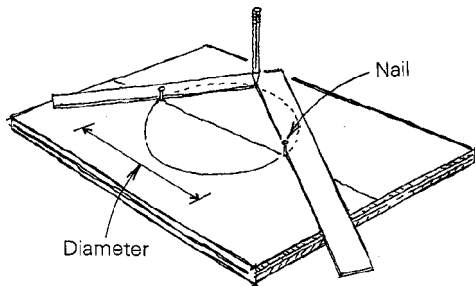


Tips and Techniques is a forum for readers to exchange information about the methods, tools and jigs they've devised. We'll pay for any we publish. Send details to Tips, Fine Homebuilding, Box 355, Newtown, Conn. 06470.

Square makes circle

An accurate circle with a diameter less than 14 in. can be drawn quickly with a common framing square. First, draw a straight line longer than your circle's diameter. Mark two points on this line equal to the circle's diameter.



ter. Then tack a small nail on the line at each mark, as shown in the drawing above.

Now you can lay a framing square on the workpiece with the inside edges of the square touching the nails. Place a pencil point at the inside corner of the square and slide the square around to each nail. Repeat on the opposite side to complete the circle.

—Matthew C. Jackson, Rapid City, S. D.

Tight-spot painting

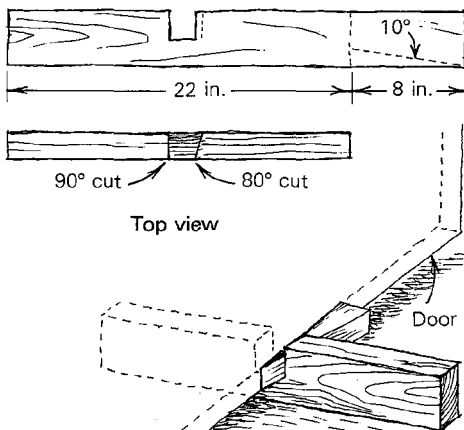
An inside corner tool used for drywall finishing can also be used as a painting shield around carpeted stairs. The tool fits neatly into the corner of the step (where the riser meets the tread). If the stair is carpeted, the tool is sturdy enough to compress the carpet.

—Kenneth C. Warr, Trussville, Ala.

Making a quick buck

An Irish craftsman, with whom I had the pleasure of working, showed me how to make a simple door buck quickly. In fact, it's so easy to make that it could be considered disposable, but it's small enough that you might want to hang on to it.

Take a 30-in. 2x4 and make a 10° taper cut along the first 8 in. of the face, as shown in the drawing below. Then make a cross cut at



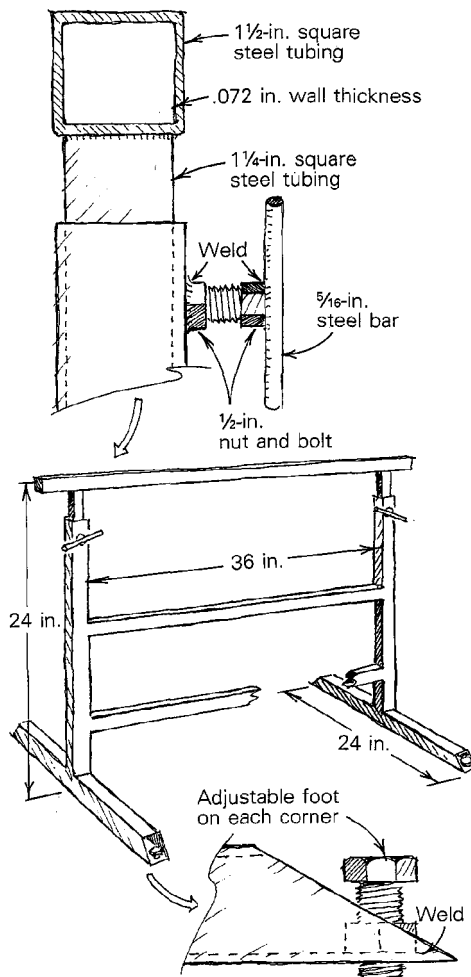
the 8-in. mark so that you have an 8-in. wedge with a 10° taper. Turn the 2x4 on edge and set your saw at a depth of 2 in. Make a 90° cross cut near the center of the board, then move over 2 in. and make another cross-cut at 80°. Then make several passes with the saw between the two cuts, knock out the pieces and clean up the slot with a chisel.

Slide a door into the slot in the 2x4 and drive in the wedge with a few taps. To keep the door from rocking, locate the buck toward one end of the door, or use one at each end.

—Tim Hoisington, Greenfield, Mass.

