# Stringing and Banding Made Easy

#### STRINGING

Thin inlay highlights the lines of a piece.

Low-tech tools deliver high-style results

DAN FAIA

#### **BANDING**

Thicker, multiple-element inlay makes a stronger visual impact.

# **Three ways** to make stringing

The most basic method for making stringing is to use a straightedge and a marking knife or veneer saw. A veneer saw works better, as long as the saw is sharpened correctly. To avoid splintering the veneer, make a very light first pass.

But the fastest way to make stringing is to use a pasta machine. One pass through this handy kitchen aid yields a bowlful of ready-to-use stringing. Wet the veneer first with warm water to make it pliable.





## STRINGING SIZE THE SCRATCH CUTTER TO THE STRINGING

Use tin snips or a bench grinder to chop off pieces from an old bandsaw blade. These cutters are fragile, so tape them in a stack to make multiple identical cutters to serve as backups.

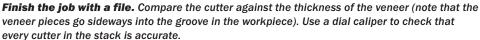


**Shape the tiny tip on the bench grinder.** Tape together a stack of cutters to ensure that each is identical.

s woodworkers, we often look for ways to embellish. An easy way to accomplish this is the use of stringing and banding. Stringing can accent a tapered leg or highlight a tabletop. Banding can add colors and patterns for a rich look. These decorative details add an extra touch that makes a simple piece a striking one. In fact, they are most of what separates Federal furniture from Shaker-style pieces.







The table featured here (built by John Louchheim) has stringing and banding on the legs and aprons. As is the custom with Federal furniture, the apron banding continues across the legs, and stringing rectangles in the upper legs reflect the lines of both the legs and the aprons. This ornamentation is placed only on the most visible surfaces; for example, the banding at the bottom of each leg does not continue around the back, and the stringing rectangles are placed only on the front faces of the front legs.

The beauty of stringing and banding is that installation is less difficult than it appears. There are some simple tricks for making stringing, assembling the banding (see Master Class on p. 116), and installing both types of inlay, and masking tape is the only clamp you will need.

I inlay the stringing first and then cut cleanly across it to install the banding. At this point the table has only been dry-fitted. To inlay stringing and banding on an assembled table would be difficult.

#### **Cut the stringing first**

Stringing material is cut from a sheet of veneer. The fastest way to handle this job is to use a pasta machine, which will yield enough stringing from one sheet of veneer to last for years. These machines sell for \$30 to \$40 at department stores and



Set the depth of the cutter. Place a cutter in the scratch stock, and set its protrusion about ½ in. less than the width of the stringing. Then make a test cut on a scrap piece.

kitchen specialty stores (or order one from Atlas Manual Pasta Machine—800-232-4070; www.kitchenetc.com) and basically draw a thin sheet of pasta between two rollers, one of which has blades that separate the sheet into strips. Feed wood veneer into the machine, turn the crank, and perfectly sized stringing comes out the other side.

There are a few keys to success. The veneer must be cut to width to fit into the pasta machine. The veneer also has to be moist, so dampen both sides with warm water using a damp rag or a mist bottle. Also, the veneer should be inserted so that it will be cut with the grain to avoid splinter-

Photos: Asa Christiana NOVEMBER/DECEMBER 2003 53

Stringing on the front faces of the legs, running between the apron and cuff bandings, highlights the long leg taper.



Work slowly down to finished depth. Start at the cuff location and move the scratch stock up the leg to the apron-banding location. Rotate the tool downward with each successive pass to increase the depth of cut.

ing. As the stringing exits the machine, guide the pieces to prevent any hang-ups. More than likely there will be a few casualties, but the stringing will be plentiful.

#### Make a scratch stock to cut grooves

Every woodworker owns a bandsaw, and most hold onto old blades. These can be chopped up with tin snips or separated into pieces with a bench grinder to make scratch stocks to cut grooves for the stringing and banding. A small router or laminate trimmer can cut thin grooves for stringing, but these also can trash a piece instantly if the edge guide wanders from the workpiece and the bit goes off track. A scratch stock makes a more gradual and easily controlled cut.

Grind and file a stack of bandsaw blanks to the exact thickness of your stringing. I cut stringing from veneer, so that determines the thickness. This dimension is critical, which is why it is good to work on a stack at one time: If one cutter breaks during the project, an identical one is ready to

go. Create a simple scratch stock like the one pictured on p. 53 (covered more thoroughly in FWW #163, p. 63). Set the cutter in the scratch stock to the appropriate depth of cut and distance from its fence. I usually cut stringing about 1/8 in. wide, which fits into a heavy 1/46-in.-deep groove, leaving a light 1/16 in. to be trimmed.

First, pencil in the locations of the apron and cuff bandings. Then scratch the grooves in the legs from the cuff locations to just past the apron edge. Start with light cuts, then rotate the scratch stock a little bit for each successive cut until full depth is reached. Check the depth with a piece of stringing. Make sure the grooves are clean and the depth is consistent. Spread glue in the grooves, just a bit at a time, and carefully press the stringing into place. No clamps are needed. Once the glue has dried, the stringing can be chiseled and scraped flush.

Lay out the stringing rectangles—The rectangles at the tops of the legs continue



Glue in the stringing bit by bit. Spread glue a few inches at a time and press in the stringing. If you spread glue along the entire groove, it will swell and close slightly before you can get stringing into it.



When the glue is dry, pare away most of the excess. Pare with the grain direction to avoid splintering the stringing.

the ornamentation on the table base. Lay out these rectangles with a combination square and a pencil. Use the same scratch stock to run the two vertical stringing grooves with the grain but stop short of the horizontal layout lines.

