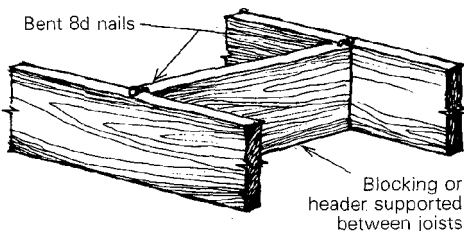


*Tips and Techniques is a forum for readers to exchange the methods, tools and jigs they've devised. We'll pay for any we publish. Send details, sketches and negatives with photographs to Tips and Techniques, Fine Homebuilding, Box 355, Newtown, Conn. 06470.*

## Solo framing

A carpenter working alone can hold a header, blocking or similar framing member in place for final nailing with a few bent nails. I use 8d nails,



driven about a third of their length into the top edge of the work and then bent 90°. These ears will support the piece until the first nail is set.

—Craig Savage, Hope, Idaho

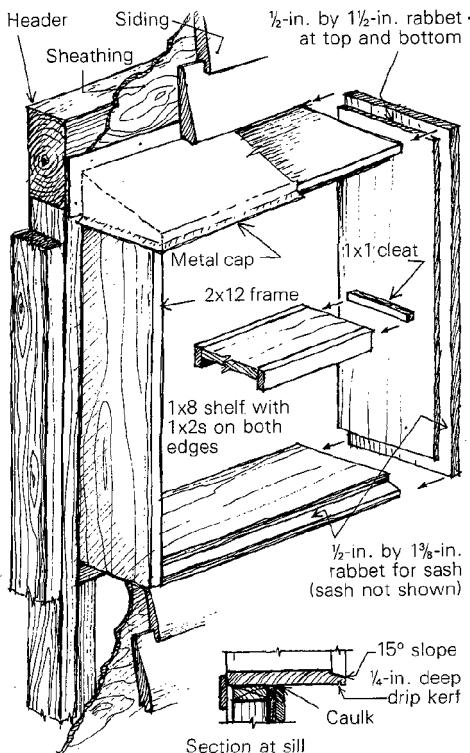
## Plugged-up plumbing

If you're working on an old galvanized water supply system (replacing a section with copper pipe to improve water pressure, for example) and nothing comes out of the faucet when you turn it on, the faucet screen is probably packed with rust particles and flux from the soldering operation.

—Chas. Mills, Leadville, Colo.

## Window box

In the course of remodeling older homes, I've developed the window box/greenhouse shown in the drawing below. Its deep recess gives the same comfortable feeling of a window in a thick



stone or adobe wall, and makes space for plants and other things.

The heart of the design is a 2x12 frame built with clear, dry lumber and then nailed into the window opening. The frame is easily cut and assembled on the job site with portable electric tools and can be fitted with any combination of casement, awning or fixed sash (new or used). Inside, I trim the edges with casings consistent with other openings in the house. For weather protection I install a sloped metal flashing above the window and caulk along the jams and sill. To date, all the windows I've built this way have proven to be weathertight.

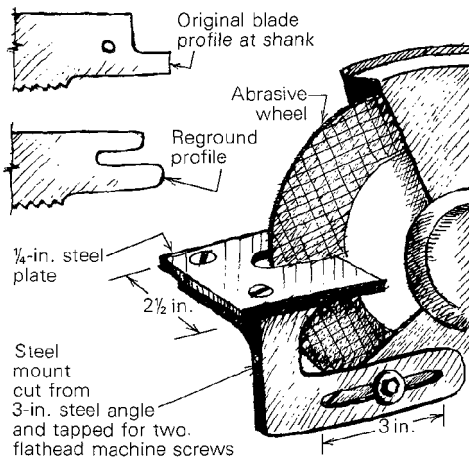
—Glen Jarvis, Berkeley, Calif.

## Born-again blades

One of the most essential remodeling tools is the reciprocating saw, but remodeling work is very hard on their blades. Here are two tricks I use to prolong blade life.