Steel-tubing sawhorse

The ultimate sawhorse should be light as a feather, strong as reinforced concrete, have infinitely adjustable height and collapse to the size



of a Swiss-army knife. My design using 1 1/2-in. and 1 1/4-in. square steel tubing hasn't been refined quite to that point, but it sure beats most of the 2x4 or plywood types (drawing above).

This horse is fairly light, very strong and will nearly double its collapsed height. The 1/2-in. bolts bind the sliding cross bar tight enough to support lots of weight. The adjustable foot assembly on all four corners takes the wobble out of the horse on uneven concrete floors and allows a screw or nail to be sunk through the nut

to hold the horse in place on a construction-site subfloor. Because they nest together, the horses don't take up much room during transport.

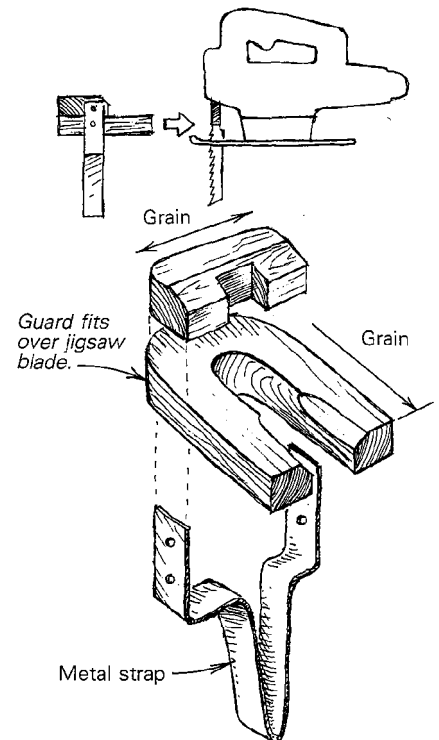
Cut the tubing with a hacksaw, reciprocating saw or with an abrasive blade mounted in a radial-arm saw or power miter saw. If you don't have a welding setup, you can keep the cost of the actual welding at a reasonable level by cutting, deburring and drilling the pieces yourself.

—Brooks Heard, Moscow, Idaho

Jigsaw blade guard

Being an urban carpenter, I carry a lot of tools up and down stairs. I leave their cases in the truck because they weigh a lot, and pack the tools up to the job in pouches. This won't damage most tools, but I found that the protruding blade of my jigsaw was either breaking off or jabbing holes in the pouch.

I finally got fed up with this and made the blade guard shown in the drawing below. It's basically a little wooden horseshoe with a Y-



shaped metal strap (made of flattened copper water line) screwed to it. I beefed up the short-grain portion of the horseshoe with a second layer of pine. Then I whittled away at the horseshoe with a utility knife until I got it to fit tightly between the body of the saw and its base. It's ugly, but it works.

—Arne Waldstein, New York, N. Y.

Small-tool and materials storage

When my collection of small tools and oddments got out of control, I knew I would have to find a better storage system. Most small cabinets with many drawers were too expensive, so I sought another solution. A dentist friend sold me his old wooden dental chest, and now I have the perfect storage unit, with drawers that vary in depth from 1 in. to 8 in. Its chest-height

marble top is perfect for laying out tools, and by adding casters to the base, I can easily move the cabinet. If you need a similar cabinet, ask your dentist where used dental equipment can be purchased—you might find a bargain.

—Keith Ojala, Birmingham, Mich.

Clean sanding belts

Sanding the varnish off an old piece of furniture clogs a coarse-grit sanding belt in a hurry. In this situation I use two belts. While I work with one, the other sits in a small can of lacquer thinner. This softens the gummy varnish enough that I can knock it off the belt with a wire brush before reusing it.

—Steve Johnson, Washougal, Wash.

Drywall patch

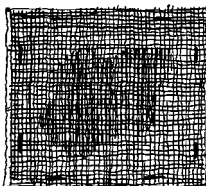
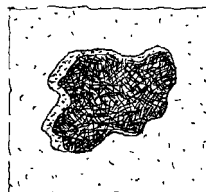
Before we moved into our house, somebody ripped out all the wiring—I guess for the copper. Whoever did it punched access holes in the drywall above each outlet box. Rather than going to the expense of installing new drywall throughout the house, I used insect screen and three layers of spackling compound to repair the holes.

