



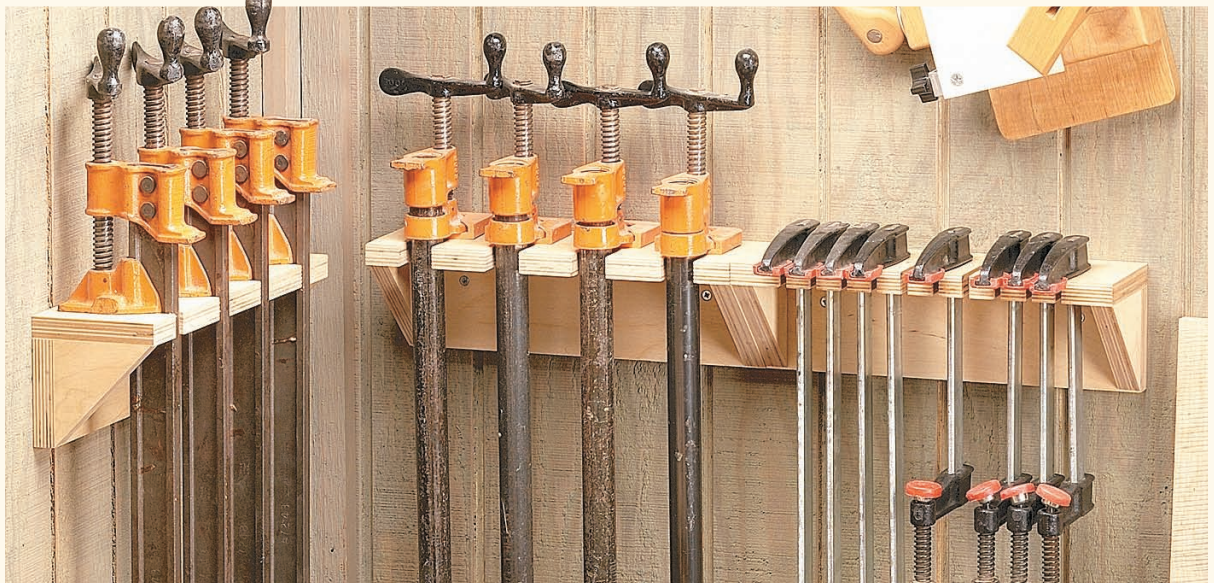
Woodsmith **PLANS**

CLAMP STORAGE



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Have some scrap plywood and an empty bit of wall space? That's all you need to get your clamps organized.



There's an old saying that a woodworker can never have too many clamps. I know that over the years I've collected quite a few. In fact, finding space to put my ever-growing collection was becoming an issue.

What I needed was a better way to store and organize my clamps. And the new "system" had to be easy to build and add on to. That way, as I got more clamps I could make a new rack for them quickly.

SIMPLE DESIGN. What I came up with is a rack that can be made from four small pieces of plywood and fits just about anywhere. A series of these racks can be customized to hold all types of bar and pipe clamps. And as you can see in the photos below, I even made a couple of extra racks to hold gluing supplies and C-clamps.

One thing all the racks have in common is that they are designed to screw to the wall. So you can fit

clamp storage wherever you have an open bit of wall space.

ROLL-AROUND CADDY. If you're short of wall space, don't worry. The racks can also be attached to a handy roll-around caddy, as you can see on page 4. Even if you have plenty of wall space, you may want to consider building the caddy. It holds all of your clamps in one place and makes it easy to roll them to wherever your project may be.



▲ A storage box keeps glue and accessories organized. Mounting it near the clamps makes it handy.



▲ C-clamps are held on this simple rack. It can be custom built to fit different sizes of clamps.



▲ Pistol-grip clamps can be cinched down on a rack, ready to grab and be put to work.

Racks

The heart of this clamp storage system is an L-shaped rack braced at each end by a triangular support. Each rack is the same size. The only difference is the slots that are customized for different types of clamps.

