The Woodwright's favorite tools

'IF I WERE A VIKING, THESE ARE THE TOOLS I'D BE BURIED WITH'

BY ROY UNDERHILL

Over three decades of teaching traditional woodworking, I have adopted a big, quirky orchestra of tools—all beechwood and brass, rosewood and steel. I have great regard for them all, but I'd be lying if I didn't confess to having favorites.

All of my favorites are brilliant work partners, but each does a little bit more for me than just get the job done. I can't help but smile when I pick up an 1875 D-9 ripsaw and hear its crisp basso continuo as it carries its kerf down the length of a plank. Other tools speak to me of days of hard labor—the raw handprint worn into the beech of an old plane that is otherwise black with tallow and linseed oil.

Some of these classic hand tools are unique and some are cookie-cutter castings. Some you can buy with a card and a click, and some, like the shaving horse and spring-pole lathe, you'll have to make for yourself. Each one is a noble instrument of long service that would certainly serve you equally as well, but if I were a Viking, these are the ones I'd be buried with.

Roy Underhill, star of PBS's The Woodwright's Shop, *also runs a woodworking school in Pittsboro, N.C. (woodwrightschool.com).*

Nothing holds like a holdfast

The holdfast is a versatile bench helper. Set it in a benchtop hole, slide the work under it, give it a whack with a mallet, and all the force of the blow is captured, locking the wood to the benchtop. When your work is done, a tap on the back of the holdfast springs it free.

The delightful holdfast works as well today as it did when the venerable Joseph Moxon described it in 1678 in his book *Mechanick Exercises: or the Doctrine of HandyWorks*: "Its office is to keep the Work fast upon the Bench, whilst you either Saw, Tennant, Mortess, or sometimes Plain upon it."

The "sometimes plain" qualification comes from the fact that the holdfast bears down on the very surface that you probably want to plane. For chamfering or rabbeting the edge of a piece held on the benchtop, though, it does just fine. You also can bore holdfast holes through the front legs and skirt of your bench. One or two holdfasts can then position a plank perfectly for edge-jointing.

Photos: Matt Kenney

For leveling a board, I like the hungry scrub plane

Some say flattening a board by hand is drudgery. I'm different. I savor the task. For leveling a board, no hand tool tops a scrub plane. The rounded iron shaves a trench across the grain and cuts very, very fast. Working back and forth in short strokes with the cool, splintery shavings spewing up over your hands as the plane hogs away wood, you look as if you were scrubbing a floor—and soon feel like it, too.

I own several scrubs, but I favor an ancient wooden jack plane that was forced into a lifetime of scrubbing long before it came to me. It probably dates from the 1830s because it has a single laminated iron made by William Ash, an English maker. Perhaps the beech body is English too, but it is far too battered to tell. In any case, it's thoroughly American now. When the original tote broke, the user replaced it—not with a sawn-out piece of beech, but with a piece made from the crotch of a dogwood branch. American dogwood is tough enough anyway, but choosing this crotch with the grain flowing around it like a ship's knee has to be the work of a fellow countryman.

The Buck Rogers smoother is an outrageous plane

When I'm not using respectable beech, coffin-shaped smoothing planes, I smooth with an outrageous plane—a tuned-up 1955 Millers Falls, red-knobbed, No. 709—the legendary "Buck Rogers." Designed in 1948 by the Huxtable brothers and sold by the Millers Falls Co., the Buck Rogers smoother was intended not for the hands of fine furniture makers but for returning GIs in the post-war boom years. The body is cast iron, and the one-piece frog and handle assembly are of tough aluminum alloy. The bright red fore and aft grips are "unbreakable" Eastman Tenite.

