



Faceplate Turning Is Fun

Shed your inhibitions—there's more to owning a lathe than turning knobs and legs

BY JIMMY CLEWES

Online Extra

To watch the whole process in motion, go to FineWoodworking.com/extras.

When it comes to turning, most furniture makers, not surprisingly, confine themselves to making furniture components. Regardless of the style, whether Shaker legs or period finials, almost all parts are turned between centers with the grain running parallel to the lathe's bed, a process known as spindle turning. However, there is another dimension to turning—faceplate turning—where the blank is attached just to the headstock end with the grain perpendicular to the bed.

Faceplate turning allows you to explore a whole new world of artistic woodworking, creating beautiful objects from start to finish in a few hours. Yet the tools and techniques are not that different from the ones you spindle turners are already familiar with. I'll demonstrate the steps involved by turning a platter, but a bowl is turned in the same way.

Freed from the conventional restrictions of furniture making, you'll find that turning stand-alone artistic pieces allows you to use a far wider range of wood. You only need an interesting chunk of a log, not a clear, 8-ft. section cut into boards and dried for a year. And in faceplate turning, the contrast between sapwood and heartwood is often prized, and irregularities like bark inclusions and burls are put on full display. However, you still want to avoid wood with cracks and checks in it, because the blank can fly apart. Although you can turn green wood, in this case I used kiln-dried curly maple.

The basic sequence

The sequence for most faceplate turning is as follows: First, draw a circle on the wood using a compass. This not only gives you a line to follow on the bandsaw but also marks the center of the blank. After sawing away the waste, mount the blank with the outside or underside of the platter facing the tailstock. The simplest and most secure way to attach it to the lathe is using a faceplate, hence the name for this type of turning. Most lathes come with at least a small faceplate, but aftermarket plates in all sizes are inexpensive and easy to find. Next, shape the base or foot so that it can be attached to a four-jaw chuck (see "The Lathe Accessory Everyone Needs," *FWW* #212), and turn, sand, and finish the rest of the outside. Remove the workpiece from the faceplate and mount the base in the four-jaw chuck. Now you can turn and finish the inside and top of the platter.

Completely finish the outside first

The first thing to consider when turning the base of your platter is how you want the jaws of the chuck to grip the workpiece. They can either apply pressure



Simple set of tools

You only need four tools to create beautiful faceplate turnings—two bowl gouges, a parting tool, and a scraper—but the way you grind them is key.

3/8-IN. BOWL GOUGE WITH LONG BEVEL GRIND

This gouge removes the bulk of waste material. The long wings can be used for light, cleanup cuts inside the rim, around the foot, and on the outside.



1/4-IN. BOWL GOUGE

The standard short-grind bevel makes a light cut that removes tearout left by the 3/8-in. gouge.



PARTING TOOL

This tool starts cuts in flat surfaces, leaving a trench that a bowl gouge can engage.



ROUND-NOSE SCRAPER

The tool is ground bevel-side up to create a fine cutting burr.



TIP Grind a long bevel on a bowl gouge

Most bowl gouges come with a short bevel. To make it more versatile, Clewes grinds a long bevel that extends farther back. He uses Oneway's Wolverine sharpening system, set up as follows.



Place the gouge in the Vari-grind jig with its adjustable arm in the second stop from the bottom. Place the jig against the back of the V-arm support and extend the tip of the gouge until the base of the bevel is level with the front of the V.



Set the base of the jig in the V-arm and swing the jig back and forth until the wings are fully shaped.

1 MOUNT THE WORKPIECE ON THE LATHE AND TURN THE FOOT

Screw on the faceplate and then attach the faceplate to the lathe. Start by turning the outside of the blank round and the face flat. Then turn a recess that will accommodate the four-jaw chuck, used when shaping the inside of the platter.



Attach the faceplate. Screw the faceplate to what will become the top or inside of the platter.

Measure the chuck. When gripping a recess, four-jaw chucks have the most contact with the wood when the jaws are nearly closed. Set your calipers to that diameter.



outward against a recess or inward against a spigot. I prefer a recess because I think you get a better grip. The diameter of the recess will determine the size of the foot, and so it should be in proportion to the rest of the piece. About a third of the total radius is a good rule of thumb. If you are turning a recess with a foot, as I am, never make the outside of the foot the same depth as the recess (see drawing, next page). If you do, you will end up with a potentially weak ring of wood on the base of the platter, which may break out when hollowing the inside.

The recess must be cut as accurately as possible so that the jaws of the chuck sit perfectly. It only needs to be deep enough to enclose the serrated ends of the jaw (see photo, below). I use a 1/8-in. parting tool to define the rim of the recess and a 3/8-in. bowl gouge to remove waste from the center. Feel free to use other tools you are comfortable with. Finish-sand the recess.