First, I use 12-in. flexible blades whenever possible and do the cutting with the teeth closest to the tip. When the teeth wear down, I simply clip off the worn portion of the blade with tin snips and go back to work.

Second, and more important, I reshape broken shanks using a metal-cutting abrasive disc mounted on my bench grinder as shown in the drawing below. Outline the shape of an original blade on the broken shank and grind away the excess metal with the abrasive disc until the new



shank fits snugly inside the saw's shoe. Then cut a slot in the blade just wide enough to accommodate the pin and retaining screw.

I've found innumerable uses for the bench grinder with this wheel installed. It will accurately cut a variety of materials from spring-steel roll pins to rubber hose. A word of caution: check the r.p.m. rating for the blade and the grinder to make sure they are compatible.

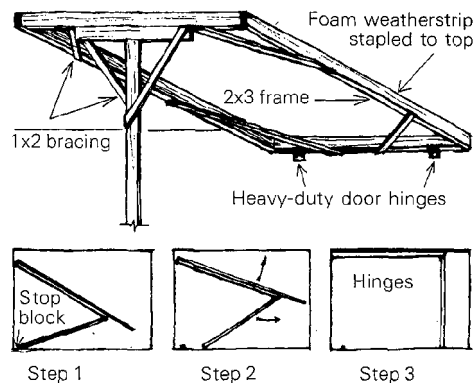
—Philip Zimmerman, Berkeley, Calif.

## Another drywall lift

While building a recent addition I used the lift shown in the drawing to help position 4x12 drywall panels on the ceiling. The lift consists of a rectangular frame with a T-shaped leg hinged to one end. I built the frame and leg from 2x3 fir and braced it diagonally with 1x2 strips. My version is 3 3/4 ft. wide and 10 ft. long. The length of the leg depends on the ceiling height.

I hinged the frame to the wall, allowing about

1/2-in. clearance between the ceiling joists and the panel when the frame is lifted into position. My hinge wall was a former exterior wall sheathed with wood siding, on which I could attach the hinges at any position. An all-purpose



version of the lift should include an additional horizontal member, permanently hinged to the frame, which could be fastened to wall studs.

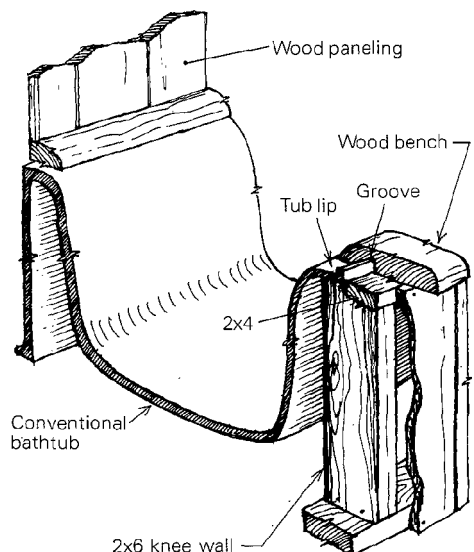
For loading, the frame is positioned to allow the panels to clear the floor and secured with a stop block temporarily nailed to the floor behind the leg (step 1 in the drawing). I stapled foam weatherstripping to the top of the frame to cushion the drywall and prevent slippage when the assembly is pivoted toward the ceiling (step 2). Once horizontal, the frame is held in place with the now vertical leg (step 3).

—Paul Turnrose, Forestville, Conn.

## Tub drops in

Using materials and fixtures in a way that wasn't originally intended is a mainstay of remodeling work. This can even be true of bathtubs. My project last summer was a tub installation that called for wood paneling around the walls and included a low bench at the side. What I needed was a drop-in tub. However, these are very expensive, hard to color-match to existing fixtures, and take a long time to get after ordering.

