Tips & Techniques

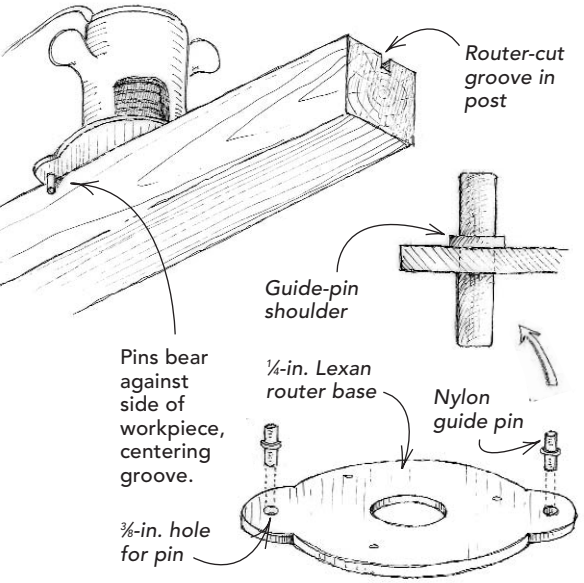
edited and illustrated by Charles Miller

Tips & Techniques is a forum for readers to exchange information about methods, tools and jigs they've devised. We'll pay for any we publish. Send details to Tips, Fine Homebuilding, *P. O. Box 5506, Newtown, CT 06470-5506.*

Self-centering router base

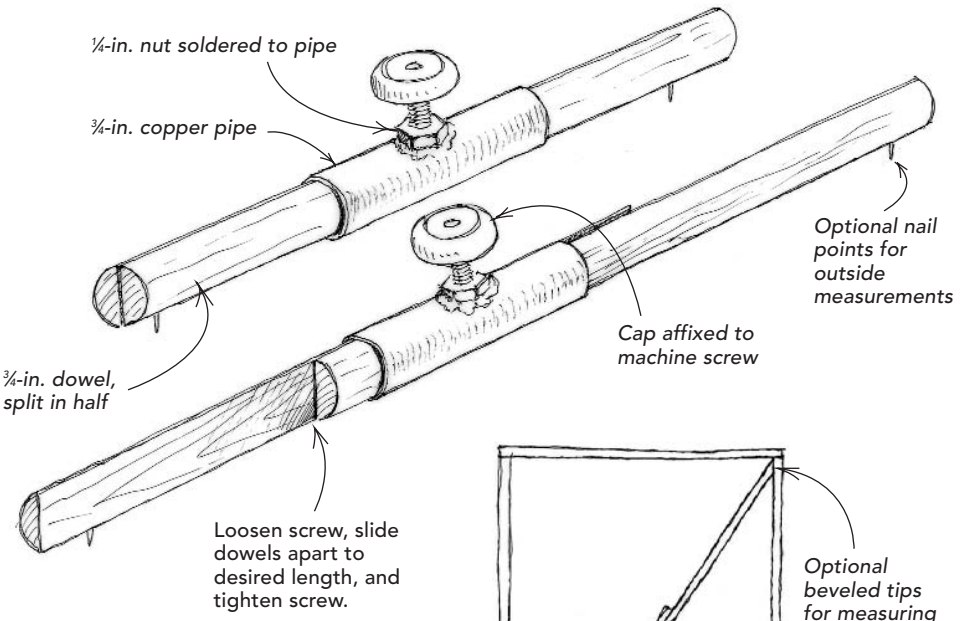
I recently built and wired a gazebo. I didn't want conduit intruding on the woodwork, so I buried the electrical supply in a post. That meant cutting a groove in the post for the wire: a good job for my router and a ½-in. straight bit. It would have been even easier if I'd had a self-centering router base. Because I didn't have one, I put one together.

As shown in the drawing below, I outlined the base of my router on a piece of ¼-in. Lexan. I marked the hole for the bit and three screw holes for attaching the new base to the router, and added circular "ears" on opposite sides of the base for guide pins. I bandsawed out the new base, smoothed the edges and set about finding the guide pins. In my miscellaneous-hardware drawer, I found a pair of nylon pins for a bifold door. I chucked a ⅜-in. bit in the drill press and bored holes, equidistant from the bit



hole, in each ear for the pins. The pins' shoulders rest on the top of the base, where I secured each one with a couple of drops of adhesive. As shown in the drawing, rotating the router so that the pins bear against the sides of the workpiece centers the bit as it plows its groove.

