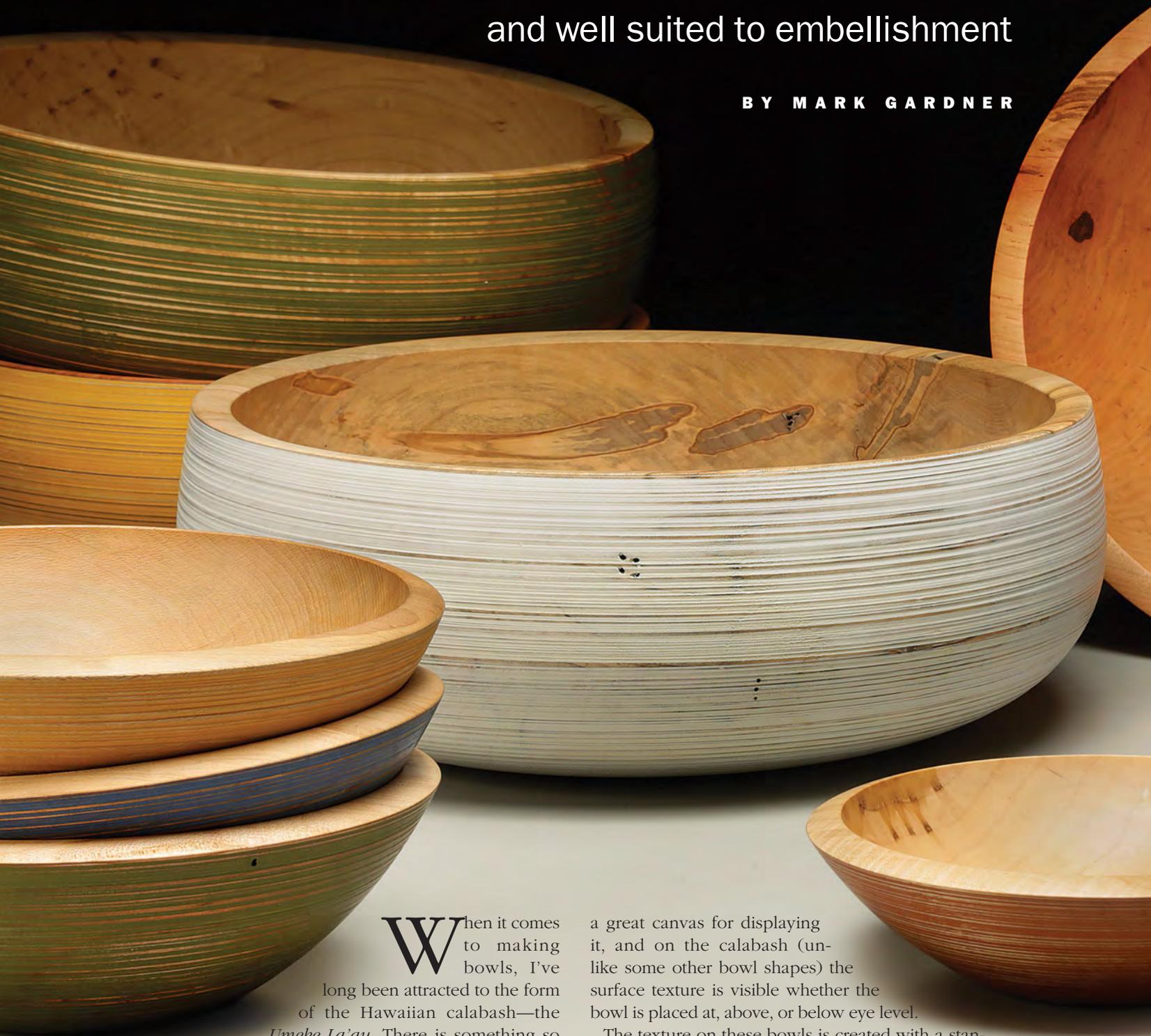


Add Color and Texture to a

The “calabash” shape is practical for serving food and well suited to embellishment

BY MARK GARDNER



When it comes to making bowls, I've long been attracted to the form of the Hawaiian calabash—the *Umeke La'au*. There is something so satisfying about this grounded, bottom-heavy shape. Due to its high, almost vertical sides, it is a great shape for holding food, particularly salad, as it is easy to toss the salad without spilling it out of the bowl. The form is also well suited to surface embellishment: the high sides provide

a great canvas for displaying it, and on the calabash (unlike some other bowl shapes) the surface texture is visible whether the bowl is placed at, above, or below eye level.