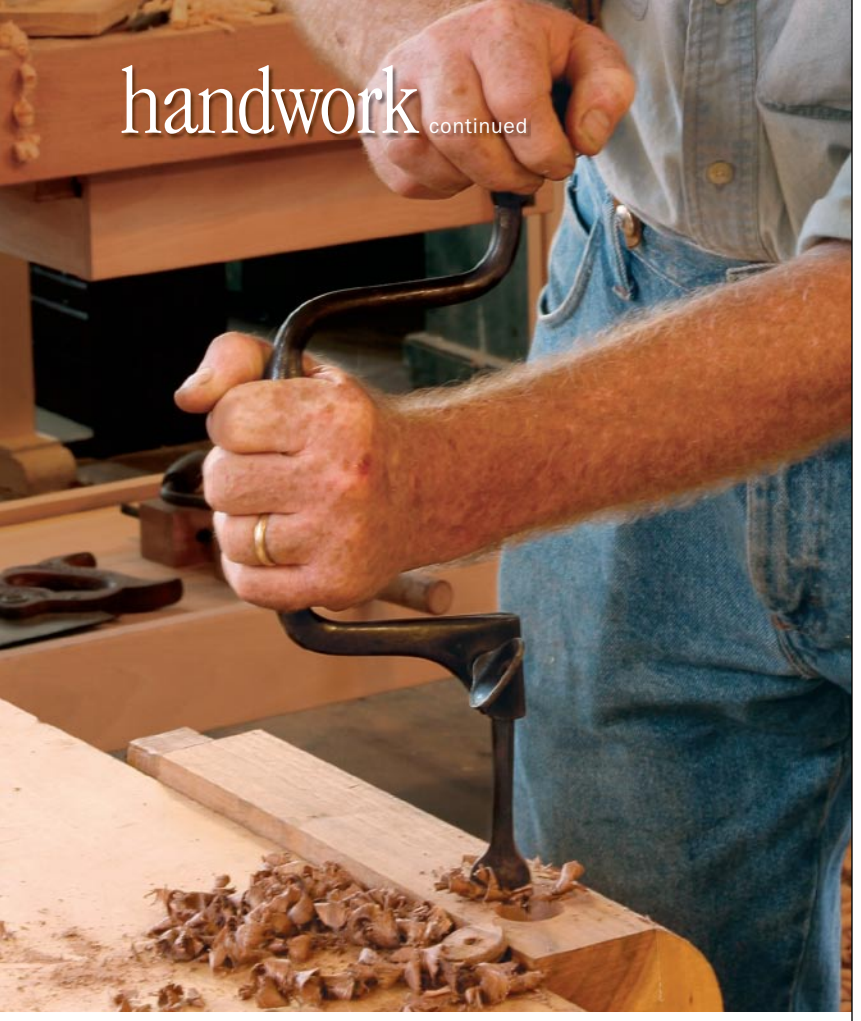
As well as the frog and handle assembly that renders the iron dead solid, it has a huge depth-adjustment wheel. Just sitting on my bench, the Buck Rogers looks like it's going 300 miles an hour. It's a strange visitor amid the Victoriana of the other vintage hand tools I own—and it works like a jet-age charm!

For rabbeting, the moving fillister plane is a champ

Despite the temptations of metal planes, I have never used anything that cuts a cross-grain shoulder as well as a wooden moving fillister—a 19th-century gem made by H. Chapin and Sons.

The skewed iron shaves the cross-grain with a shearing cut and draws the fence tight to the edge of the wood. The fence exposes only the width of the blade that you need. Riding just ahead of the iron, a little vertical nicker severs the cross-grain to keep a clean shoulder, and the shoulder of the plane is made of hard boxwood inserted into the beech body. A brass depth stop controlled by a screw completes this marvelous instrument.

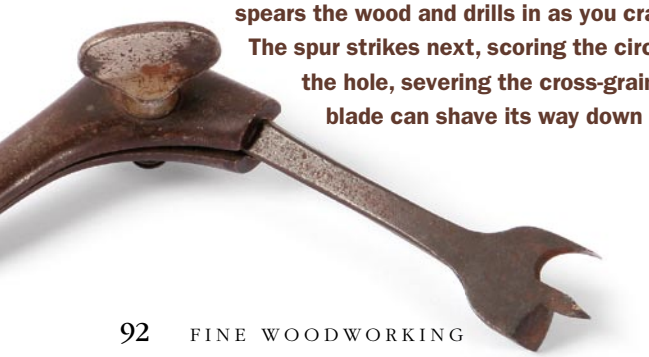
The moving fillister won't cut end grain like a shoulder plane, and the fence makes it difficult to use on the cheeks of tenons. But for rabbeting, along or across the grain, the moving fillister is a champ.



Spofford brace and center bit bore holes with style

A Spofford-chucked bit brace is cool. While other bit braces rattle, ratchet, and reverse with nickel-plated knurling on their screw-barreled chucks, the Spofford brace just clamps your bit in clamshell jaws with detached self-confidence. Made by the Fray company of Bridgeport, Conn., in the late 1800s, the Spofford brace is defined by the forged, split jaw tightened by a single transverse thumbscrew. It's a clean forging, but Spoffords are not just iron and irony—the rosewood pad and the pewter rings on the crank handle give these braces an effortless, understated panache. When you have a boring job to do, it sure helps if you have a cool tool working along with you.

Chuck up a center bit in a Spofford brace, and you're working with elemental efficiency. Ideal for boring shallow holes, the business end of the bit has just three simple elements: a central pike, a cross-grain scoring spur, and the main blade. The pike spears the wood and drills in as you crank the brace. The spur strikes next, scoring the circumference of the hole, severing the cross-grain fibers so the blade can shave its way down into the wood.

