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BENTWOOD BOXES WITH TURNED AND CARVED LIDS

Walnut, Curly Maple, Cherry



MAKING THE BENTWOOD BOXES

First, make a bending form for the main body of the box. This can be fabricated from any scrap that can be glued together to make up a sufficient thickness. This is then band sawn and sanded to the inside profile of the finished box. Undercut the face of the bending form at one point to allow for the thickness of the lapped material underneath the box's glue joint. Screw a thin strip of metal (I used a scrap of aluminum siding) to the form underneath which an end of the sidewall material should be inserted prior to being wrapped around the form.

At this time, saw a clamping caul (see photos, below) with a slightly greater radius than the bending form from scrap material. This caul will protect the sidewall material from the clamps.

The next consideration is the sidewall material itself. There are three possibilities. First, the stock can be resawn, planed and sanded to a thickness of 1/16". Second, Constant-e's Hardware sells 1/16" veneer in cherry, walnut and mahogany, even though those thicknesses aren't listed in their most recent catalogs. Third, the sidewall material can be glued-up from two thicknesses of 1/32" veneer, which is

widely available in a variety of species. I would recommend using one of the new waterproof glues between the laminations, although I have built boxes using regular aliphatic resin glue to bond the thicknesses of veneer.

Then, soak the sidewall stock in a tub of cool water for twenty-four hours; dunk it briefly in warm water and take it directly to the bending form. Tuck one end of this softened, plasticized material under the metal strip on the bending form. Wrap the remaining length around the form and secure in place with clamps and the caul.

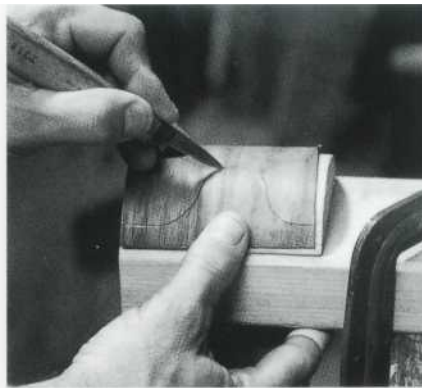
Four or five days later, remove the sidewall material from the form and cut the profile of the lap joint. A bench extension to which is nailed a piece of scrap sawn to the inside radius of the box simplifies the cutting of the joint.

Then, glue the lap, wrap the sidewall material around the form once again and clamp with the aid of the caul. This time, however, do not insert the end of the sidewall material under the form's metal strip. After being turned, attached the box's bottom to the sidewalls with four 1/8" wooden pegs driven into predrilled holes.

CUTTING THE LAP JOINTS

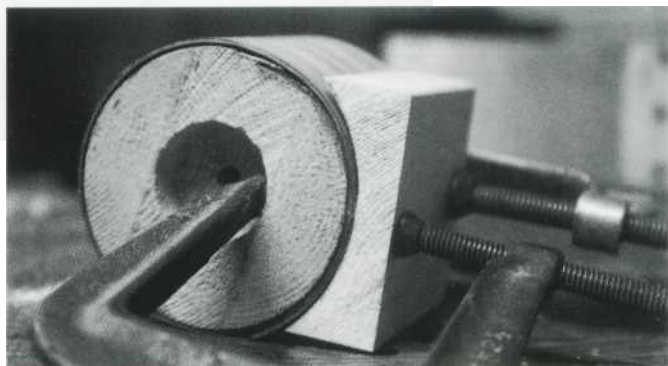


1 This is the bench extension used to maintain the curved form of the sidewall material during the cutting of the lap. The clamping caul is visible on the right.



2

A lap joint is being cut on the bench extension.