Profile the outside of the piece—With the recess and foot complete, it's time to shape the rest of the outside. Simple shapes please me most and my favorite is the softened ogee, which is attractive to the eye.

Don't turn at an excessively slow speed. Once the blank is balanced, higher speeds lessen the resistance of the cut and produce a better finish from the tool. To shape the outside of the platter, work from the center to the edge going with the grain. I remove the bulk of the waste material with a 3/8-in. long-grind bowl gouge (see "Simple set of tools," p. 71).

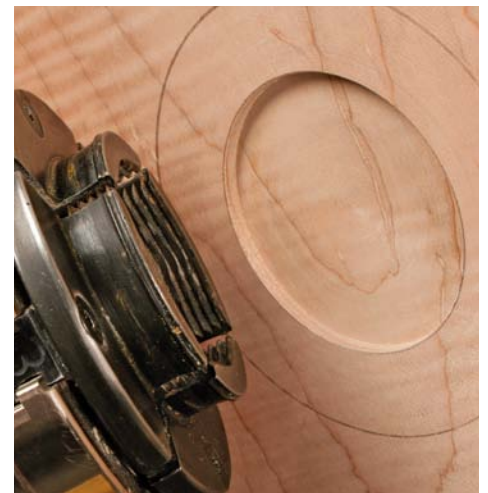
When you have shaped the outside of the platter, there will almost certainly be some tearout on the end grain. There are a couple of steps to take care of this. Make a finishing cut with a 1/4-in. bowl gouge, also cutting from the center to the outside and removing only a little wood—up to 3/32 in. The more even your movements, the smoother the finish, but the odd ripple can be removed by the next step.



Lay out the recess. Use the calipers to mark the diameter of the recess on the spinning workpiece. Mark the outside of the foot, too, and then use a parting tool to cut the shoulder.



Complete the recess. Use the long-grind 3/8-in. bowl gouge to remove the rest of the waste from the recess.



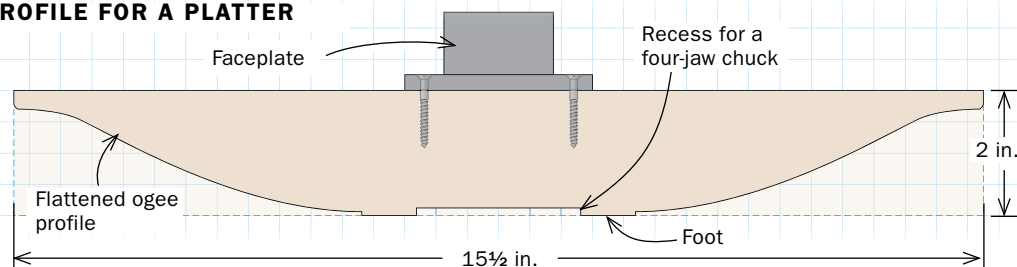
Grip with the tip. There is no need to create a recess that matches the full depth of the chuck's jaws. Only the serrated tips need to grab the wood.

2

ROUGH OUT AND REFINE THE BOTTOM

Use a series of tools to quickly shape the overall profile, and then produce a smooth surface with no tearout.

PROFILE FOR A PLATTER



Rough it. When shaping the outside of the workpiece, cut from the center toward the edge, going with the wood fibers. Use the $\frac{3}{8}$ -in. bowl gouge. The side bevels, or wings, on the gouge can be used to make light, shaving cuts to clean up the surface.

Shear-scraping, which is really shear cutting, leaves a surface that needs very little sanding. When preparing the scraper, try sharpening the tool upside down. This produces a longer, more even burr, as the grinding wheel draws the steel away from the tool edge. By the way, when the burr is worn away on one part of the cutting edge, a slight adjustment in tool angle will give you a fresh burr to work with.

Take your time sanding—The outside of the platter should be ready for sanding. I start with P180-grit paper and work through P240, P320, P400, and then CAMI 600, 800, 1,000, and 1,200 wet-or-dry paper, used dry.

The first sanding is the most important—any tool marks or disturbed grain should be sanded out to leave an even surface. If you can see any light lines in the piece, they are probably areas where the grain has been disturbed and they show up because dust has entered the disturbed grain. These lines must be sanded out before you go to the next grit.

I usually power-sand using small hook-and-loop-backed sanding disks attached to a corded drill. This speeds things up dramatically and gives better control and more even pressure. If you see the disk detaching itself from the pad, you are probably spending too



Smooth it. Use the $\frac{1}{4}$ -in. bowl gouge to make a single pass from the foot to the edge of the platter. If you go slowly and remove very little wood, the surface will have almost no tearout.



Scrape it. Use the burr on a round-nose scraper to clean up the surface prior to sanding.

3 FINISH BEFORE FLIPPING

Take this opportunity to completely prep and finish the bottom of the platter. You'll use the same finishing sequence on the top.

Power sanding.