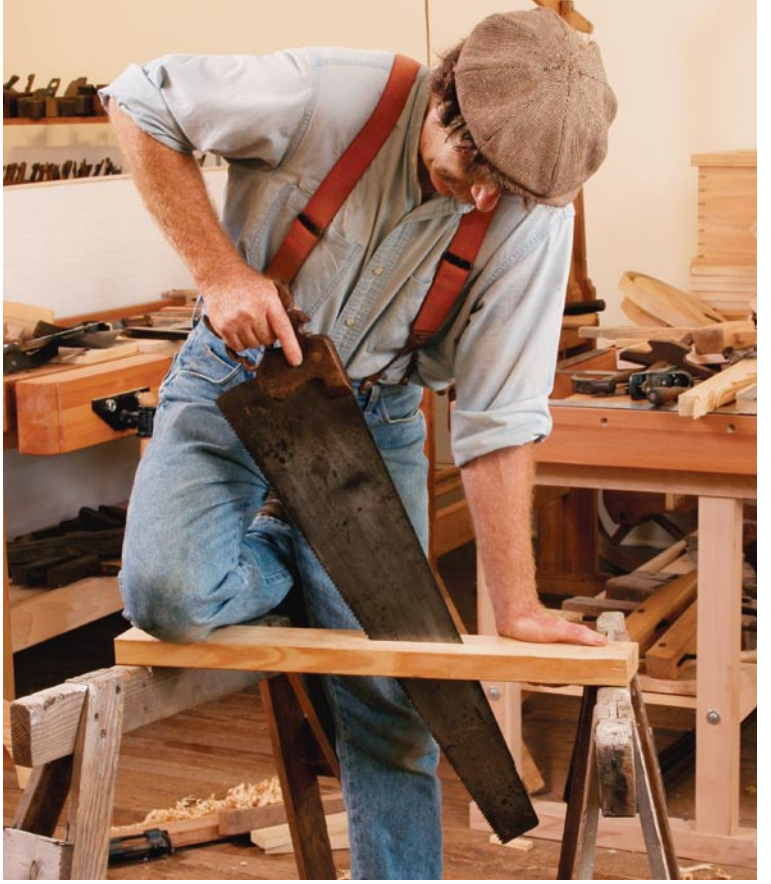


Drawknife and shaving horse, an inseparable pair

There are few more personal tools than your shaving horse and drawknife. They're a fast pair, too. The horse is essentially a foot-operated vise that allows you to reposition the wood as you work. And where a handplane takes the same metered shaving with every stroke, the drawknife is a free blade, controlled only by constant feedback and minute muscular adjustment through every stroke. Sitting on a shaving horse with a drawknife in your hands, you can get talking with someone, look down, and discover that you've made a chair by mistake.

I work with a variety of drawknives and use both the solid-headed shaving horse favored by coopers, and the gate-headed "bodger's horse" (shown here) used by chair makers. In both forms, the harder you pull, the firmer the grip. The power flows from the drawknife into your hands, through your body and down to your feet, up through the lever of the shaving horse, and then back into the blade. It's a full circle of strength, and even if there's nothing mystical about it, no one can deny that it's wonderful.

Disston ripsaw sings as it cuts



In every young person's life, if they're lucky, they'll light on a tool that just clicks with them. My epiphany came while I was ripping pieces of oak flooring with a Disston saw, found at a flea market for a few dollars. The speed and ease of the saw impressed me first. But then I listened. On every downstroke, it spoke out with a crisp, rising burr; on every upstroke, it rang with a faint echo of the moan the saw makes when bent into an S and plunked with my thumb. It was speaking to me, singing to me—all I had to do was work and listen.

The points create a slightly finer cut at the toe, giving it an easier start and accounting for the rising note of each stroke. Even the applewood handle is special—the large opening gives you a grip for two-handed use—something you might not appreciate for the first 5 ft. of ripping.

It sings, it talks, it even cuts wood. To many, it may seem a sorry fate to discover that your tool of destiny is a big handsaw, but 35 years later, I've got no complaints.

Pole lathe is a powerful, precise turning tool

Properly built, a spring pole lathe is a powerful and precise machine—a reciprocal tool with a cutting stroke and a return stroke—just like a plane or a handsaw.

But you can't just cobble one together. The frame must be solid, the centers polished, and the spring pole lively. The downward push of your foot on the treadle pulls the cord wrapped around the work, giving it the forward spin for the cutting stroke. Raising your foot then lets the spring pole rewind the cord, ready for the next cut. With the tension adjusted properly, the spring pole does not excessively resist your down stroke, yet spins the work quickly back, even giving your foot a little lift.

The lathe I built, based on a design I found in a 17th-century German technical encyclopedia, is solid, compact, and infinitely adjustable. Sliding the collar joining the two ash poles back and forth quickly changes the tension from wimpy to wow!

This little lathe is a rock-steady workhorse with the added benefit of the delighted look on people's faces when they try it for themselves—another true believer born every time.