

Beautiful carving starts with a keen edge

LEARN TO SHARPEN A CURVED GOUGE AND YOU'LL BE ABLE TO HANDLE MOST CARVING TOOLS

BY DAN FAIA

It is not the artistic side of carving that keeps some woodworkers from trying it, but the mechanics of how to sharpen the multitude of carving tools. This article will teach you how to sharpen a curved gouge, one of carving's most basic and useful tools. Gouges of various widths and curvature (sweep) are used throughout the carving process: the initial roughing out, the "setting in" of the carving's primary outlines, and the final details and finished



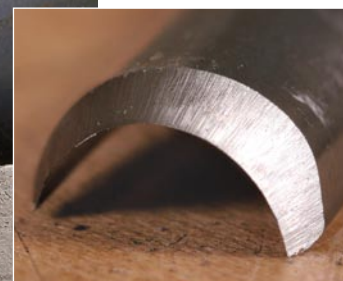
Grinding a smooth bevel



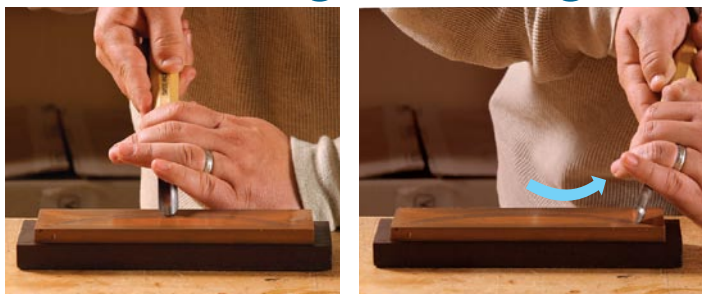
Joint the edge flat. Faia rests his forearms on the benchtop to help keep the tool perpendicular to the stone. The goal is a flat that's no more than $\frac{1}{64}$ in. or so wide.



Grind with a light touch. Steadily rotate the handle to work the entire edge. Also slide the tool from side to side to use the wheel's whole width. When you're done, the jointed surface should be almost gone.



Get the hang of honing



Center to side. Place the stone on the bench so its long axis crosses your body. Tilt the handle upward until the blade is seated on its bevel.

surfaces. Some of the techniques you'll learn also apply to other types of carving tools. On FineWoodworking.com, I'll show how I sharpen two others.

Gather your equipment

To sharpen a gouge or any other carving tool, you need sharpening stones (one coarse stone, like an India stone, and one fine Arkansas). I use oilstones because they wear more slowly than other types of stones. If you plan to carve a lot, get a separate set of stones for your carving tools. Otherwise, you'll spend too much time keeping the stones flat for your straight-edge tools.

You'll also need a fine, profiled slipstone, a leather strop, and a bench grinder with a tool rest. A slow-speed grinder is best, but a high-speed one with a white or pink wheel is fine, too.

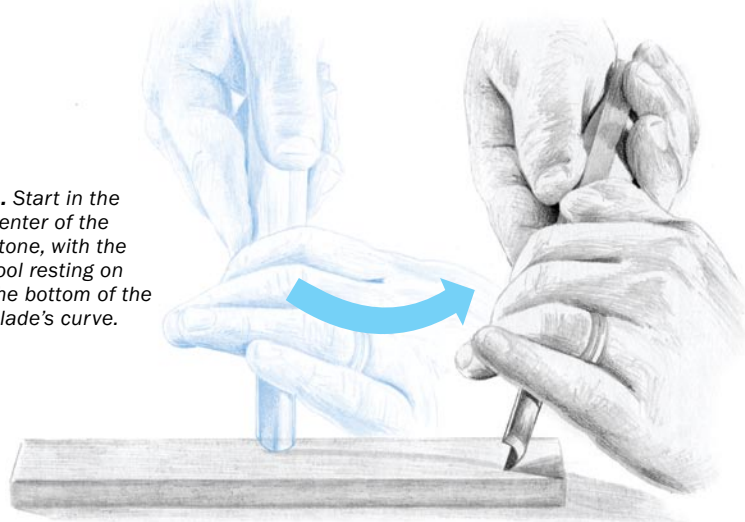
Start by jointing the edge

The first thing to do with a new gouge is to joint the edge. Jointing flattens and trues the edge and creates a narrow, flat surface on the tip. This flat serves as a visual reference to aim for when grinding the bevel, helping you to keep the edge consistent. Jointing is also important in repairing a damaged edge or if you need to grind the edge again to re-establish the bevel angle. I joint the edge on a fine India stone. Using a two-handed grip, hold the edge perpendicular to the stone and take six to 10 strokes, drawing the tool toward you. Your goal is a flat that's no wider than $\frac{1}{64}$ in. or so.

