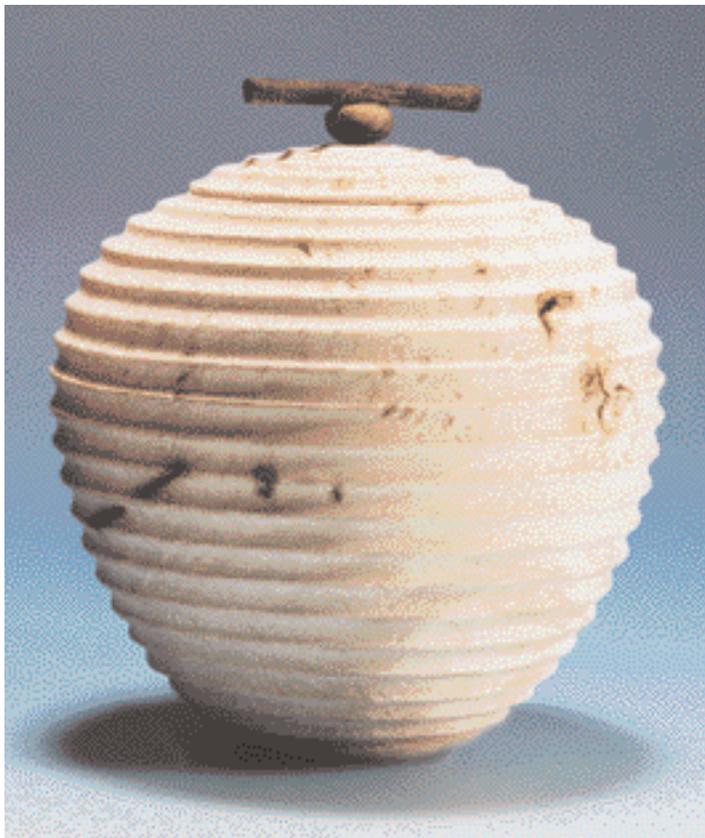
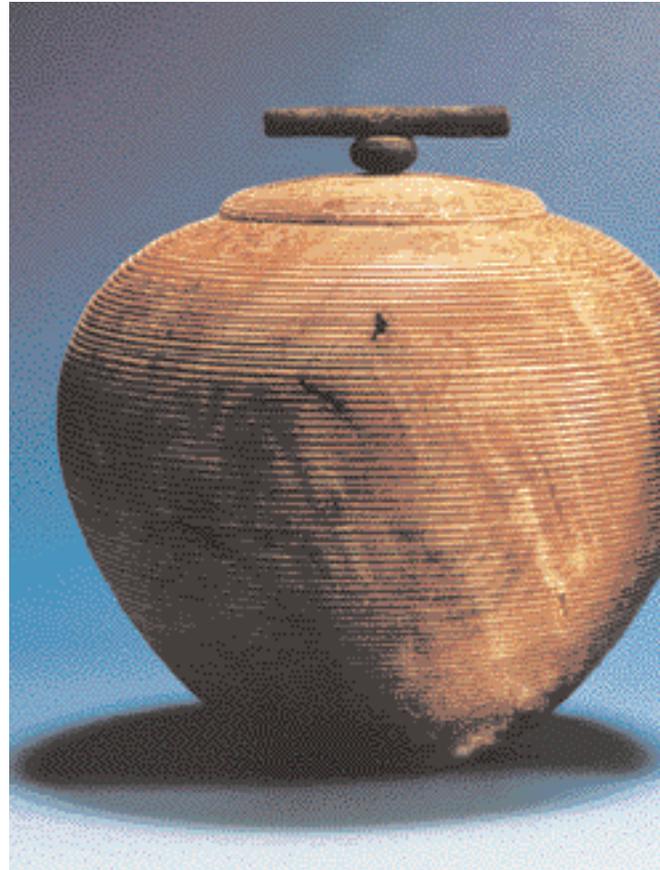


It's hard to top lidded boxes

by Bob Rosand

Ever since I started lathe work in the mid-70s, I have enjoyed turning lidded boxes. I based my first boxes on Dale Nish's creative and artistic woodturning and Richard Raffan's video on the same subject. My boxes were obvious design ripoffs, and I relied on sanding to make up for deficiencies in my tool techniques.



