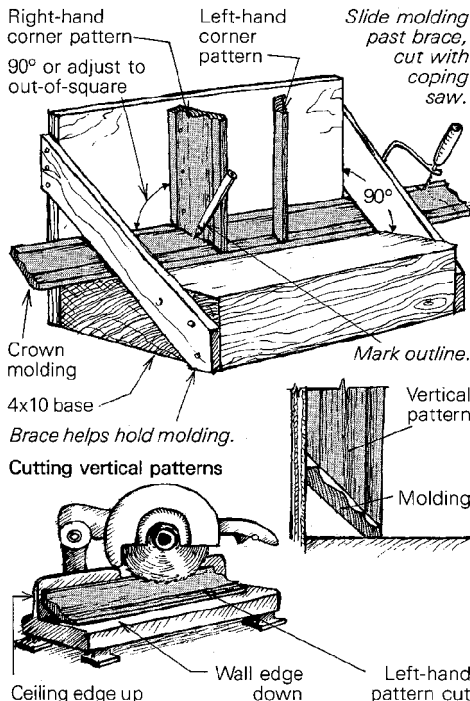


Tips and Techniques is a forum for readers to exchange the methods, tools and jigs they've devised. We'll pay for any we publish. Send details, sketches and photographs with negatives to Tips and Techniques, Fine Homebuilding, Box 355, Newtown, Conn. 06470.

Crown-molding fixture

The fixture shown in the drawing below makes it easy for me to mark and cut crown molding for a coped inside corner. I use framing scraps to make the fixture—a 4x10 for a weighty base, 3/4-in. plywood for the back, and 1x4s for braces. These braces should be set so that the



molding, with its face up, just passes underneath the bottom edge.

For the vertical pattern pieces, cut miters on two short lengths of crown molding, one right-handed, the other, left. These should be cut from stock of the same mill-run that you'll be installing. Nail these two pattern pieces so that they just touch the horizontal molding that is in the fixture for marking. The vertical pattern pieces should be nailed at 90° to the table of the fixture, although they can be adjusted out-of-square if necessary.

To use the fixture, just mark the molding using the right or left-hand patterns, and slide the scribed end out beyond the fixture for cutting with a coping saw. For marking and cutting, the molding is held securely by the pattern pieces and end braces. A generous undercut and a half-round file for touch-ups will yield a joint good enough to write home about.

—Harry W. Stangel, Palo Alto, Calif.

Gluing plastic laminate

While covering some site-built cabinets with plastic laminate, I tried the often recommended method of laying brown paper between the laminate and the substrate to adjust the alignment before the contact cement on the two surfaces touch. I had difficulty removing the paper

while keeping the plastic laminate in place, and it seemed like a waste to throw the paper away after a couple of uses.

Instead of brown paper, I began using lengths of an old metal tape from a tape measure. Now I place these pieces of blade directly on the glue surface, position the laminate, and then grip the blades with a pair of pliers to slip them out one by one without any problems. The blades are also reusable.

—Walter J. Hutchins, West Hartford, Conn.

Quick drill bit

Pre-drilling nail holes is often required to prevent splitting finish lumber, or even to allow nail penetration in hardwoods. If you lack the right bit for your power drill, a handy solution is to use a nail of the same size that you are driving. You have to cut off the head of the nail to fit it into the drill chuck. The nail bit isn't as sharp and won't last as long as a high-speed steel bit, but it does the job in a pinch.

—Steve Larson, Santa Cruz, Calif.

Bent nail

Bending a box nail on a deck or exterior trim is frustrating even to a veteran builder, but even more vexing is not being able to pull it out.