The texture on these bowls is created with a standard spindle gouge while the bowl is turning on the lathe. The texturing technique is simple and quick, and the addition of milk paint enhances it greatly, making the texture jump and creating an interesting contrast with the natural wood surface inside the bowl. For me, pairing a painted, textured exterior with a smooth,

Turned Bowl

🔗 Online Extra

Gardner cuts his bowl blanks from green logs. To see every step in the process as he chainsaws two blanks from this maple log, go to [FineWoodworking.com/285](https://www.finewoodworking.com/285).



natural finished interior brings the best of both worlds into one bowl.

Prepare the bowl blank

Start with a log. I use local hardwoods—maple, cherry, ash, or walnut. Using a chainsaw, cut a few inches off the end of the log. If there are no cracks on the fresh-sawn face you can start cutting out bowl blanks. If there are cracks, and they'll interfere with the blanks, keep taking slices off the end until the new face is clean. Then cut a bolt whose length is an inch or so greater than the diameter of the bowl you intend to make.

Now slab the bolt to produce two bowl blanks. The thickness of the slabs will correspond to the height of the bowls. Once the blanks are slabbed, take one to the bandsaw and cut it round.

Turn the bowl's rough shape while the wood is green

I turn this type of bowl twice: once to rough out the shape while the wood is green, and a second time to finish the bowl after it has been drying for several months. While the wood is green



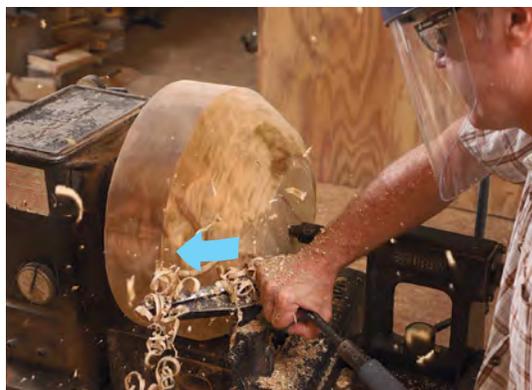
ROUGH-TURN THE GREEN BOWL

Circular sawing.
Having chainsawn the blank and laid out the bowl's perimeter with a compass, Gardner bandsaws to the line.

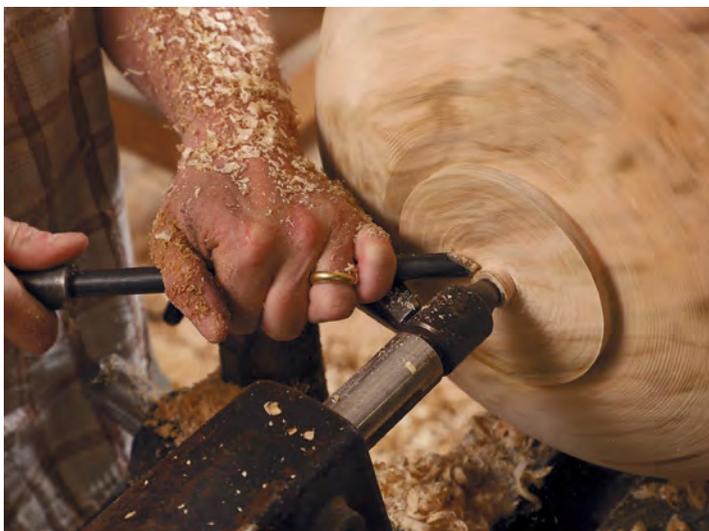
and easy to work, I get the bowl about 90% of the way to its final shape. After the bowl has dried (and inevitably distorted a little), I true up the shape and make finishing cuts. I don't want to have to remove much wood when the bowl is dry and more difficult to turn. But when I finish the gouge work and move on to sanding, it's actually a boon that the bowl is dry, since dry wood is easier to sand.

