

Chisel Handles that Fit Your Grip

Transform your old chisels with homegrown handles

BY JOHN TETREAULT

The first chisel I remember buying was an old Buck Brothers socket chisel. I've since added a few vintage Stanley 750s and other tag-sale finds, all of them socket style. Some of them had handles that were damaged or just missing, but they were all made from good old tool steel. They sure didn't look like a set, but after I spent some time at the lathe and used some repurposed materials, they do now.

Making handles for your chisels is a simple task and a great way to bring together a mismatched set. It's also a chance to customize the fit to your own hand. A few small scraps of any dense hardwood will do the trick. For my handles, I dove into my firewood pile, home to an abundance of local hardwoods that work

➤ **Online Extra**

To see Tetreault craft one of these chisel handles, watch the video at FineWoodworking.com/extras.

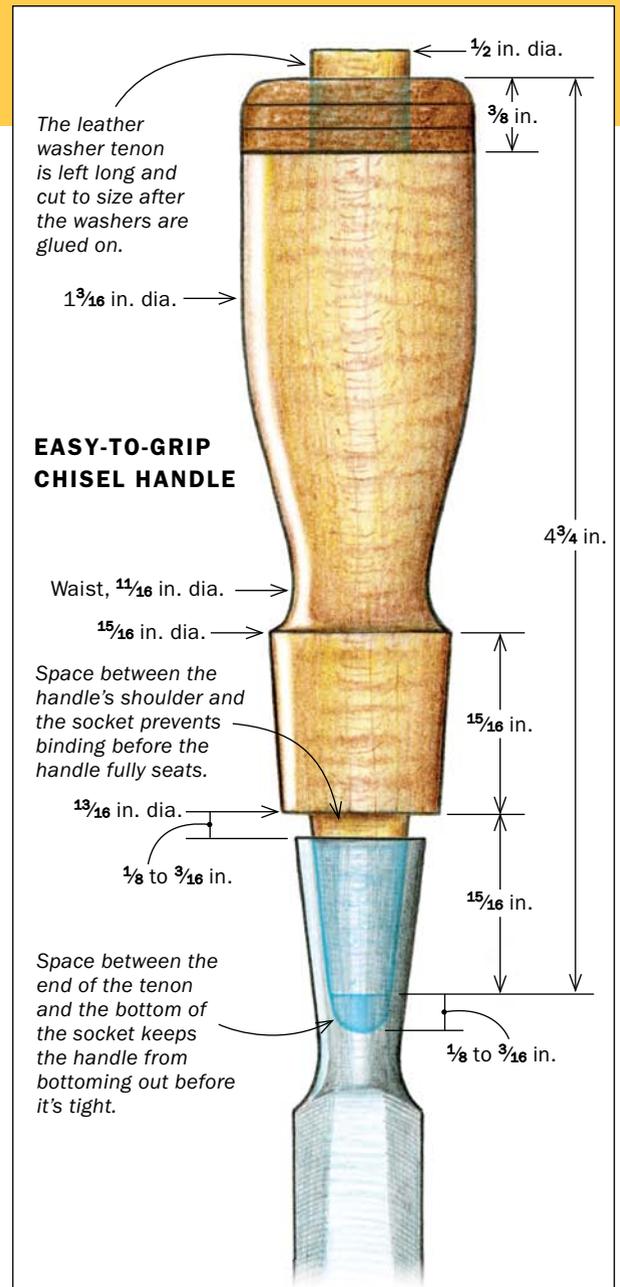
Rough in the handle shape



From old to new. Tetreault turns two handles from one spindle. Using the old handle as a reference, he marks the handle's transition points on the cylinder with the lathe spinning. He makes certain to include both ends of the tapered socket tenon and the base of the washer tenon.