—Edward Sprouts, Columbus, OH



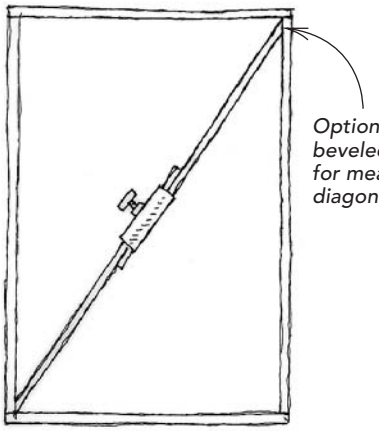
Story-stick measuring

For those of us plain-vanilla boys and girls who don't like to remember numbers on tapes or which side of the mark to use, story sticks can simplify a number of measuring situations. You can buy commercially available gadgets that do the same thing (they are called bar gauges), but I'd rather make my own. Here's how.

I start with a piece of garden-variety ¾-in. copper pipe about 4 in. long (drawing above). I drill a hole in its side, then solder a ¼-in. brass nut to the side of the pipe, centered over the hole. A 1-in.-long ¼-in. machine screw with a knob on one end screws into the nut. The screw acts as a clamp, bearing against a ¾-in. dowel that has been split in half. To use this device, you simply loosen the screw and let the dowel halves slide past one another until they bear against the surface of the target. Let's say it's an inside measurement for a window jamb. Extend the dowels against the opening, clamp, transfer to workpiece and cut. No numbers required.

Another option is to add nail points to each dowel half, as shown in the drawing. They can be used to transfer outside measurements. For measuring diagonals, as in drawer boxes or picture frames, bevel the ends of the dowels so that they tuck into 90° corners.

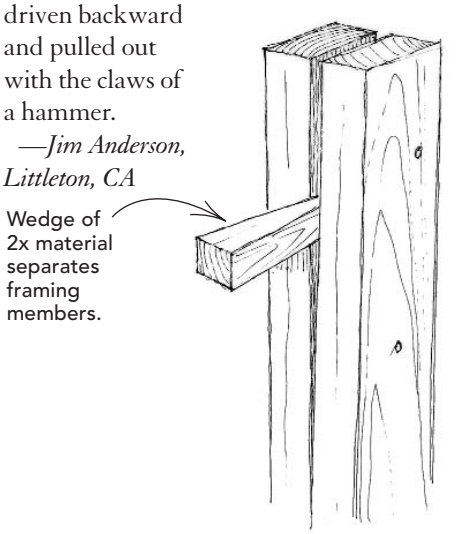
—Paul K. Kincaid, Lawrence, KS



A simple way to separate studs

When I need to tear two pieces of nailed lumber apart (a trimmer that needs to be replaced, temporary posts, built-up beam members that aren't quite flush), I reach for a Skilsaw. Next, I cut a 6-in. long wedge of 2x material that tapers from about 1½ in. wide on one end to a point on the other. Once I have that wedge, I drive it between the two pieces, and they come apart. No cat's paw required. Nails then are driven backward and pulled out with the claws of a hammer.