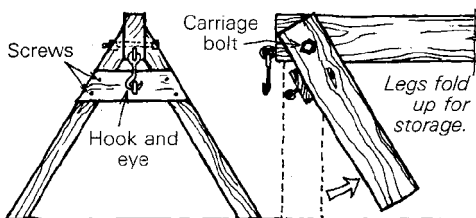
As an apprentice I learned to deal with this situation neatly and quickly. Using a nail set (2/32 is ideal), dimple the shank of the nail just at the surface of the wood with several sharp blows from your hammer. Then use the claw to bend the nail back and forth without touching the wood. It will break where it was dimpled.

To finish the job, drill a pilot hole right next to the old nail shank and drive a new nail. Its head covers the old scar, and no one is the wiser.

—Claude Foster, Des Moines, Iowa

Folding horses

I can transport my wooden sawhorses in the trunk of my car and store them in tight spaces because I've designed them with folding legs. The trick is to build each leg pair as a unit with the cross-brace screwed in place. Attaching each leg unit to the horizontal member with a single carriage bolt lets the legs pivot. Ordinary



hook-and-eye catches on each end will keep the horses steady while they are being used.

—Barry Bower, Baddeck, N.S.

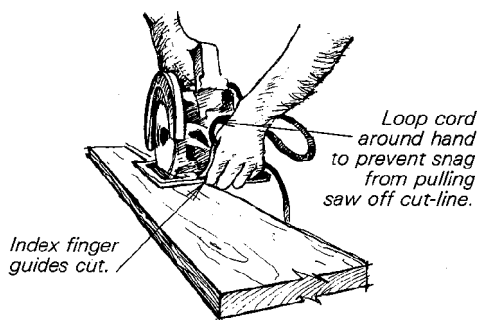
Rip fence

Most portable circular saws come with a rip fence that gives an accurate cut, but having one attached to your saw can be very inconvenient. Usually, you are switching back and forth between crosscutting and ripping, so you end up ripping freehand. The problem is how to make a true, straight rip.

As long as you have a saw with a foot that extends completely around the blade, you can use the fingers on your left hand (if you are sawing

with your right) as an accurate rip guide. Hold the foot plate firmly at the front, allowing your fingers to extend below the plate enough to provide a pressure guide against the wood.

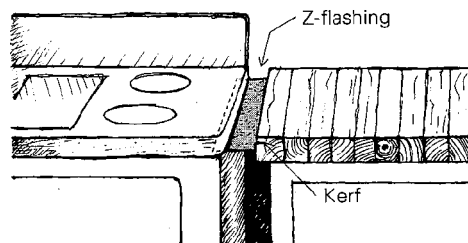
If your reaction is "that's dangerous," study



the situation with the saw unplugged. You have a solid two-handed grip on the saw, and your fingers are well clear of the blade. If you also loop the cord around the thumb of the hand that's acting as the fence, you'll know if the cord catches on something before the saw is pulled off the cut.

Kitchen flashing

I put a chopping-block counter next to my stove and left about an inch between the two so the block wouldn't get scorched. The extra counter surface was mighty handy, but food



and utensils kept falling into the hard-to-reach space between the two.

I solved the problem with a 2-ft. length of Z-flashing placed under the stove lip and into a kerf cut in the chopping block, as shown in the drawing. No more lost butter knives or green peas rolling under the stove.

—Bruce McGaw, Albany, Calif.

Fitting drywall

As a remodeler, I hang and tape a lot of drywall. To get a close fit around electrical outlets, I use the installed outlet itself to mark the gyp-board. Spread liquid detergent or hand lotion around the rim of the outlet box, and lift the drywall panel into place on the wall, pressing it tightly against the outlet box. The back paper will absorb the liquid immediately upon contact, marking the outlet clearly. Then just cut around the outline for a tight fit.

—Mark Messier, Eugene, Ore.