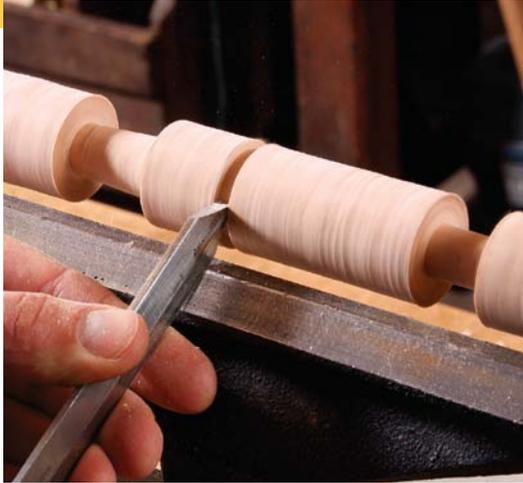
Turn the tenons. After turning the washer tenon (left in photo, below), Tetreault turns the socket tenon to a cylinder using a small gouge. He uses calipers set to the major diameter of the socket tenon of the original handle (left) to gauge his progress. The tapering happens after the two handles are separated from the spindle.



TIP HOW TO SIZE A SOCKET

The clay trick. When he has no old handle for reference, Tetreault uses a piece of clay to reveal the socket's inner dimensions. He forms the clay to a point, presses it into the socket, and twists it free. He'll take measurements straight from the clay.

Fit it to your hand



Rough in the shape. Tetreault uses a parting tool to define the waist of the chisel (above). The grip of the handle begins to take shape (right) as he uses a small gouge to contour it to his grip, making sure to round out the hard angle where the waist transitions into the shoulder.



well for handles, such as locust, maple, or beech. You just have to be sure the wood is dry enough to use. The firewood I chose had been air-drying in the stack for about a year. I brought the logs into the shop for a few weeks to let them acclimate before turning.

Shape the stock and cut the tenons

I roughly squared two adjacent sides of the log at the bandsaw using a shopmade sled, jointed those sides, and then cut blanks to rough size at the bandsaw. I let the blanks sit for a day or two before milling them to about 1¼ in. square. I cut the stock just long enough to make two handles. A longer blank can result in excessive vibration of the spindle, especially when you're turning the tapered tenon.

Turn each blank into a cylinder at the lathe using a roughing gouge, keeping the 1¼ in. diameter. You can use an old chisel handle as a model or create an entirely new shape as you mark the transition points on the blank.

Now turn the tenons for the leather washers. The washers help to absorb shock and direct the mallet blow down the center of the chisel, as well as preventing the end from “mushrooming” or chipping out. This is probably more of an aesthetic preference than a necessity, since a rounded end on a good, dense hardwood will go a long way. Use a parting tool to turn a tenon on each handle, about ⅝ in. long and a hair over ½ in. dia. This will allow the washers to stretch over the tenon to ensure a tight, no-gap glue-up.

The toughest part of making a socket chisel handle is fitting the tapered tenon snugly. If you're using an old handle as a model, use calipers to take dimensions directly from that tapered tenon. If the handle is missing, simply push a piece of clay or plumber's



Get a grip. Tetreault pauses regularly during the shaping process and gets a good feel for the handle (above), stopping work only when it feels right. He sands the handles while they're still on the lathe. For straight sections he uses a flat sanding block (left), for concave parts he uses a dowel wrapped in sandpaper, and for convex areas he holds the sandpaper in his hands.

Taper the socket tenon

Split the set. With the handle shaped and smoothed, cut the blank in two with a handsaw so the leather washer tenon and the socket tenon can be refined independently.



Find your center. To mark the centers precisely on the separated handles, Tetreault uses a center head and rule to strike a few lines across the tenon end. The point where they meet is the new center.

putty into the socket, gently twist it out, and take dimensions from that. Make a quick sketch and jot down the length of the tenon and the diameters at both ends of the taper.

Use the parting tool to define the shoulders at each end. Now switch to a small gouge to make the small and large ends meet. Remember to leave it slightly oversize at this point. Once the handles are cut apart, you can mount them back on the lathe and use a small sanding block to make the taper straight and true.

A big advantage to making your own handles is custom-fitting them to your hands. There are no rules here; simply go by feel. Start by using a parting tool to define the waist, then use a gouge to shape the handle to suit your grip. Turn off the lathe once in a while and see how the handle feels in your hand. Adjust the dimensions and when they feel right, sand the grip up to P220-grit. Be sure to move the tool rest out of the way before sanding to avoid getting anything caught between the piece and the rest. When I made my set, I perfected the grip one handle at a time.