Although you can use sheets of sandpaper or random-orbit sander disks, the fastest and most effective way is to use hook-and-loop disks and a foam backer pad attached to a drill while the workpiece spins at a moderate speed.



Seal and steel.

After sanding, seal the surface with shellac or sanding sealer. When dry, smooth the surface with good quality 0000 steel wool.



A flawless finish. Because you sealed the wood first, the subsequent oil-based finish leaves an even sheen.



much time sanding with too fine a grit and creating too much heat. You will be better off dropping back to a coarser grit.

When satisfied with the initial sanding, go through the grits, removing the sanding marks made by the previous abrasive. By the end, the wood should be polished enough to see your fingers reflected in it before you apply any finish.

Seal and then apply a finish—I finish my platters with Watco Danish Oil, my favorite finishing product. It is extremely durable, with just the right amount of body, and it allows you to re-oil items later to rejuvenate them, providing you didn't apply a topcoat of paste wax.

However, don't apply the Danish oil to bare wood. On figured wood in particular, you would have to saturate the wood before you'd get an even sheen. Instead, seal the surface with either dewaxed shellac or an oil-based sanding sealer. Once dry, smooth the surface with Liberon's 0000 steel wool. Use a fine-weave, lint-free cloth such as an old T-shirt to apply the Danish oil in a circular motion with the piece stationary on the lathe. If you see any white dots, they are pores filled with dust; apply more oil to these areas until they disappear.

Remove any excess oil using a clean cloth with the lathe turning slowly. Let the oil dry for about a half-hour before buffing to a satin sheen with a clean cloth. Second and third coats are optional based on the sheen you desire.

Remount the piece and turn the inside

Now to the inside of the platter. Remove the faceplate from the unfinished side of the platter and screw the four-jaw chuck to the lathe. When mounting the piece in the chuck, make sure you put pressure right in the center of the workpiece. This will ensure that it is sitting squarely before the chuck jaws are tightened. Tighten until there is just a little resistance on the jaws, enough to hold the workpiece securely but not enough to dent the recess.

The first task is to flatten the face of the workpiece and bring it to the desired thickness. When laying out the inside of the platter, bear in mind that the width of the rim looks good if it is about one-third of the radius. Make a cut with a parting tool to define the rim edge. This will also serve as a shoulder for the bevel of your bowl gouge when you start hollowing the center.

Finish the rim first, leaving the bulk of the wood in the middle for support. I also divide the rim roughly into thirds with the outer third sloping toward the outer rim while the inner section slopes toward the inner rim but terminates in a kind of very small ski jump. This gives your fingers something to register against when you handle the platter. You also will be cutting downhill with the grain. I shear-scrape if necessary as I cut the wood, ready for sanding.

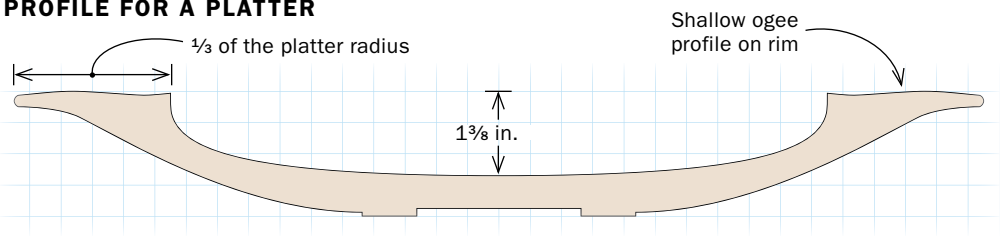
To remove waste from the inside of the platter, I again use the long-grind bowl gouge and the 1/4-in.

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TURN THE INSIDE LAST

When turning the inside, reverse the process and work from the edge to the center.

PROFILE FOR A PLATTER



Flip and regrab. With the outside finished, remove the faceplate and use the recess you turned in the base to mount the platter on the chuck.



Rule of thirds. The rim should be about a third the radius of the platter. Use a parting tool to define the inside edge, and then divide the rim itself into thirds to help determine its profile.

bowl gouge for the finishing cuts, working from the outside to the middle, as this is the way the grain is running. I erase any ripple marks by shear-scraping. Make sure the inside profile of the platter is a nice continuous curve with no hump or depression in the middle, a common oversight. To detect any discrepancies on the inside profile curve, simply use the tips of your fingers and run them back and forth over the surface; it's surprising how sensitive they are and how fine a flaw they can detect. When satisfied that everything is in order, sand, seal, and finish the inside in the same way as you did the outside. □

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Work toward the center. Turn the rim using the same tools as the bottom of the platter, then hollow out the center. Weight in the center keeps the blank more stable.



The reward for good sanding. The oil-based finish will highlight any tearout or scratches, so don't skimp on the surface preparation.

TURN HEADS WITH COLOR

See Finish Line, pp. 92-94, for details on dyeing the rim.