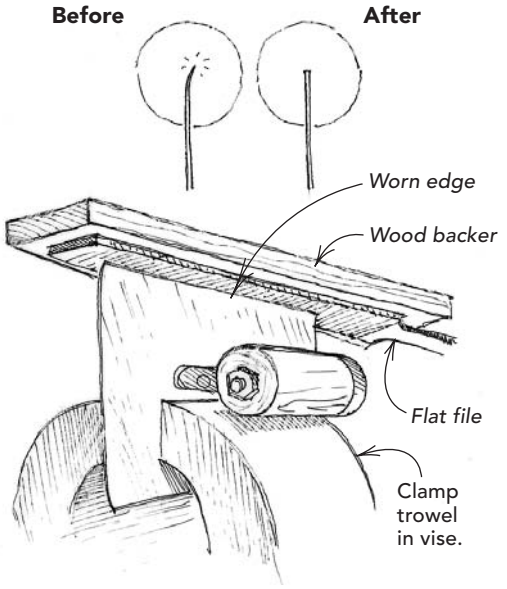
—Jim Anderson, Littleton, CA



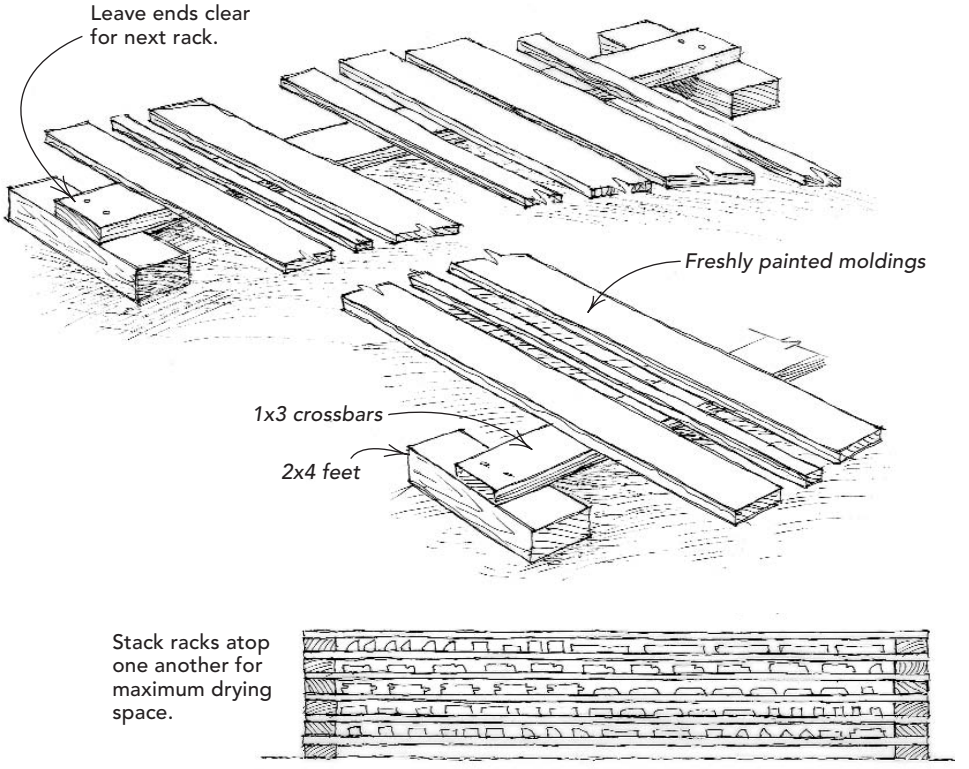
Revitalizing a finishing trowel

During years of finishing concrete in Alaska, Michigan and Wisconsin, I've noticed a universal bad habit among concrete finishers: using trowels with edges that are chipped, jagged and razor sharp. Cement masons are usually proud of these tools and will tell you they are "broken in just right." Unfortunately, no matter how talented a finisher is, that person can't do a great job with less-than-perfect trowels. Not only are out-of-tune trowels counterproductive, they also can be downright dangerous. Finishers who have never cut themselves on a sharp trowel are as rare as carpenters who have never hit themselves with a hammer. Instead of buying new trowels when mine reach this dangerous condition, I file new edges on them.

First, I clamp the trowel, edge up, in a vise. Then, using a flat file with a piece of wood behind it to keep the file from bowing, I run it the full length of the trowel's edge in long, even passes. I wear heavy gloves as I do this job, and I let the tip of one of my fingers ride along the side of the trowel to align the center of the file. I typically remove between 1/16 in. to 1/8 in. of metal to dress a trowel edge. Then I turn over the trowel and repeat the process on the other side. Before returning the trowel to my tool bucket, I give it a good coat of WD-40 to prevent rust.



—David Whipple, False Pass, AK



Drying racks for painted trim work

I hate cutting in, that fussy job of laying down a clean painted edge where woodwork meets walls. I especially dislike the chore when it comes to new construction, where I consider it practically unnecessary. My crews paint or stain virtually all the woodwork and trim before we put it up.

This policy has its drawbacks, however. It requires us to find a place to lay out all those hundreds and hundreds of linear feet of baseboard, casing and crown moldings while they dry.

For years, we had to wait for good weather, then set up every sawhorse, stepladder and milk crate we could find along with a few dozen 1x3s for crossbars. We'd paint or stain outside, then spend a lot of time picking mosquitoes and black flies from the dried finish. Yuck.

Last autumn, I got a bit behind schedule and wound up finishing a major kitchen project in November. Staining the wainscoting, chair rails, baseboards and crown moldings outside was not possible. Already, 6 in. of snow covered the ground, and my next window of good weather was about seven months in the future.

The solution that I came up with was so laughingly simple that I nearly smacked myself on the back of the head for not having thought of it years ago. As shown in the drawing above, I used my finish nailer to affix 4-ft. long 1x3s to a 2x4 block at each end. I made 20 of these pieces in about 15 minutes.

Next, I laid out a length of poly sheeting on the floor and set two racks on it about 6 ft. apart. I then stained a couple of dozen shoe moldings and laid them across the two racks. When they were full, I simply put two more racks atop the first two and continued staining. I was able to stack the racks ten high without any trouble.

Although the racks didn't cost much, I didn't toss them at the end of the job. Instead, I wrapped them into bundles and put them in the shed. They're never there for long, though. If I charged rent to my friends and competitors for each time someone borrowed them, I'd probably be able to take a little more time off and work on my own house.

—T. H. Richards, Mont-Tremblant, PQ, Canada