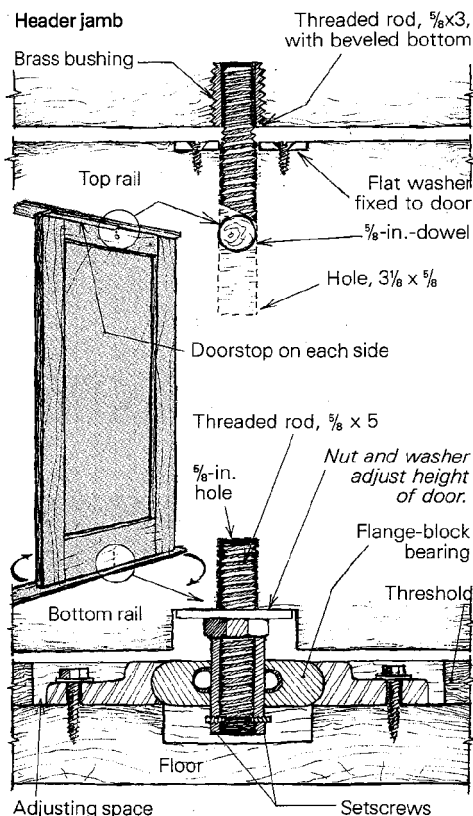
Center pivot doors

I've always admired Frank Lloyd Wright's use of center pivot doors arranged in a row. When open, they show only their edges, allowing the wall to disappear.

Recently I wanted to use three such doors to

divide a living room from an attached solar greenhouse, so I hunted around for the proper hardware. Ready-made center pivot hinges were available, but they were designed for heavy commercial use and cost a hefty \$200 apiece. Discussion with some friends led me to an industrial-equipment supplier, where I found something called two-hole, self-aligning flange-block bearings, at only \$12 apiece. With these bearings, another \$10 worth of parts from the hardware store and a liberal amount of head-scratching, the doors were swinging smoothly on their hinges.

I cut an oversize mortise for each bearing block into the threshold and floor to allow a measure of adjustability, as shown in the drawing. I used threaded rod for the top and bottom



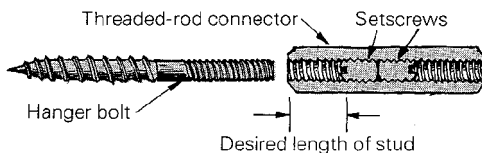
pins, and locked each bottom pin into its bearing with setscrews. A nut threaded onto the pin rests on top of the bearing's inner race sleeve and carries the door load with the help of a large flat washer.

The self-aligning feature of these bearings allows the shaft to swivel, making installation of the door easier by letting you tilt the bottom pin out (this can also be done by leaving the mounting screws out and tilting the whole bearing until the door is in place). The screw holes are mounted parallel to the door so they are exposed when the door is open.

During installation the top pin drops into a hole drilled in the top rail. When the pin is in place, it is retained by a dowel. Once the door was in position, I inserted a screwdriver into the dowel hole, levered the pin into its jamb-mounted brass bushing (an outside-thread plumbing nipple) and then drove the dowel home. —Robin Mark Freeman, Berkeley, Calif.

Hanger-bolt driver

To screw in hanger bolts easily, make up a driver from a threaded rod connector and two setscrews. You can determine the length of the



installed stud by how far you drive the setscrews into the rod connector.

Screw the hanger bolt into one end of the connector. Then use a socket and ratchet or electric drill on the other end to drive the bolt into its pilot hole. A touch of paraffin on the screw threads will make the job easier.

—Alan Dorr, Chico, Calif.

Stair-button rip fence

When I need an accurate rip on a job site without a table saw, I use my stair-gauge fixtures. I clamp them on the front and back of my circular-saw baseplate, equidistant from the blade. This requires a saw with a flat baseplate. Measure the distance from the blade to the stair buttons just as you would with a rip fence, and then make the cut normally. With this quick setup, I get table-saw accuracy.