Separate the handles and fine-tune

Once the handles are shaped and sized, it's time to cut them apart and fit them to their chisels. I use a handsaw to cut them apart, being sure to leave the adjacent tapered tenon and washer tenon with a little extra length on either side. The tenon should fit the socket with $\frac{1}{8}$ in. to $\frac{3}{16}$ in. of clearance between the handle shoulder and the socket's end, and also between the tapered tenon's tip and the bottom of the socket. This clearance allows the handle to be beaten into the socket without bottoming out. Check the fit by twisting the chisel on the tenon. High spots will appear smooth. Chuck the handle on the lathe between



Mark the tenon's length. Tetreault uses the old handle for reference.



Taper to the line. Tetreault uses a beading and parting tool to taper the tenon. To check his progress, he uses calipers set to the original tenon's dimensions.

Finishing touches



Prep the washers. After scraping the leather clean and drilling $\frac{1}{2}$ -in. holes into it, Tetreault uses a sturdy pair of scissors to cut out the washers.



Stack them up. Put a coat of Titebond III between each layer of leather, stacking them three high, and then place the handles in the clamping caul.

centers and use a sanding block to sneak up on a perfect-fitting taper.

Glue on the leather washers

Leather washers add a classic look, but must take a beating as well. Quality leather and a proper glue-up will ensure your washers will be on for good. You can buy leather, but I used an old belt. Using a Forstner bit, drill $\frac{1}{2}$ -in. holes every few inches and scrape off any finish with a razor blade to get a good glue surface. Then cut the leather into squares with sturdy scissors.

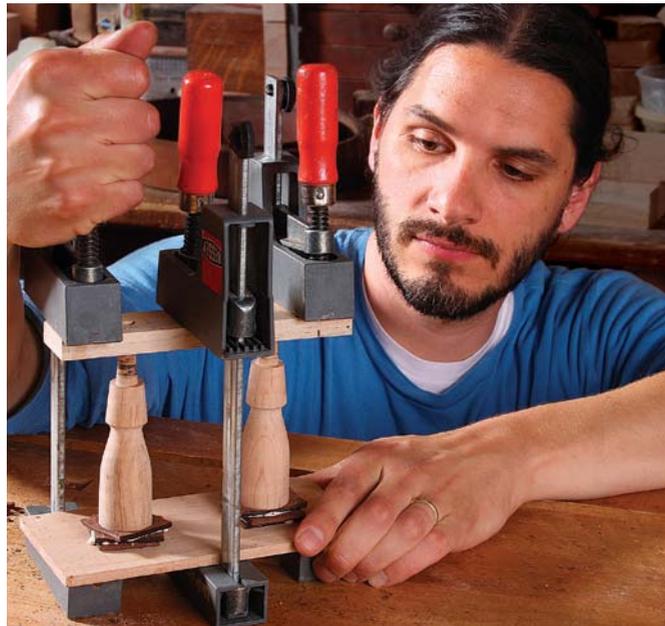
Gluing on the washers can be tricky. To help, make a caul that clamps two handles at a time. Drill two $\frac{5}{8}$ -in. holes, about 4 in. apart, in a scrap of softwood. Add a second piece of softwood with two $\frac{3}{8}$ -in. holes at the tapered tenon end and the caul is complete.

Apply glue to the tenon and between each washer as you stack them up to the desired thickness. Place the end of each tenon in a hole in the clamping caul and compress the washers down tight. When the setup is dry, remove the leather waste and sand the washers flush with the handle at the belt sander. Then round over the ends slightly for a smooth transition.

Dip for a durable finish

This may be the easiest finish you'll ever apply. Open a can of satin polyurethane and put on rubber gloves. Remove any dust from the handle and dip it in the can by the end of the tapered tenon. Let the excess drip off and place the handle in a shopmade drying rack made from scrap. When dry, lightly sand with P400-grit paper and dip it once more. As a final step, I apply a coat of a recipe I used on our butcher-block table: beeswax with a bit of mineral oil. Your new handles will feel great and smell even better. □

John Tetreault is a deputy art director at FWW and a professional furniture maker.



Clamp them tight. A simple caul allows Tetreault to apply even pressure on the washers, snugging them down onto the tenon for a tight, even fit.



Clean up the leather. With the glue dried, sand the leather flush with the handle (above) and round over the pommel for a comfortable grip. To apply polyurethane to the handles, dip them into the can and then place the handles in a simple shopmade rack to dry (right)