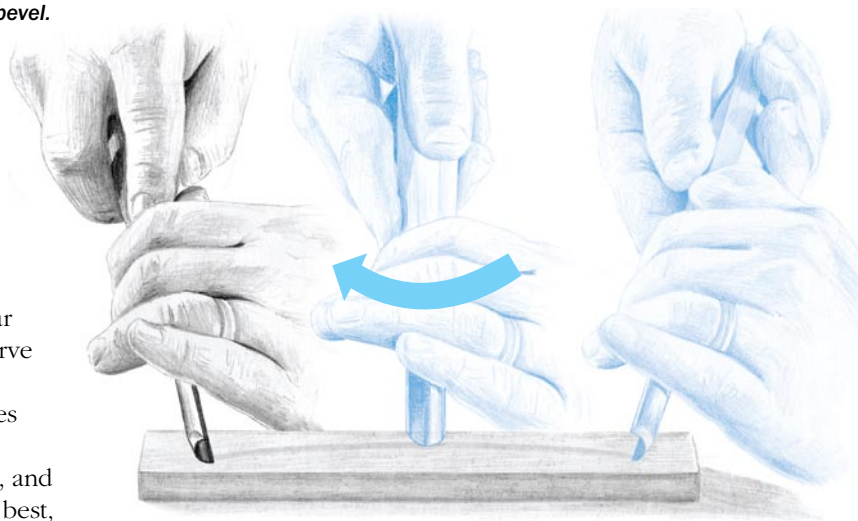
The next step is to grind the bevel. First, consider whether to bevel both sides of the edge or only one. Some carvers bevel both sides, but I find it easier to maintain the tool with a bevel only on the outside of the flute. Then consider the angle of the bevel itself. In general, a shallower bevel cuts more easily while a steeper bevel creates a longer-lasting edge. I like a 30° bevel because it gives you a durable edge that cuts effectively in all but the hardest woods. The steepness of the bevel also means that the tool's handle sits high enough when I'm cutting that my knuckles can ride underneath without bumping the work.

Setting the tool rest is easy. Most new tools come with the bevel set between 24° and 26° , and with a little experience you'll be able to use this angle as a reference to set the tool rest by eye. You also can set the angle using a protractor or

1. Start in the center of the stone, with the tool resting on the bottom of the blade's curve.



2. Then work the gouge from side to side, rotating the tool as you go. End each stroke as the tool's corner touches the stone.



Move to the finer stone. Continue honing in the same pattern, switching to the Arkansas stone to polish the bevel.



Push back the burr. Use a slipstone, working the edge with short strokes along the tool's long axis. Return to the Arkansas stone and repeat the process until the burr is gone and the bevel fully polished.

Stropping is the secret



Pull and roll. Faia starts with the edge on one corner and pulls the tool toward him, rotating it onto the opposite corner as he goes.

angle gauge. The diameter of the wheel is not critical (because all of the hollow will be honed away). There's also no need to dress the wheel with a special shape—a flat grinding edge is what you want. To grind the bevel, hold the gouge flat to the tool rest and lightly touch the edge to the wheel. Steadily rotate the handle to ensure even grinding, and move the tool from side to side, using the whole width of the stone. Check your progress often. You'll know you're done when the jointed surface on the edge is almost gone.

Honing refines the edge

I start honing on the India stone. Orient the stone with its long side facing you. Start in the middle of the stone, with the middle of the flute facing down. As you move the tool toward the side, rotate the handle so that the stroke ends with the trailing wing in contact with the abrasive. The next step is to bring the tool all the way back across the stone, rotating as you go, so the opposite wing is touching when you reach the other end. But first, I back up just a little and work the same wing once more. This helps ensure even wear between the wings and the bottom of the flute.

Work until you raise a burr on the inside of the flute. Then use the translucent white Arkansas slipstone to push the burr back, holding the slipstone dead flat against the inside of the flute. Move on to the finer stone, repeating the process to polish out the scratches from the India stone. Using the stones, chase the burr from bevel to flute until the hollow is flattened, the bevel is polished, and you can no longer feel the burr.

Finish by lightly stropping the bevel and flute to polish away any rough spots and create a highly sharpened edge. I charge the suede side of a piece of leather with honing compound (I like Herb's Yellowstone), and hold the strop flat on the bench with my hand as I work the tool across it. □

Online Extra

To see how Faia sharpens a skew chisel and a V-parting tool, go to FineWoodworking.com/extras.



Put a curl in it. Faia simply folds the strop over to work the inside of the gouge.



Do your carving tools cut like this? A series of clean cross-grain cuts with clearly defined ridges and no tearout indicates a sharp gouge.