Photos by Bob Rosand

As I became a better turner, I wanted to accomplish two things: Sand less and turn more interesting boxes. This was accomplished I hope—by what I call my no-sand boxes. Okay, I do sand a little, but only with a few touches of 320- or 400-grit paper. The texturing techniques I'll discuss on these pages generally let me skip most of those time-consuming, dusty sanding chores. Do I have your interest? Read on!

The boxes that I make today are burl, usually maple. I keep the shape simple. The boxes average about 3" in diameter, but I have turned boxes as large as 7 or 8" in diameter and as small as 3/4" in diameter.

All of my boxes have loose-fitting lids. They are not a sloppy fit by any means, but I don't worry about getting the tight friction- or piston-fit prized by many turners. The tight friction fit was bad business, I found early on when I sold my friction-fit boxes at local craft shows. Too many people lifted the boxes by the lid only to have the body of the box fall on the lid, creating a damaged and unsellable item.

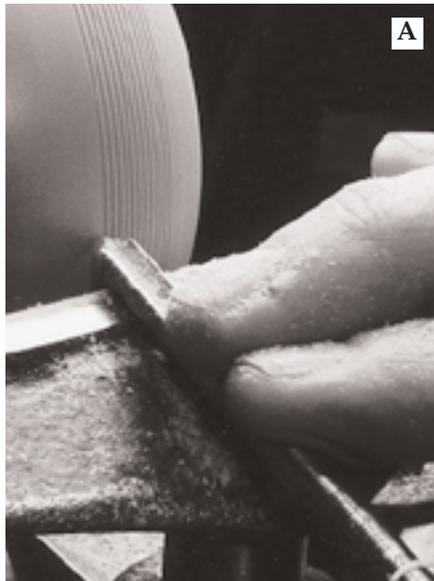
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American Association of Woodturners

One spindle gouge, two grinds, two looks

The first box that I describe here is what I call a cove box and is simply textured with a series of large or small coves depending upon your skills and taste. You can texture with nothing more than a small spindle gouge. To avoid tool marks on the finished product, the gouge must be properly sharpened with a keen and smooth edge.

The second box design is embellished with fine lines, which creates an entirely different visual and tactile effect. However, the turning techniques are basically the same for both boxes.

I cut the fine V grooves into the surface in exactly the same manner (Photo A). Believe it or not, I accomplish both looks with



A spindle gouge sharpened to an extremely sharp point is ideal to cut the V grooves in surface of this turned box.

a modified 1/4" or 3/16" spindle gouge sharpened to a sharp point. The gouge doesn't have much of a flute. But it cuts well, even though I can't really tell you why.

To use the tool, you simply push it into the wood to make your cut. When turning with it, your technique is somewhere between scraping and cutting. Additionally, you really can't rub the bevel. Make sure that you do not overlap the lines when cutting; this almost always results in torn grain. Finally, in order to see what you are doing, consider wearing a pair of optivisors. Trust me—they really help when detailing this no-sand box.

The body of cove box

I start my boxes by selecting a piece of burl about 3" square and 3 or 4" long (Photo B). The height is not critical. I usually fit the shape of the box to the piece of burl available. The turning stock is glued to a waste block, which fits into my chuck. (I turn with a Talon chuck from Oneway.) Bring up the tail center and true the block using a spindle gouge.

I also true up the top of the block (the one where the tail center engages and will become the lid) and make a series of pencil lines on the top section. The pencil lines will allow me to center the top when I glue it to a waste block.

