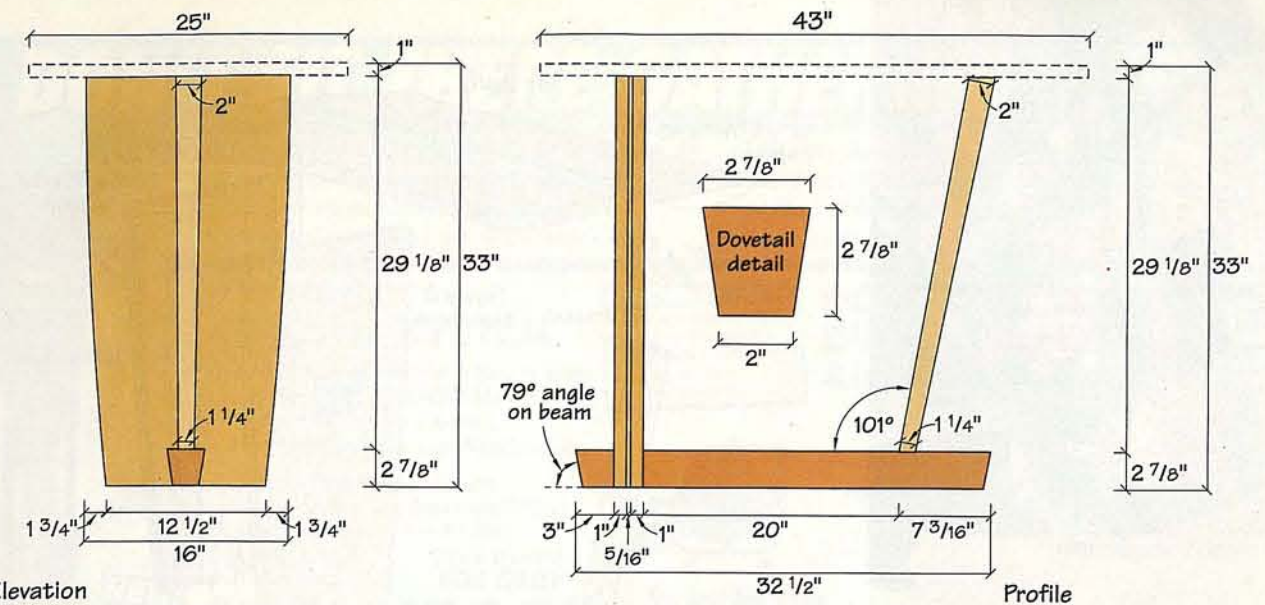
Mark the outline of the dovetail to be cut in the center of the bottom edge of the panel end using a trim piece of the actual beam. With the dovetail shape already cut on the beam, an accurate layout is assured.



Cut the dovetail sides using a saw without a back because the cut is nearly 3" deep. Also, make sure when starting the cut that the saw is properly aligned on both faces of the panel. Make the cut slowly until you've established the saw kerf following the layout line.

up to use in the center of the panel so that when cutting the through dovetail for the beam I'd have solid wood through and through.

Next I glued up the panels by first gluing and nailing the build up to one piece, maintaining a 5/16" setback at the edges, then gluing the second panel to it. I was



Elevation

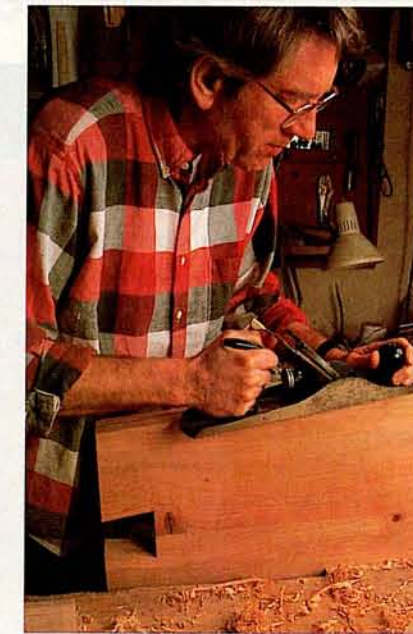
Profile

### NAKASHIMA-STYLE TABLE

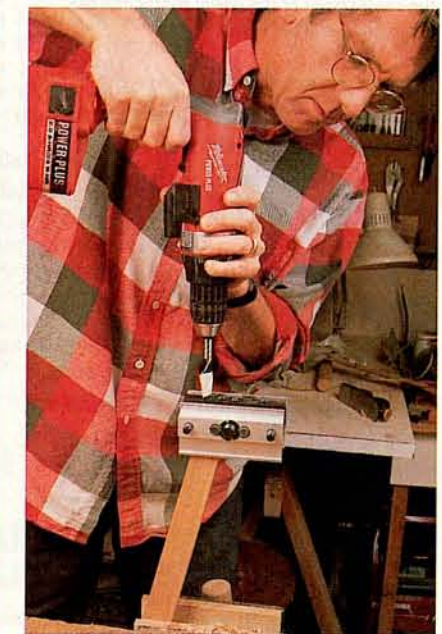
No.	Item	Dimensions T W L	No.	Item	Dimensions T W L
1	Top	1" x 25" x 43"	1	Panel build-up	5/16" x 5" x 32"
2	Panel ends	1" x 16" x 32"	1	Leg	2" x 2" x 31"
2	Panel build-up	5/16" x 3" x 32"	1	Beam	2 7/8" x 2 7/8" x 32 1/2"



After sawing out the bulk of the waste with a coping saw, chisel the remaining waste. Make certain your cuts are perpendicular to the face. After cutting halfway down, turn the panel over and work from the other side to avoid tear out.