My solution was to purchase a standard tub. By installing the finished skirt against the back wall of the tub area, as shown in the drawing, in-

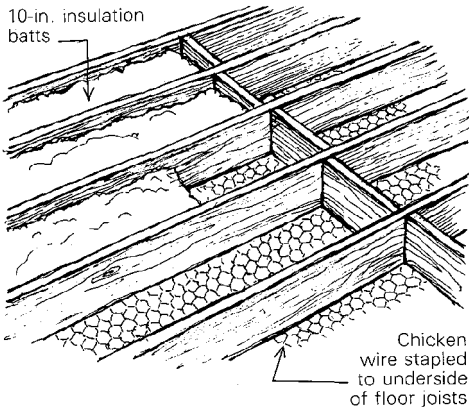


stead of in front as usual, I was left with a completely open outer side for framing the knee wall and applying the seat, which I grooved to fit over the lip of the tub.

—James B. French, Portsmouth, R.I.

## Insulating a floor

In "Truss Frame Construction" (FHB #5), Mark White describes a way of holding up insulation with twine so it can easily be installed from above. Here's an alternative method we used to

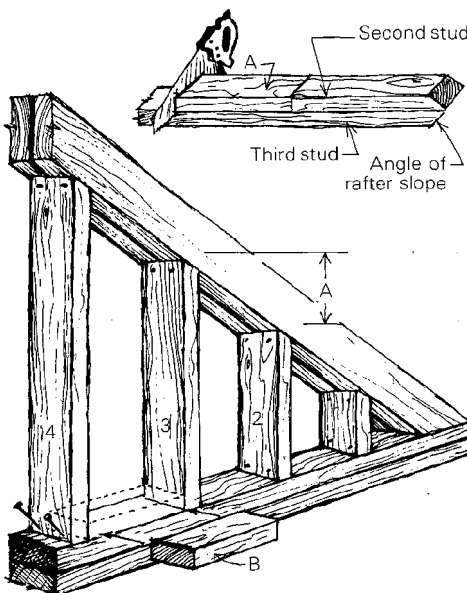


support 10-in. friction-fit batts in the floor of an addition with a 2-ft. crawl space. First we stapled light-gauge chicken wire to the underside of the floor joists, using  $\frac{1}{8}$ -in. staples. We then dropped in the batts, installed a plywood subfloor and continued framing. The insulation process is fast and easy, with little discomfort to the worker. And the insulation "breathes" well with standard venting.

—Doug Jackson, Mission, B. C.

## Framing under a peak

Putting studs into the wall beneath the end rafters of a peaked roof can be time-consuming, but two simple jigs make it easy. Using a carpenter's square (or a calculator), determine the change in stud length (A in the drawing below). Assuming that the studs are equally spaced, this dimension is constant the entire length of the



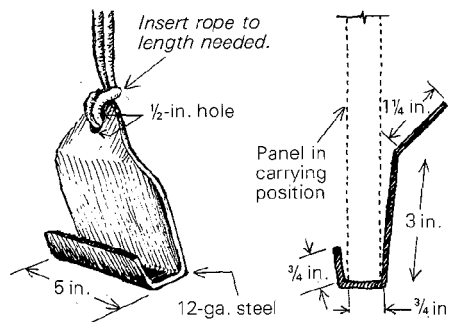
rafter. Now cut the ends of the studs at the angle that fits the rafter slope. Next, cut a piece of stud scrap to length A. The length of the shortest stud is found by measuring; from then on add the scrap block to the length of the previous stud and mark a cutting line, as shown.

Once cut, the studs will nail up easily if you make one more block. Cut another scrap piece as long as the distance between the stud faces (B in the drawing), and use this as a spacer block. If you work accurately, the tops of the studs will wind up in the right position just by nailing.

—Kevin Kelly, Westfield, N.J.