At this point, I either use a parting tool to cut off a 3/8" thick piece or I remove the 3/8" piece



A 3 or 4" long piece of burl makes excellent material for this project. The photo above shows the lid material already separated.

with a bandsaw. If you use the bandsaw, be very careful: A round piece cut in a bandsaw tends to roll. An alternative method is to remove the 3/8" piece prior to rounding the blank or building a jig to keep the piece from rolling on the bandsaw table. Then parting aside the lid section.

Using a spindle gouge or a small bowl gouge (my choice) rough-shape the box. My boxes are relatively flat on top so they don't have to undercut the lid much to get a proper fit. The widest diameter of the box also is also fairly high, about two-thirds above the base. From the widest diameter, the boxes taper down to a relatively small base. That, for me, is just a matter of design preference. When rough-turning the boxes, make sure that you leave enough material at the top of the box so that you can ho-

it and not have it chatter on the lathe. Remove enough material so that you can envision what the final product will be (Photo C).

With a pencil, mark what will be the opening of the box. Then drill out close to the bottom of the box with the largest Forstner bit that will fit within those lines (Photo D). Avoid going too deep; you can always remove more material later, but you can't put it back. Clean up the entrance of the box with a small spindle gouge, or the long

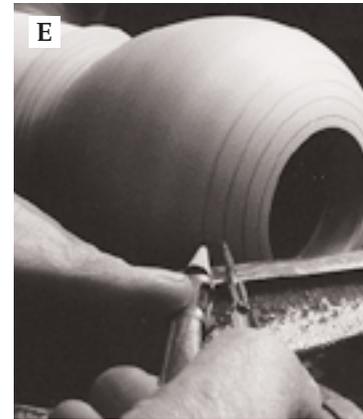
point of a small skew. It's necessary to do this because the drill will occasionally wander and the finished edge will either be too rough or not perfectly round.

Instead of hollowing the box at this point, I refine the exterior and hollow later. First, make a pencil line in about $\frac{1}{8}$ " from the opening of the box. Later, you will fit the lid to this line. Set your compass to $\frac{1}{8}$ ", $\frac{3}{16}$ ", or whatever size you desire, then mark a series of pencil lines down the exterior of the box

(Photo E). With your spindle gouge, cut a series of coves between the pencil lines (Photo F). These are not your finish cuts. Always cut the coves twice. The first cut is a rough cut, and the second is a finish cut. Your first rough cut will probably have a torn end grain. In order to clean that up, take a 50/50 mixture of sanding sealer and turpentine, then brush it on the box and take a very light finish cut with the spindle gouge. You might also



As you rough-turn the body, leave enough material to hollow the interior and texture the surface.



Mark out the box lines with a compass.



A Forstner bit is ideal for drilling the box interior. Note the tape which marks the depth limit.



Follow the evenly spaced lines marked on the exterior of the box body to cut the coves with a spindle gouge.

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consider honing the spindle gouge prior to taking that final cut. Though I rarely hone for general work, the honed gouge produces a superior finish and require almost no sanding.

At this point, about two-thirds of the exterior is finished and hopefully you have left enough material at the base to allow hollowing without a lot of chatter (Photo G). I rely on two tools to hollow my boxes: A straight-shafted round-nosed scraper about

$\frac{3}{8}$ " square and a homemade bent angle tool with about a $\frac{5}{16}$ " shaft. For the most part, I first grab the round-nosed scraper to clean out material so that I can get the bent angle tool in and refine the exterior. I use the two tools in combination until I get close to the bottom of the box and near to where I finished my cuts on the outside of the box. At this point, you need to return to the exterior of the box and refine that some more. Cut a few more coves, then

return to the interior and re-hollow the bottom of the box interior.

When you are satisfied with the quality and thickness of the interior, you're ready to finish the bottom. Part the piece from the lathe (Photo H). Friction-fit the lid on the waste block or reverse chuck so you can hollow the bottom (Photo I).

When I friction-fit boxes, I usually glue on a pine waste block because it is soft enough that it does not mar the finished piece. When I part the box from the waste block, I also leave a short tenon at the bottom of the box. Why? I bring up the tail center to square the piece for my finished cut. The mark left by the tail center is not so deep that it will leave a mark in the finished piece. I use the tail center and carefully hollow the very bottom of the box.

