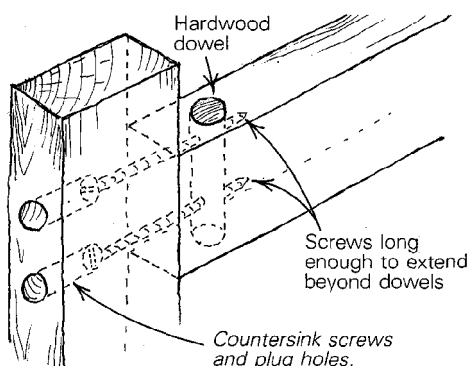


Tips and Techniques is a forum for readers to exchange the methods, tools and jigs they've devised. We'll pay for any we publish. Send details and sketches to *Tips*, Fine Homebuilding, Box 355, Newtown, Conn. 06470.

Dowel-anchored butt joint

Anyone who spends much time putting together pieces of wood eventually comes across a situation where a simple screw-held butt joint would be both efficient and attractive. Unfortunately, screwing into the end grain of *any* wood has little holding power, and glue increases the bond only marginally. Doweling the joint is effective, but tedious. Also, dowels have no ability to pull the joint together, which screws do quite well. The problem boils down to finding a way to keep the screws from stripping out of end grain.

A simple way of overcoming this difficulty is to insert a dowel in the piece of wood receiving the screws. The dowel should be perpendicular to the butt end of the piece of wood, as shown



in the drawing, where it will provide a good cross grain anchor for the screw's threads. As a rule of thumb, I use a diameter of dowel that is about half the thickness of the stock. Pilot holes should be drilled through the dowel after it's inserted in the hole to avoid splitting it. Screws should be long enough to extend a bit past the dowel to ensure maximum grip.

—John Grunwald, Hornby Island, B. C.

Hybrid handles

In carpentry circles the debate still rages as to which framing hammer is the best. Purists defend the wooden handle for its superior ability to absorb vibration, as well as the fact that most of the weight is located right where it's needed—at the head of the hammer. With steel handles, the weight is distributed along the length of the hammer. But wooden handles need frequent replacement, while some of the steel-handled brands are guaranteed for life.

For the real wildmen on a crew, only the framing hatchet will do. Every carpenter I know who can sink a 3½-in. spike with one hit uses a framing hatchet. This is due in part to the hatchet's superior handle design—it's neither round nor oval, and its shape matches the grip of the human hand. In addition the handle broadens out at the end, which encourages a carpenter to use all of the leverage that an 18-in. handle gives instead of choking up. Unfortunately, using a framing hatchet usually necessitates carrying around a nail-puller.

Perhaps the best of both worlds is my hybrid,

which combines a framing-hatchet handle with a 28-oz. hammer head. The hatchet handle is shaped differently from the standard handle, so I had to whittle down the end before I wedged on the head. There were still a few gaps between the handle and the head, but I used these to advantage by filling them with fiberglass resin. Then I saturated some fiberglass mesh with more resin, and wrapped it around the juncture of the head and the handle. Now my hybrid hammer is one of the strongest, most durable framing hammers I've seen.

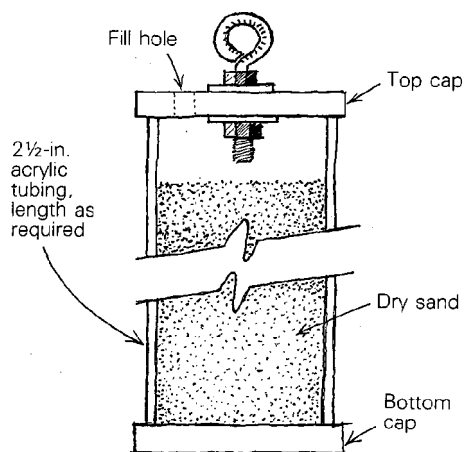
—Art McAfee, Edmonton, Alta.

Adjustable counterweights

I use the counterweight shown below to balance movable insulated shutters, such as the ones shown in *FHB* #28 on p. 46. The beauty of this weight is that I can adjust it while it's in position, rather than running in and out to the truck to file away at a piece of iron bar stock.

The basic container is a piece of 2½-in. dia. clear acrylic tubing. I've found that tubes between 1 ft. and 2 ft. long will do for most shutters. I glue acrylic caps to each end of the tube; the upper cap incorporates an eyebolt with a pair of nuts and washers.

To load the counterweight, attach it to the shutter's draw rope and make sure the shutter is in its open position. Insert a funnel into the fill hole in the cap, and slowly add dry sand. When the shutter starts to move, stop adding sand, and pull on the rope to bring the shutter to its



closed position. It should stay put. If not, adjust the counterweight accordingly, and cap the filler hole with a dab of silicone caulk. The finished weights can be dressed up with a tube-sock covering, or you can use colored sand or marbles for ballast.

—Bryan Curry, Attica, N. Y.

Drainpipe patch

When I've made temporary repairs on exposed, low-pressure drainpipes such as those used for washing machines or swimming pools, I've found automotive radiator hose to be quite useful. Radiator hoses are available in several diameters, and they come in a variety of offset shapes that can fit many situations. Best of all, these hoses are manufactured to withstand high pressures and temperatures, so it is unlikely that any home applications will exceed their capabilities.

To repair a drainpipe, I remove the damaged portion and file smooth any burrs. Then I slip

radiator hose over both ends of the pipe, and cinch them with a hose clamp. This allows me to repair broken lines with ease.

—Greg Clarke, Mountain View, Calif.

Trimming outlet boxes

Despite everyone's best intentions, switch boxes and electric-outlet boxes sometimes project a bit beyond the plane of the drywall. Left this way, the cover plate won't seat properly, leaving an unsightly gap around the plate. To eliminate this problem with plastic and fiberglass boxes, I grind down any protrusions with a wood rasp. This operation is best done right after the drywall is installed—before the electrician arrives.

—Sebastian Eggert, Port Townsend, Wash.

Screw-eye driver

The next time you've got to install cup hooks or screw eyes, get out your old brace and bit and make the job easy. A brace with a two-jawed chuck will get a good bite on the screw eyes, and a starter hole in harder woods will help get things going.

—Mark Quigley, Boston, Mass.

Tuck pointing

Nothing will ever make repointing old masonry a pleasure, but there is a tool that will take some of the drudgery out of it. Clean and prepare your joint lines as you usually do, then go out and buy a grout bag at a masonry supply store. I like the 24-in. model, but the size you'll wind up using depends on how strong you are—the bag gets heavy fast.

To use the bag, load in a mortar mix with just a touch more liquid than you normally use. Twist the open end of the bag or make a 90° fold in it to keep the mortar from oozing out the wrong way. Now position the nozzle so that the stream of mortar flows into your joint lines, as shown in the drawing. Wear rubber gloves during this operation, or plan on keeping the outside of the bag dry as a bone. If you don't, you'll wind up with peeling skin on both hands. Once you've got the joint lines loaded with mortar, go back and compact them with your striking tool.

—John Dobrin, Washington, D. C.