Cut a piece of medium-density fiberboard (MDF) to match the height of the rectangle. Clamp the piece to the leg and scribe the rectangle's top and bottom with a marking knife. To cut the outside edges of these grooves, place a scrap of stringing veneer against the MDF and use it to scribe the rectangle's top and bottom again.



Last, scrape the surface flush. Scrape just enough to clean the surface but not enough to cut beneath the shallow stringing.

## Stringing a rectangle





**Scribe the rectangle.** After penciling in the layout, use the scratch stock to cut the vertical grooves. Then use a block as shown (left) to scribe one side of the top and bottom grooves. Next, use a piece of the stringing veneer as a guide (right) to scribe the other side of each groove.



**Cut the waste.** Use a chisel to work from the center of the groove toward the scribed edges to remove most of the waste, a technique called ramp-cutting.

Lightly chisel out the waste, working from the middle of the groove toward the knife cuts on each side—a technique called ramp-cutting.

Then take the cutter out of the scratch stock and use it to carefully scrape the horizontal stringing grooves to the same depth as the vertical ones. Be sure to work the cutter into all four corners to clean and square them.

Miter one end of a piece of stringing with a chisel, angling this tiny cut by eye. Then hold the stringing against its groove to mark its length. Miter it to finished length with the chisel, and glue the stringing into place. Repeat the installation around the rectangle.

#### Install the banding

Apron bandings usually carry around the legs. When laying out and cutting the rabbets and dadoes for the bandings, it's easiest to start on the table aprons and then transfer those locations to the legs.

First, set a marking or cutting gauge to the width of the banding pieces and score the aprons to prevent any tearout at the edge of the rabbet. Then cut a shallow rabbet for the banding, leaving the banding a bit proud. On a straight apron, this rabbet can be cut in a variety of ways. But because this apron is serpentine, the matter is more complicated. However, either a large scratch stock or a laminate trimmer (see the photo on p. 56) will follow the curve and cut a consistent rabbet.

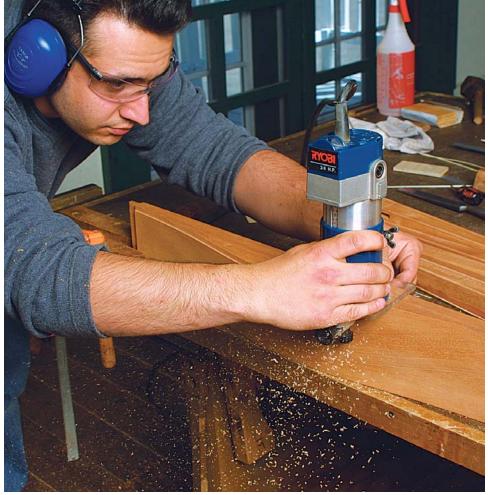
Dry-assemble the table and use a wide chisel to transfer the banding locations from the aprons to the legs. The leg bandings should overlap the ends of the stringing.

Next, with a sharp knife and a combination square, scribe marks across the legs. You can use a piece of banding as a shim

## BANDING

## THE APRON BANDING IS CONTINUOUS

The legs are flush with the aprons, so the banding wraps unimpeded around the table. The rabbets for the banding are cut first in the aprons; then dadoes are cut into the legs.



Cut the rabbets in the aprons. First, scribe the bottom edges of the rabbets to prevent router tearout. Then use a small router (above) with a single-bearing edge guide to follow the curve. Make test cuts in scrap to ensure that the banding will end up just proud of the surface.



**Transfer the banding locations from** aprons to legs. Dry-fit the table, then use a wide chisel to carry over the layout marks.

to scribe the other edge of the dado. With a sharp chisel, remove the waste material down to the appropriate depth. To go deeper, scribe the edges again and pare away more of the bottom. Wait to install this continuous banding until the legs and aprons have been glued up.

**Install the cuffs now**—The banding at the bottom of each leg, at the point where the stringing ends, is called a cuff. To simplify handling, the cuff bandings are attached while the legs still are separate. Determine the height of the cuffs off the floor, and then mark them with a knife. Scribe the height around three sides of the front legs and two sides of the back legs.



# **Installing the cuff banding**

Attach the cuffs while the legs are separate. Measure up from the bottom, then cut the dadoes the same way you did at the top of the legs.



Install opposite sides of this banding. Then trim them flush with the dado to prepare for the last piece.



Glue in the last piece. Use masking tape or a small clamp to hold the banding in place. No banding is necessary on the back face.



Level the cuff banding. Pare away most of the waste with a chisel, then scrape and sand the surfaces flush.



**Scribe the edges of the dado.** Carry across the upper line from the apron. Then use a piece of banding to locate the lower edge.





**Chisel away the waste.** Start with ramp cuts with a wide chisel (left). Then switch to a narrow chisel to clean the bottom of the dado (right).

To scribe the other edge of these dadoes, lay the banding in place against the combination square—the same technique used before. Again, use a chisel to clean out the waste between the scribe marks.

Glue in the bandings, two opposite sides at a time. This will enable you to fit these two pieces tightly, then trim them flush with the dado for the final piece of banding. Make the corner joints ebony to ebony, which will hide the glueline. When the glue has dried, scrape the cuffs flush.

Glue up the table and install the apron banding—Once the glue has set, glue the apron banding in place using masking tape as a clamp. When the glue has dried, scrape the banding close to flush, then sand it flush. Be careful when paring or scraping banding, as it is prone to splintering.

These simple techniques will add the look of high-end craftsmanship to your woodworking projects. Never be afraid to try something new. The result may not be what you expected, but the lessons learned will expand your knowledge and skills.  $\square$ 

Dan Faia teaches chair making at The Windsor Institute in Hampton, N.H., and furniture making at Boston's North Bennet Street School.

Glue up the table and install the apron banding. Always dry-fit banding first to see where it should end to create a continuous pattern around each corner.