If you are a little uncertain about the tightness of your friction-fit, you might consider adhering the lid to a dab of hot glue prior to friction-fitting. The hot glue increases the hold on the waste block and comes off easily after removing the lid from your lathe.

Now, turn the lid

First, glue the lid material to the waste block put aside earlier to a waste block. To center the piece on the waste block, reference the lines you marked on the lid material prior to parting it from the main block. True the lid what will become the lid (Photo I) then mark the diameter of the opening with a set of vernier calipers. I rely on a small spindle gouge and the long point of the skew for this. The underside of the lid is



With a round-nosed scraper, hollow the box interior.



A thin parting tool is ideal to part the box from the waste block.



With the body friction-fit into a waste block, turn the coves in the box bottom with a spindle gouge.

lid must be cut so that you have no gaps when you fit the lid to the body of the box. Part the lid from the waste block, reverse it, and friction-fit the lid in a waste block.

Now, continue refining the top. With your compass, mark the same lines on the lid that were on the body of the box. Then cut the cove lines (Photo K). Don't forget that the box lid should be thick enough to accommodate the coves that you are cutting.

When you've finished cutting the coves, drill a small hole in the top of the lid to accept a knob or handle. Next, remove the lid from the friction fit.

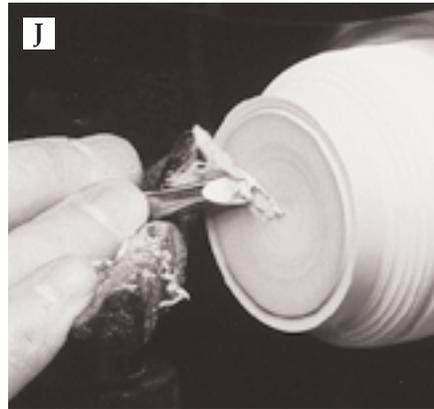
If you have a snug fit, the lid may be difficult to remove; prying it off may break or damage the rim. I discovered that the easiest method to accomplish this job is to cut away the lid-holding material with a small parting tool. In a few moments, the material securing the lid loses its holding power and the lid comes away easily.

A stylish knob tops off your box

My earliest boxes had a small simple knob, often turned from ebony. Unfortunately, the knobs were difficult to grasp. One day while leafing through a pottery book, I discovered some pleasing knobs/handles.

My boxes now feature a handle that's nothing more than the addition of a "stick" on the top of the knob. I think the stick from nature adds a great deal to the appeal of my boxes.

For this look, turn a small tenon for gluing a stick to the knob



With the lid glued to a waste block, refine the lid interior with a long point of a skew.



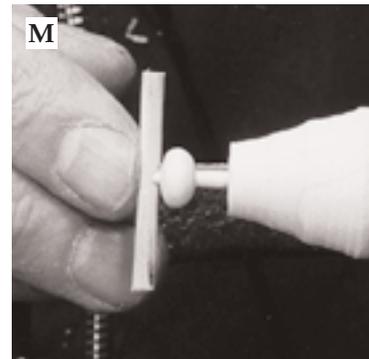
After friction-fitting the lid into a waste block, turn the lid cove lines with a spindle gouge.



You're nearly done: Turn the knob with a tenon for an "aha!" finishing touch. With the tenon, you'll mount a stick to the knob in the next step (Photo M).

(Photo L). After gluing these two pieces (Photo M), adhere the assembly to the lid. Several turners have asked why I don't streamline the process and turn a handle from a dowel. I think found sticks—imperfect and organic—look better.

There are other finish options for the box handles. In the boxes featured in this article, I used a product called Instant Rust. It's a brush-on solution (available from Dick Blick at 800-828-4548) which "rusts" instantly. I've also experimented with Copper Topper and bronze patinas.



Glue a found stick on the tenon of the knob. To part the knob from the lathe, use a pointed skew or parting tool.

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