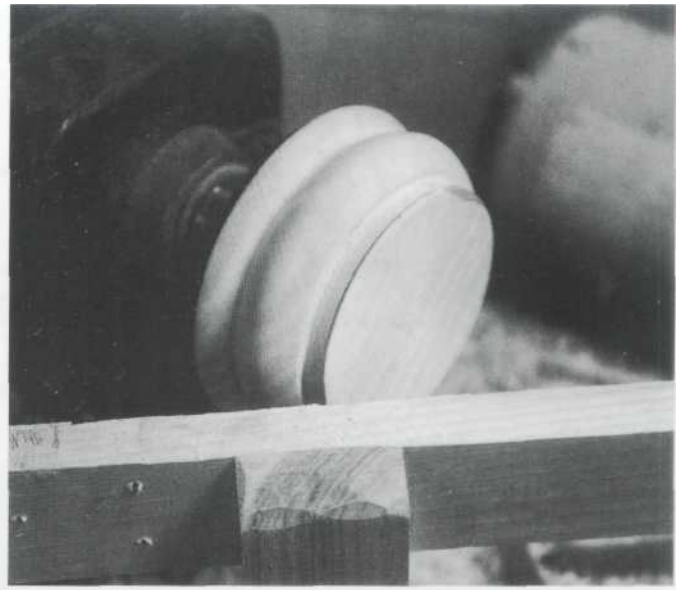


3 Here, the glued lap joint is being clamped with the aid of the caul. Notice that the end of the sidewall material is not positioned under the metal strip as it was during its initial clamping for shape.

TURNING THE LID AND THE BOTTOM

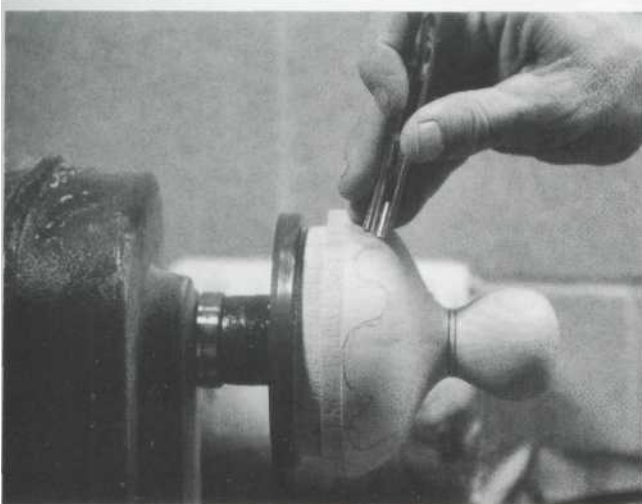


1 Screw a faceplate to a band-sawn turning blank with large sheet metal screws. Then, install it on the lathe.

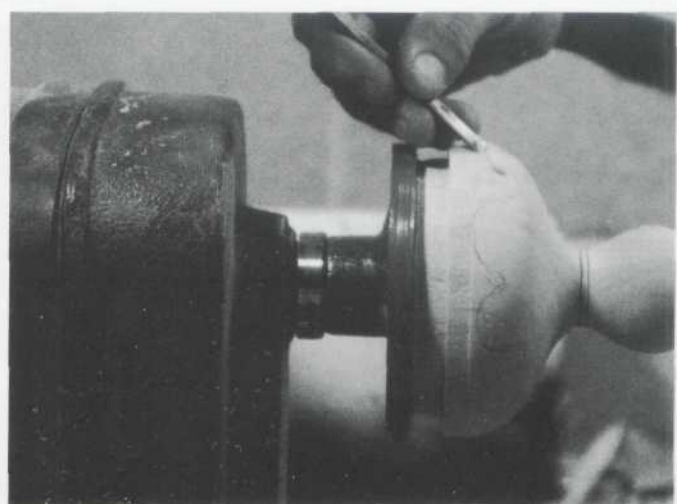


This is the same blank after being turned. Above the bead, notice the flange that will fit inside the box's sidewalls.

DECORATING THE SURFACES



1 Before removing the parts from the lathe, sketch pencil lines on the lid approximating the shapes to be created. Then with gouges of various sweeps, define those lines (shown above).



2 Remove material below the line (as shown above), and create the stippled texture by repeatedly tapping a nail set into the surface of the wood.

MATERIALS LIST

A	Form	1 pc.	3X3/2
B	Caul	1 pc.	1/2X3 1/2X3 1/2
C	Sidewall	1 pc.	1/16X3 1/2X15
D	Lid	1 pc.	variable
E	Bottom	1 pc.	variable
F	Pegs	4 pc.	1/8 X 1/8 X 1/2