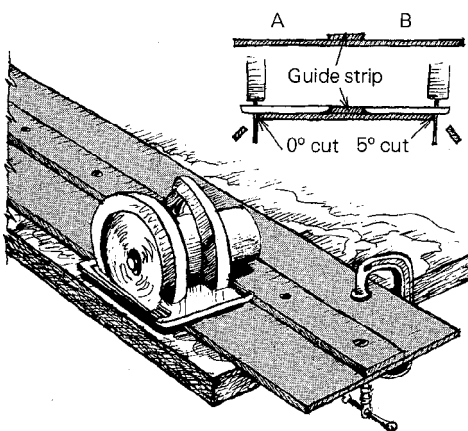
—Gred Gross, Wooster, Ohio

Door-trimming jig

The hinge side of a door must be trimmed to width at 90°. The latch side is usually trimmed at 5° off vertical for a beveled edge. Making these long cuts straight and smooth is easy with this two-sided jig.

First, buy a fine-toothed blade for your circular saw. I prefer a carbide-tipped plywood blade. Mount it on the saw arbor, and then use a combination square to make sure that the saw's base is 90° to the blade.

Build the jig with 1/4-in. Masonite, 8 ft. long and about 12 in. wide. Accurately place a



straight Masonite guide strip, 2 in. wide, down the middle, gluing and tacking it firmly into position. Leave dimensions A and B large at first. When the glue is dry, trim the sides with your saw—one side with the blade set at 0°, the other side with the blade set at 5°. Mark the respective sides clearly. When the jig is clamped to the work, the appropriate edge will register

the line of cut. For smooth operation, apply furniture wax or car wax to the surfaces on which the saw's baseplate slides.

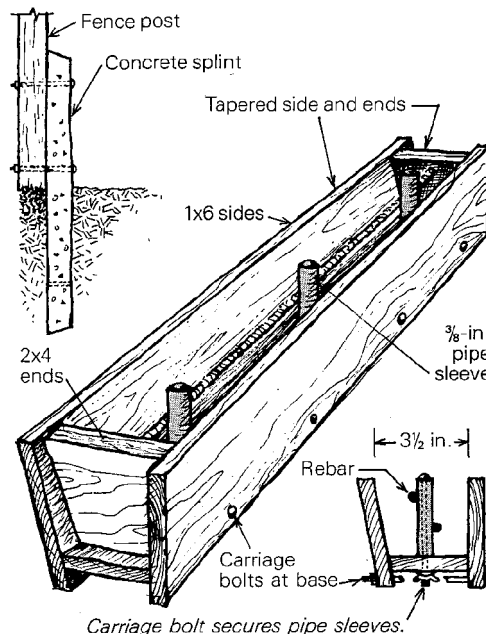
For crossgrain cuts, first run a knife along the cutline to sever the surface fibers of the wood. This will eliminate splintering, which can be a problem with veneered doors.

—Philip Zimmerman, Berkeley, Calif.

Concrete splint

On a trip to England years ago, I saw an old fence whose posts had rotted off at ground level. The rest of the fence was still in good shape, so its owner had replaced the below-grade post sections with concrete splints. I've since mended my fences using the same solution, with excellent results.

I built a form about 4 ft. long, with sloping ends and one sloping side, as shown in the drawing. For each splint, three short pieces of 3/8-in. galvanized pipe are mounted on the form's axis to secure two lengths of 3/8-in. rebar. Two of the pipe sections are in the above-grade



half of the splint, and act as sleeves for 5/16-in. bolts during installation.

Before filling the form, I lubricate the sides with a little axle grease to aid in removal. Nearly every splint I've cast has been with the left-over concrete from some small household job.

—Sidney McGaw, Albany, Calif.

Split-free nailing

A simple but usually effective trick of the trade I learned from a framer was to blunt the point of the nail before driving it wherever there might be danger of splitting. This can be done by setting the nail point up with the head on a hard surface and striking the point several times with your hammer.

Rather than separating the wood fibers, which may cause splitting, the nail tears the fibers as its blunted end is driven. The nail acts like a punch and makes a cleaner hole. The safest alternative, of course, would be to pre-drill, but this is often impractical, especially when framing. —Robert Nye, Waterford, Conn.