

# Turning a Lidded Vessel

featuring Frank Bowers

Our February demonstrator was Frank Bowers. Frank is a very popular presenter and this was the fourth time that he presented to the Club. He is the owner of F.B. Woodthings, Inc. Frank's talent earned him a place in the 2001 Juried Exhibition sponsored by Highland Hardware. He also teaches at the John C. Campbell Folk School and is an active member of the Georgia Association of Woodturners. The focus of his demonstration for the evening was turning a lidded vessel.



Frank began his presentation by emphasizing safety. He said the three most important rules to remember are: that (1) the speed of the lathe must be suited to the piece you are turning; (2) the piece clears the tool rest, and (3) the piece clears the lathe bed. He stressed that over 90 percent of the accidents in turning can be avoided if these precautions are observed.



Next he discussed using the correct gouge. The spindle gouge is used for spindle work where the grain runs lengthwise with the axis of the lathe. This is also where you use a roughing gouge. Do not use a roughing out gouge if you have end grain coming around which is the case when hollowing a bowl or other vessel. When turning end grain, the two tools he uses most commonly are the  $\frac{3}{8}$  inch and  $\frac{1}{4}$  inch bowl gouge.



He suggested having an example or a picture of what you want to make before you begin. Although the details of a design can change as you turn, the general shape to be achieved should be established in advance.

For the lidded vessel Frank mounted a piece of ambrosia maple between centers with the grain perpendicular to the lathe bed. He began by rounding and removing the corner with pull cuts using the  $\frac{3}{8}$  bowl gouge. During the cutting, the bevel should ride the wood. When the wood was rounded and shaped for the base of the vessel, Frank made a tenon for a Talon chuck using a Bedan tool. The angle of the cut where it is held by the chuck should be exactly 90 degrees and about  $\frac{1}{4}$  inch deep. The optimum gripping power is when the chuck jaws are only slightly open, otherwise only the corners of jaws grab the wood.



After the tenon was made, Frank turned his attention to the other end of the piece which would ultimately become the

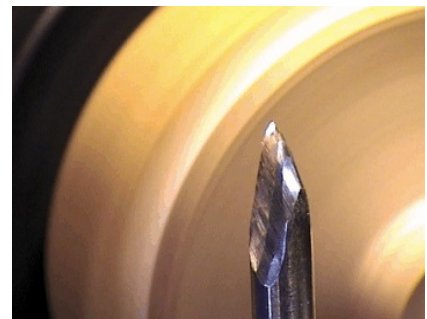
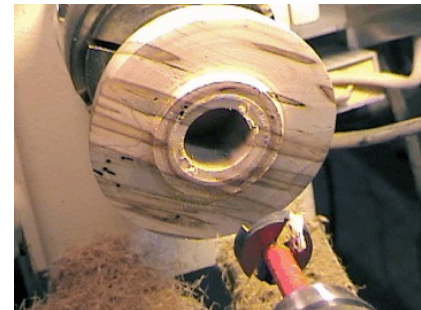
lid for the vessel. He used pull cuts with the bowl gouge to achieve the diameter and the approximate shape he wanted. He then made another tenon on that end. He continued shaping the overall vessel with push and pull shear cuts while looking at the top edge to follow the profile. As the final finishing cut for the body of the vessel, Frank used a skew to smooth the piece. This minimizes the amount of sanding needed. He uses the skew as a scraper to bring the hills down to the valleys and eliminate any tear out that may have occurred. If tear out still remains, Frank suggested using sanding sealer to toughen up the fibers. Last he used a pyramid tool to define the vessel's foot which he then burned with a wire to make the separating line distinct. With the parting tool, Frank then cut the top off. He used a Japanese pull saw to finish the cut.

After putting the vessel in the chuck, Frank had to true it up again. For this he used a continental gouge initially followed by a skew to smooth the surface. Then, using the bowl gouge, he shaped the top of the vessel to accommodate the lid.

To begin hollowing the inside, Frank used a large Forstner bit to remove much of the wood. In this process he constantly measured the depth of the bore to be certain he did not leave the bottom too shallow. To hollow the inside Frank said he uses either McNaughton tools or John Jordan tools. When working, the tool should be level with the plane of the lathe bed or pointed slightly downward. It's dangerous if it slopes up. Also, the flat part (never the curved part) of the tool should be on the tool rest. Frank also demonstrated a David Elsworth tool. When hollowing, you need to blow out the waste chips so they don't bind the cutting. He did not complete hollowing the vessel during the demonstration because he planned to finish it at home.

Last Frank turned the lid. He decided to make the lid fit over the top of the rim he had left on the base of the vessel around the opening. To measure the exact size he used a caliper against the turning lid. He stressed that only the caliper point closest to him would touch the piece, otherwise it could fly up and out of his hands. He then hollowed out the lid so it fit exactly over the bowl using a parting tool and  $\frac{3}{8}$  inch gouge..

To finish the top of the lid, Frank made a jam chuck to fit inside the lid. He used a paper towel to hold the top tight in the jam chuck and tightened the tail stock to hold it in place initially. He used the  $\frac{1}{4}$  inch bowl gouge to shape the top. The final cut to form the knob on the top was made with a gouge with a convex grind for a bevel in the manner recommended by Mark Silay. The advantage of this grind is



that only the first ¼ inch of the tool tip touches the wood which results in a very smooth finishing cut. After he removed the tail stock, he finished off the knob.

*By Ken Calkin*