Mount the blank between centers on the lathe with the grain running perpendicular to the length of the lathe bed. This orientation of the wood on the lathe is typically referred to as side grain. Orient the blank so the bowl's rim will be toward the headstock and the base will be toward the tailstock. I begin shaping the outside of the bowl using a ½-in. bowl gouge, working from the tailstock side of the blank toward the headstock. You can also think of it as working from small diameter (the base) to large diameter (the rim).

Turn a tenon at the base of the bowl that fits the chuck jaws you will use to hold the blank for hollowing out the interior. It is important that the faces of the chuck jaws sit tightly against the shoulder above the tenon; if there is a gap between the shoulder and the jaws the bowl could vibrate in the chuck, making it difficult to achieve a smooth, clean cut off the gouge. To ensure



Roughing the outside. Using a ½-in. bowl gouge (left), rough in the bowl's exterior shape, pushing the tool from the foot toward the rim (center). To smooth the roughed-in curve, use a shear cut (right), pulling the tool from the foot toward the rim.



Tend to the tenon. After creating a wide tenon with a dovetailed edge, dish the bottom slightly and create a small spigot.

a good fit, I slightly undercut the shoulder and slightly dovetail the tenon. A ⅜-in. spindle gouge works well for this procedure.

To rough out the interior, remount the blank with the tenon in a chuck on the headstock. With a ½-in. bowl gouge, start in the center of the bowl and turn a small hollow. Take successive cuts making the hollow wider and deeper with each cut. Cuts should start at the rim and finish in the center of the bowl. For cuts at the bottom of the bowl, I'll switch to a blunt-nosed bowl gouge. While doing this rough turning with the bowl green, I give the walls a thickness equal to ¼ the diameter of the bowl; for example if the bowl has a 10-in. diameter, I make walls approximately 1 in. thick. After the bowl has been roughed out, I put it in a homemade kiln to dry for a few months.

True up and texture the dry bowl

When the rough-turned bowl comes out of the kiln, mount it between a jam chuck (or a faceplate) and the tailstock, with the tenon toward the tailstock. I use the original tailstock center mark



Reverse the blank and rough-turn inside. Fitting the tenon in a four-jaw compression chuck, Gardner begins turning the bowl's interior. Starting with a thumb-sized hollow at the center, he works his way outward, cutting wider and deeper with each pass. Cuts start at the rim and finish at the center of the bowl.



Shearing the rim. True up the bowl's rim with shearing cuts, pulling the gouge toward you.



Going deep. Switching from a straight tool rest to a curved one gives better support for cuts inside the bowl. A blunt-nosed bowl gouge works best for these cuts along the bottom of the bowl.

to help center the bowl. Using the $\frac{1}{2}$ -in. bowl gouge and the $\frac{3}{8}$ -in. spindle gouge, true up the tenon. Then true up the outside of the bowl, making it round once again.

After truing, remount the bowl with the tenon in the headstock chuck and make finishing cuts along the outside with the $\frac{1}{2}$ -in. bowl gouge. I use a shear cut near the tenon and switch to a bevel-supported cut as soon as I've worked my way far enough up the side of the bowl. With the bevel supported, you have more control over the tool and this translates to a smoother curve. Final finishing of the surface, though, is done with shear scraping cuts, which fair out any minor inconsistencies in the curve.