## Panel hook

A 4x8 sheet of drywall, pegboard or plywood can be a nuisance to carry. With my device, one person can easily maneuver these bulky panels. I fabricated the metal hook shown in the drawing below from a scrap piece of 12-ga. cold-

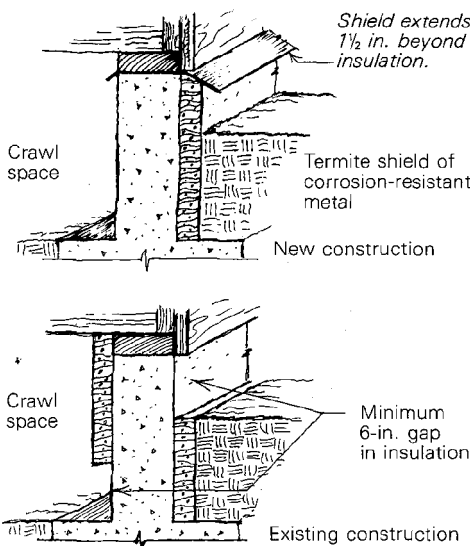


rolled steel. A short length of rope is threaded through the  $\frac{1}{2}$ -in. diameter hole and serves as an adjustable handle. By hitching up on the rope slightly and adjusting the panel's center of gravity I can negotiate stairs, up or down, with no problem.

—George Eckhart, Kenosha, Wis.

## Termite protection

Rigid exterior insulation should not be attached to foundation walls (as commonly recommended in passive solar manuals) in any area



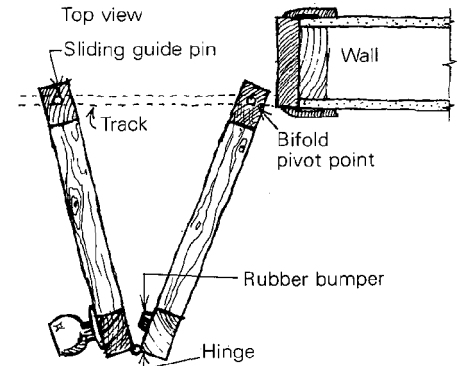
where subterranean termites are found. It gives termites hidden access to the walls of a building. In new construction, an unbroken through-the-wall termite shield should be installed as shown

in the drawing. For existing construction, either insulate inside the foundation wall (but not to the ground) or stop exterior insulation at least 6 in. below the top of the foundation. The 6-in. space will allow you to see and destroy any termite tubes constructed between the ground and a wood structure. It's a lot better to lose a few Btus than the framework of your house.

—Tom Bender, Nehalem, Ore.

## Bifold bumper

Bifold doors are often hard to close from the fully open position. Some need a pull from the inside back of the lead door to close them. The cure I've come up with is a simple  $\frac{3}{8}$ -in. diameter



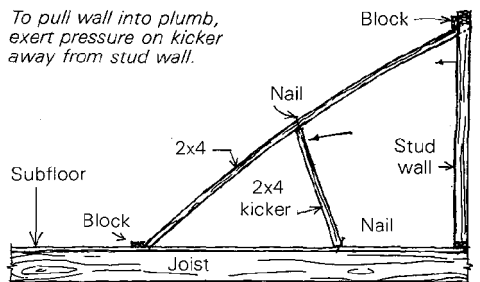
rubber bumper placed near the bottom hinge on the pivot door. The bumper prevents the doors from coming too close to each other, allowing their normal operation.

—David Graper, Painesville, Ohio

## Wall bracing

One common problem in framing is how to straight-line a second-story stud wall and brace it for joisting or rafters if it leans out. Here's one way you can pull the wall back into line and keep it there:

Lean a 2x4 (face up) against the stud wall with one end resting on the top plate and the other end on the subfloor at the location of a joist. Nail both ends securely. For extra security nail a 2x4 scrap block flat against the double plate at the



top of the brace to prevent it from coming loose under pressure.

Next, toenail a 3-ft. to 4-ft. 2x4 to the floor along the same joist midway between the wall and the foot of the brace. You'll get the desired results by pushing this kicker against the brace and exerting whatever pressure is required to draw the wall into line. Secure by driving two nails through the brace into the end grain of the kicker. These braces can be left in place until the rafters or joists are installed.

—Marc Daw's, Tucson, Ariz.