Veneering an Ellipse

Making a Sheraton-style inlay with borders

by John M. Van Buren

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The Sheraton-style card table is a case in point. I reproduced a pair of these tables from a photograph of one in The Metropolitan Museum of Art in New York City. I wanted to use mine as side tables—not game tables—so I made them without a second hinged leaf.

The oval in the center of the serpentine apron presented a technical challenge. After some experimentation, I discovered that veneering the oval with a border of black and satinwood inlays could be done with simple equipment and a little practice.

You need to start with a master pattern: a full-scale ellipse made with ¹/₄-in. plywood cut out on the bandsaw and then

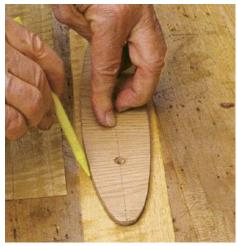


sanded smooth around the edges. This master serves as a pattern to cut out the elliptical veneer field and as a bending form for the inlay borders.

Draw an ellipse to the required dimensions. In this case, the satinwood oval has major and minor axes of 9 in. and $2^{1}/_{2}$ in. With the $^{1}/_{46}$ -in. inlay borders, or stringing, it is possible to bend to curves with as little as a $^{1}/_{2}$ in. radius, like the ends of the one on the table shown above. The pattern is mounted on a second piece of $^{1}/_{4}$ -in. plywood, about $^{3}/_{8}$ in. larger all around, to serve as a clamping surface. Both pieces are, in turn, screwed to the edge of a block of $^{3}/_{4}$ -in. wood that's wide enough to be held in a vise.

Heat and moisture do the job

Dampen the borders by leaving them rolled in a wet towel for several hours. The dye in ebonized stringing leeches out with soaking, so it's important to keep it separated from the satinwood because it will stain the lighter veneer.



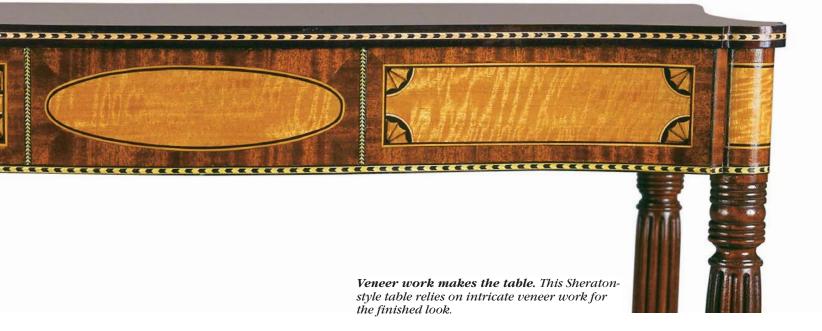
Bending form is also master pattern. The smaller piece of $\frac{1}{4}$ -in. plywood can be used to mark the veneer.



Bend two at once. Dampened light and dark inlay pieces are bent in pairs, as they'll appear around the ellipse.



Work in small increments. With a tight radius, the author heats and bends only about $\frac{1}{4}$ in. at a time.



I use an ordinary laundry iron, set between "wool" and "rayon," to heat the damp veneer for bending. With the bending form set in the vise, start the borders near the middle of the ellipse, and spring clamp them to the lower piece of plywood. Using the tip of the hot iron, heat the line until it steams. Nudge it against the pattern, and secure it with another spring clamp, working around the ellipse a little at a time. Be sure to heat the line well before attempting to bend it, or the inlay will fracture. Bend the ¹/₂-in.-radius curves on the ends in small increments, and clamp the borders to the pattern as tightly as possible. Flatter parts of the ellipse will need fewer clamps. After bending the inlays around the pattern, allow the ends to overlap for trimming. Keep the tip of the iron clean by rubbing it with steel wool.

Exactly when you bend the inlay after heating it is critical, and you may need some practice to get it right. If the ¹/₁₆-in. stringing is poorly made, it may fracture along a grain line. If so, try another piece. When the outline of the ellipse is completed and clamped,

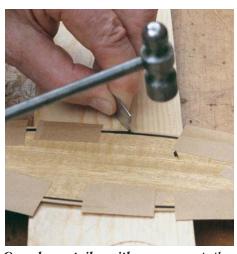
allow it to dry overnight. In the meantime, cut out the ellipse around which the stringing will be laid up. I mark the veneer in pencil using the ¹/₄-in. plywood template. The African satinwood veneer I used for this project cut neatly with scissors. The two pieces of stringing will spring open somewhat when the clamps are removed, so they should be secured at once to the elliptical field with veneer tape or gummed craft paper. Pressing the entire inlay between flat surfaces, weighted down, will prevent curling until the ellipse has been laid up to the background.

The mahogany background was made as a frame from 2-in.wide pieces of veneer. The veneer was taped together so that the grain pattern radiates from the center of the ellipse. Mark the cut with your actual veneer pattern, and make the cut into the background frame with a sharp razor knife.

John Van Buren is a retired neurosurgeon. He has spent much of the last 30 years building furniture for his family.



After bending the inlay completely around the form and clamping it in place, allow it to dry overnight.



One clean strike with a razor cuts the inlay for an angled seam that will virtually disappear when finished.



Mark each piece separately. A completed ellipse is used to mark the cutout in the background veneer.