As shown in the drawing at right, I first cut through the outer layer of paper and excavated a square or rectangular hole (depending on the shape of the damaged area) about $\frac{1}{16}$ in. deep. Then I stapled a piece of insect screen to the drywall and covered the screen

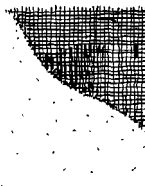
1. Hole in drywall



2. Remove paper around hole



3. Staple insect screen over hole



4. Cover with spackle

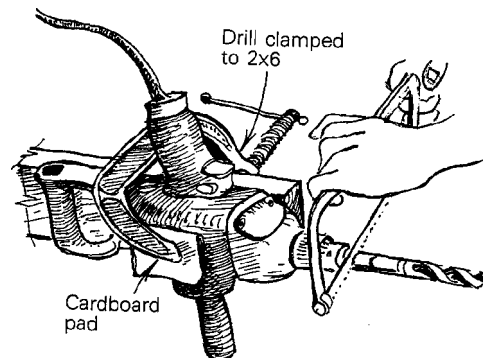
with a layer of spackle. I feathered the edges of the next two layers of spackle to blend into the field. The screen keeps the spackle from shrinking as it dries.

—Timothy Carlson, Centerville, Mass.

Shortening drill bits

Recently I needed to shorten the shank of a $\frac{3}{4}$ -in. hardened steel drill bit. Depressed at the

thought of all that time and elbow grease, I devised the method shown in the drawing below. With the drill securely clamped to a 2x6, I adjusted it to its highest speed, pressed



the lock-on button and let gravity and the hacksaw do all the work. A few drops of oil made for a cool cut.

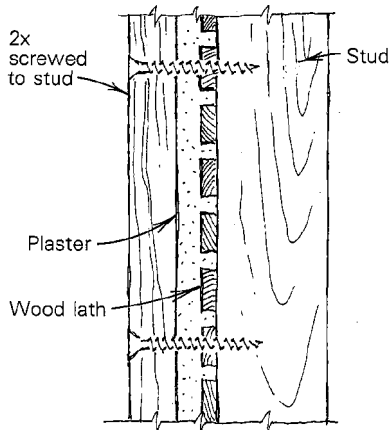
—Dorothy Ainsworth, Ashland, Ore.

Plaster clamp

Using a reciprocating saw to cut an opening into a wall made of plaster and wood lath runs the risk of cracking the plaster around the edges of the hole. To minimize the problem, find the nearest stud outside the desired cut line and screw a length of 2x to it, as

shown in the drawing below.

Now you can use a reciprocating saw



alongside the stud to cut the plaster and lath. The 2x will act as a clamp, preventing the vibration from damaging the plaster you want to save.

—Allan R. Aho, Minneapolis, Minn.

Removing labels

Anyone who has scrubbed fruitlessly on the gum labels and glued-on instructions that decorate plumbing fixtures will appreciate a can of WD-40. Used with a soft cloth, the lu-

bricant works well as a solvent to lift labels off ceramic fixtures without a scratch. It works equally as well on metal.

—Duane L. Schubauer, Blackhawk, S. D.

Flag control

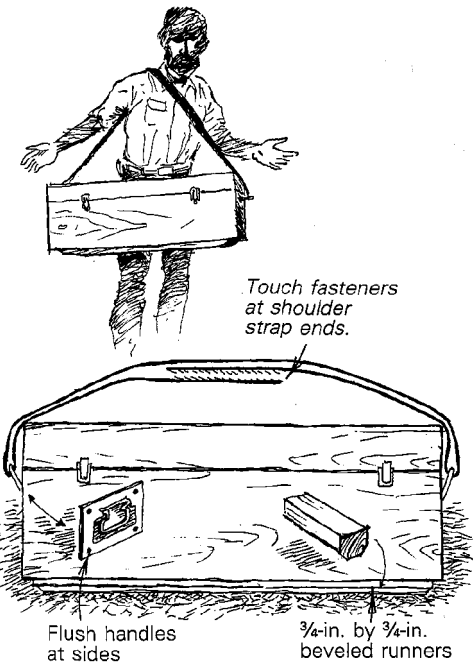
Wire your red flag to a piece of inner tube cut to resemble a big rubber band. It will readily wrap around almost any projecting load.

—M. Felix Marti, Monroe, Ore.

Strap-on toolbox

My toolbox combines ideas from a number of other boxes that I've seen on job sites. It has flush handles in each end and one on top. This keeps the surfaces free of obstructions so I can stack things on it, use it as a work surface and, yes, use it as a step stool when being a little taller wouldn't hurt. As shown in the drawing at right, there are beveled runners on the bottom of the box, making it slide easily on the bed of my truck.

The box is 11½ in. by 12 in. by 32 in., so when it's full of tools, it's a heavy load. To save my back, I made a loop out of a 2-in. wide, 130-in. long seatbelt-type strap by sewing a 2-in. by 12-in. strip of touch fastener on each end. I slip the strap through the handles on the ends of the box so that the joint in the strap is sandwiched over my shoulder. That way, the touch-fastener bristles are forced together by the weight of the box.



With my toolbox supported on my shoulder, it's a breeze to open a door, climb a stairway or negotiate a tight spot.

—Rick Puls, Elkhart Lake, Wis.