Once I'm happy with the shape of the bowl I switch to a $\frac{3}{8}$ -in. spindle gouge to do the texturing. The approach is similar to a shear scraping cut, with the handle down and the flute pointed in the direction of tool travel. But instead of using the long edge of the gouge to smooth the surface, I use the tip of the tool to score the bowl's exterior. I start at the base and draw the tool up the side of the bowl, creating a spiral on the surface. I do this several

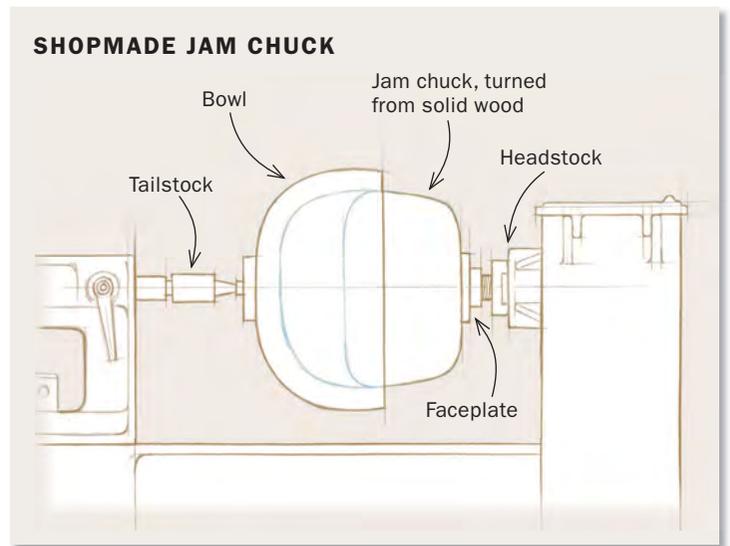


Roughed out and ready for the kiln. With the green bowl rough turned, Gardner paints the end-grain surfaces with Anchor Seal, a water-emulsified wax, and then puts the bowl in a drying closet for six to eight weeks.



TRUE UP THE DRY BOWL

A job for a jam chuck. The bowl distorts as it dries. To mount the bowl for initial truing, Gardner uses a shopmade jam chuck. The solid wood jam chuck, which he fits to the drive center, snugs against the inside rim of the bowl. Alternatively, you could use a faceplate.



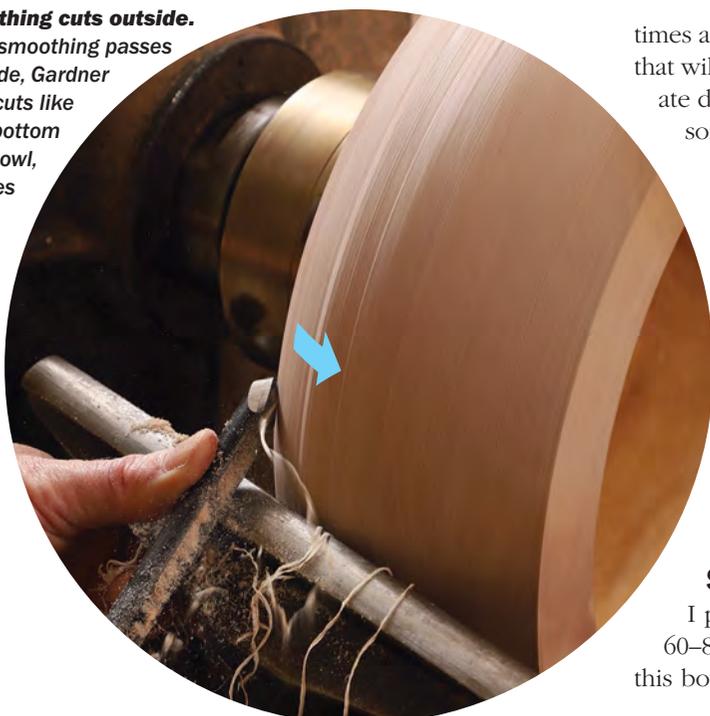
Truing cuts. With the dried bowl on the jam chuck, use a $\frac{1}{2}$ -in. bowl gouge to turn the bowl round and to create a smooth outside curve.



Remount the bowl. Once the outside of the bowl is trued up, remove the jam chuck and use the tenon to remount the bowl. Then true the rim.

Final smoothing cuts outside.

For the last smoothing passes on the outside, Gardner uses shear cuts like this on the bottom half of the bowl, then switches to bevel-supported cuts for the upper area closer to the rim.