Each edge of the leg panel has a slight bevel detail that's made with a handplane or a spokeshave.



The tapered leg is joined to the bottom beam with two 1/2" dowels. Although the spacing is tight, two dowels can be used. Use a doweling jig for alignment and, depending on placement, make sure you don't drill too deep.

careful not to apply too much glue to prevent a lot of squeeze-out in the reveal.

While the glue was drying I started making the hefty beam that ties the panel and leg together. I didn't have any stock thick enough to make the 3" x 3" blank size, so I glued up three pieces of 1" stock. After it dried I cleaned up and squared two op-

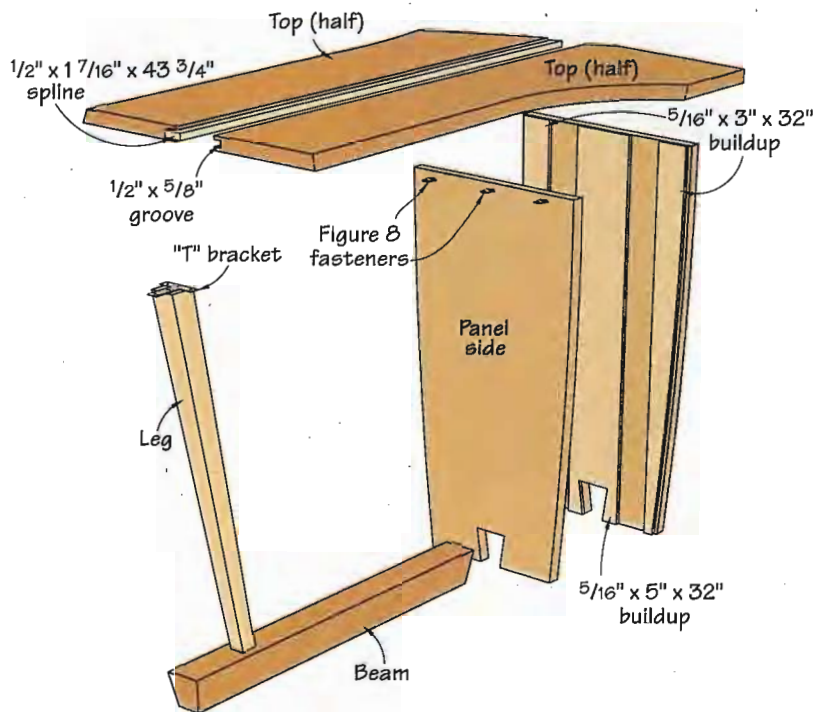
posing edges on the jointer then planed the remaining two. Next, I sawed the blank to the dovetail shape, sloping the sides to an 8-degree angle. At this point I sliced off a small piece of one end that served as a template for marking the cut to be made in the bottom edge of the panel.

After marking the centers of the tem-

plate and panel bottom edge I cut the sloping slides of the dovetail using the ripping teeth of my Japanese pull saw. Next I removed most of the waste with a coping saw then chiseled the edge flat. I found the fit of the beam just a bit tight so I pared the sides of the panel dovetail opening until achieving a fit that went together with just



Transfer the dowel hole locations using dowel centers. A slight tap on the top of the legs drives the center point of the dowel center into the beam. Then drill the holes.



a slight amount of force. I then removed the beam and made the 11-degree bevel cuts on the ends. To complete the work on the panel I put a slight bevel on the panel edges. A hand plane was the tool of choice for this chore.

The leg that supports the other end of the table is simple enough to make. I started with a blank that was 2" square. I wanted the leg to taper from top to bottom so I penciled lines to follow on the band saw. After cutting, I cleaned up the edges with the jointer.

The leg cants at a 101-degree angle so I chopped the bottom edge at 11 degrees. To determine the length, I simply set the leg on the beam with the bottom edge seated evenly and the side touching the top edge of the panel. I made the mark there and made the final 11-degree cut on the top of the leg.

The leg is joined to the beam using two 1/2" dowels. First drill dowel holes into the bottom of the leg; then, after inserting dowel centers, mark the dowel locations in the beam. It is then a simple task to drill the holes.

To assemble the base I used polyurethane glue because of its superior bonding characteristics in gluing non-long-grain to long-grain joints. I first glued the beam to the panel making sure the beam and panel

were square. After this dried, I finished up gluing the leg to the beam using a band clamp with a little assistance from a pipe clamp to maintain the desired angle.

Fastening the top to the base was a snap. On the top edge of the panel end I used three figure eight fasteners, setting them flush. For the leg, I used a common "T" shaped bracket that I screwed down to the top of the leg, then up into the top.

To finish, I sanded everything to 150 grit and broke all the sharp edges. Next I mixed small but equal amounts of Olympic brand Early American and Red Oak oil stain and combined seven teaspoons of this blend with a pint of boiled linseed oil. The diluted color won't blotch the cherry but will give the wood a nice color to start. Time will enrich the color more, encouraged by the linseed oil, which speeds the photochemical reaction that occurs naturally in cherry. After wiping away all excess oil I let the prefinish dry for two days. I completed the finish with a clear top coat of lacquer, although any clear coat will work fine.

I was quite pleased with the outcome of the table. Realizing this style may not be everyone's cup of tea, I think most wood-



To clamp the tapered leg in place, use a band clamp. The pipe clamp is essentially used to maintain the leg in the right position. The "T" bracket is later screwed to the top of the leg and is used to secure the leg to the underside of the top.

workers would have to agree on one thing. Using the free edge of boards sawn straight off the log and showcasing "defects" in the lumber clearly celebrates the material we all enjoy using so much. It instantly reminds us of just where all the wonderful wood we use comes from. **PW**