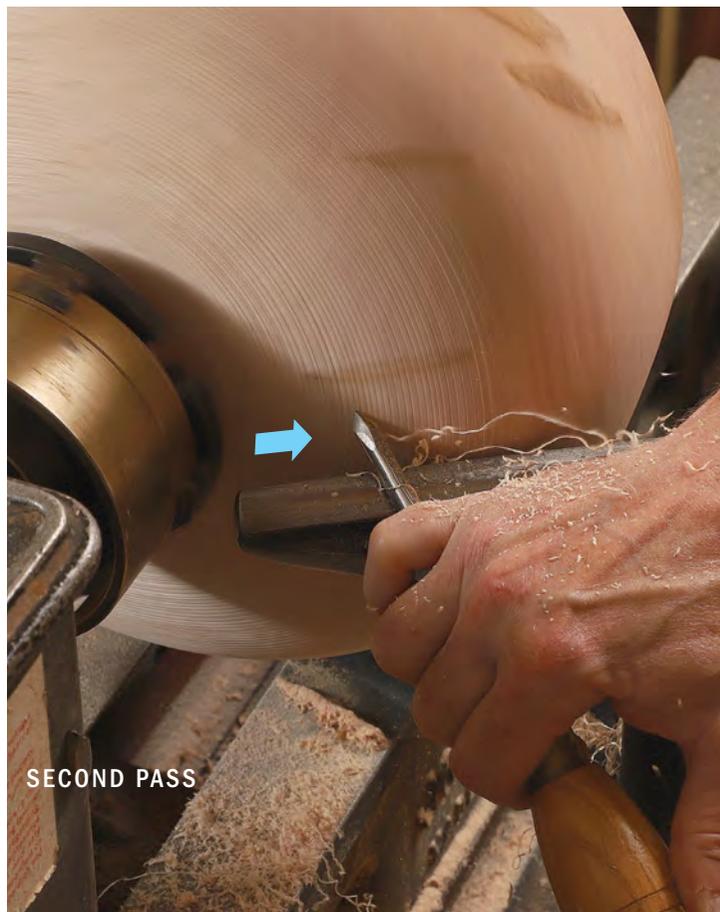
times at different rates of travel to achieve a loose gouged texture that will read through the milk-painted finish. It's important to create depth in the texture so that when you sand it after painting some paint is left in the valleys.

When the outside is done don't go back to it. The extra wall thickness has been supporting the outside cuts, and once you take the walls to final thickness by removing wood from the inside, it will be more difficult to achieve smooth finish cuts on the outside, since the bowl will tend to vibrate against the tool. The same goes with the rim—make your finish cuts there before finishing the inside.

With the outside and rim finished, move to the inside. When you're ready to make the last inside cut, sharpen your gouge; you want the keenest edge here to produce the best possible surface prior to sanding.

Sand, paint, and sand again

I power-sand the interior and rim of the bowl starting with 60–80 grit paper on a 2-in. or 3-in. pad in a handheld drill. As this bowl is intended to be used for food, I sand up to 320 grit.



Adding embellishment. After cutting the outside completely smooth, Gardner adds texture, scoring the surface with the point of a $\frac{3}{8}$ -in. spindle gouge. He makes the pattern in several passes, first scratching a widely spaced spiral, then filling it in with subsequent ones.



On to the interior. With the texturing complete, turn the bowl's inside to its final form. A $\frac{1}{2}$ -in. bowl gouge works well on the walls, and a blunt-nosed bowl gouge helps handle smoothing cuts on the bottom.



How thick is it? Use cuts from inside to take the bowl's walls to final thickness, checking your progress with turning calipers. For this bowl, Gardner is aiming for a final wall thickness of $\frac{1}{2}$ in.

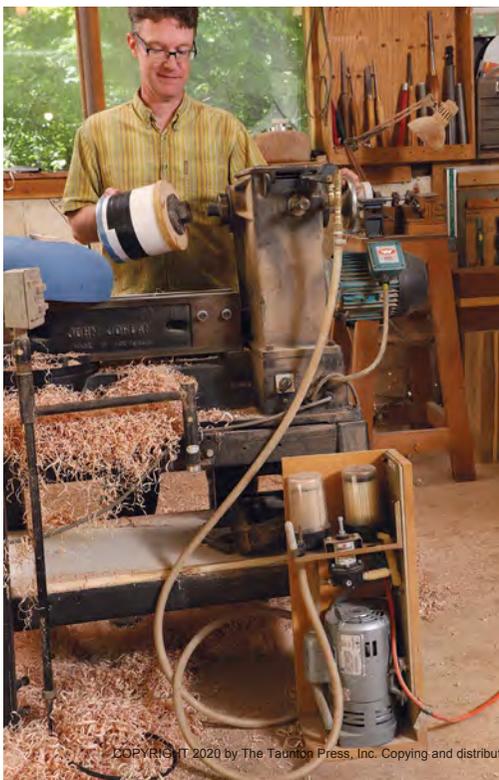


Sand it extra smooth. With the bowl spinning, Gardner sands the interior with a pad in a handheld drill. Move up through the grits, starting at 60 or 80 grit and finishing at 320.



Clean the contours, then fill them. Before applying any paint, brush (or vacuum) any dust from the textured surface. Gardner makes a batch of milk paint by adding water slowly to several tablespoons of powder. He stirs thoroughly and aims for a consistency like heavy cream. Brush it on smoothly. Two coats of milk paint should be sufficient.

Suction helps with the sanding. Once the milk paint is dry, remount the bowl on the lathe to scuff-sand the outside. Gardner uses a shopmade vacuum chuck at this stage. It enables him to back off the tail stock after sanding and turn away the tenon. The vacuum draws air through the hollow shaft of the drive stock. You could use a faceplate instead.



Sand back the ridges. With the bowl spinning, hand sand the outside with 150-grit paper, then 220-grit. This removes paint on the ridges and leaves contrasting bands of paint in the grooves.



Turn off the spigot. When you turn away the tenon, create a slightly dished foot. Then part off the spigot, back off the tailstock, and power sand the dished area.



A flat foot. So that the bowl will sit without wobbling, Gardner uses a hard, flat sanding block with the lathe spinning to flatten the foot's circular rim.



Sweet finish. With the lathe still spinning, apply finish to the outside of the bowl. Gardner uses a 1-to-3 mixture of beeswax and walnut oil.

I apply a mixture of beeswax and walnut oil to the inside of the bowl at this point. Then the bowl is ready for paint. I use milk paint from the Old Fashioned Milk Paint Company. It comes in powder form and is mixed with water when ready to use. Mix as much paint as you are going to use in one sitting. Once mixed with water, milk paint will last only a day or so, or a bit longer if kept in the refrigerator. My monochrome bowls get two coats of paint; if I'm layering different colors, there will be a total of three or four coats.

Once the paint is dry, I mount the bowl on the lathe using a vacuum chuck (a faceplate would also work well here). Again you can use the original tailstock entry point to help center the bowl on the vacuum chuck. Turn away the tenon using the bowl gouge, creating a shallow concave area at the base of the bowl with a narrow raised rim around it. This ensures that the bowl will sit flat on a table. Leave the tailstock in place for support until there is just a small nub left from turning away the tenon. Then slide the tailstock out of the way and remove the last bit of tenon.

I power sand the base of the bowl and hand sand the outside and rim. Start with 150 grit and finish with 220 on the outside of the bowl. The rim and base are sanded to 320 grit like the interior. Apply clear finish to the outside and your bowl is done. Sign it and send it off to the gallery. Or deliver it to the dining room. □

Mark Gardner turns bowls and makes sculpture in Saluda, N.C., and teaches turning around the country.

TIP Faceplate instead of a vacuum chuck



Make a faceplate. A shopmade faceplate will work instead of the vacuum chuck and jam chuck. Gardner saws a circle of 1-in. Baltic-birch plywood and trues it on the lathe.



Trim off the tenon. Turn away all but the central bit of the tenon, then stop the lathe and remove the bowl.



Last tasks by hand. Knock off the little spigot with a chisel, then sand the base and apply finish to the outside of the bowl.