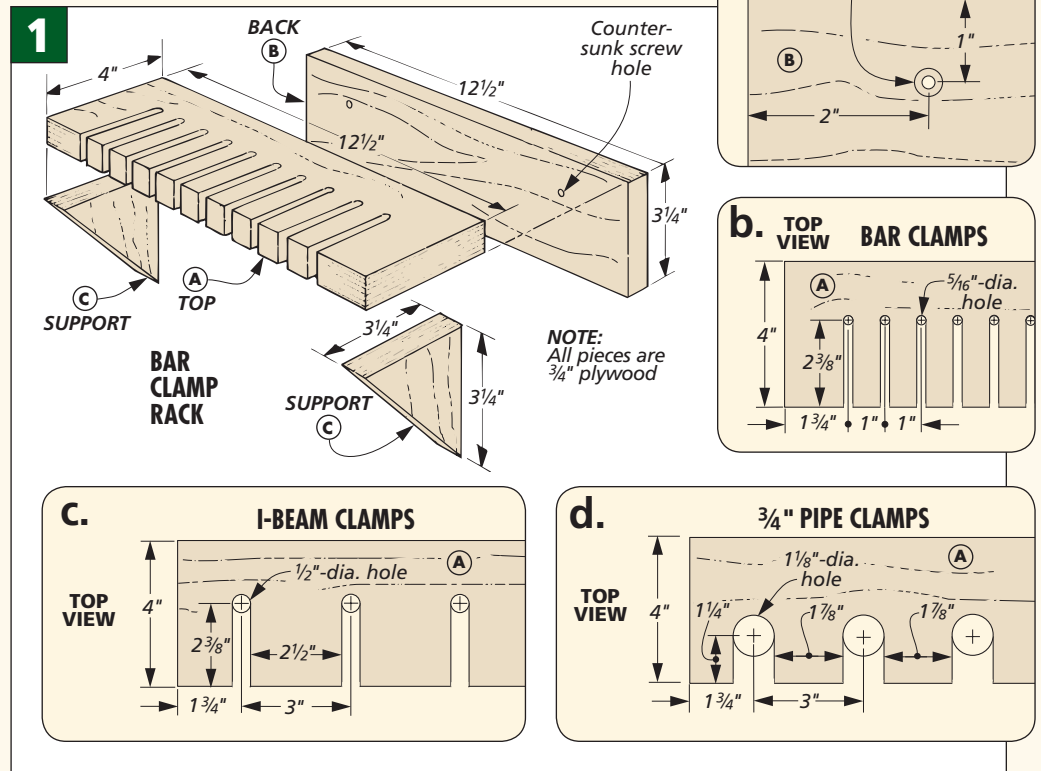
All of the pieces are made from $\frac{3}{4}$ " plywood (although hardwood would work as well). In fact, I built my racks from pieces of scrap plywood that were too small for projects but too big to throw out.

To keep things simple, I made each rack $12\frac{1}{2}$ " long. That way they fit in small bits of wall space as well as on the optional roll-around caddy. But they can be made any length you like to accommodate your clamps.

CUT PIECES. The first step was to cut a top (A), back (B), and two supports (C) to size for each rack, like you see in Fig. 1 at right. (I made the supports by ripping a long $3\frac{1}{4}$ "-wide blank, then making alternating 45° cuts on the end.)

Before assembling the racks, I took the time to drill a couple of countersunk holes in each back piece (Fig. 1a). These are used to screw the completed rack to a wall.

SLOT LAYOUT. The next step is to lay out the slots for the clamps in each top piece. The detail drawings in Fig. 1 show racks for the most common types of clamps. Small bar clamps sit fairly close together (Fig. 1b). I-beam clamps need more room between slots (Fig. 1c). And Fig. 1d shows the spacing for pipe clamps. Note: Racks for pistol-grip clamps don't need slots. Refer to the lower right photo on the previous page.



CUT SLOTS. After the slots are laid out, you can start cutting them. I found the best way to do this was to drill a hole at the top of each slot first, like you see in Fig. 2.

After the holes are drilled, the waste can be removed on the table saw. As Fig. 3 shows, I attached an auxiliary fence to my miter gauge to support the workpiece and prevent the waste piece from kicking back.

ASSEMBLY. Once the slots are cut, the rack can be glued up. The top is clamped to the top edge of the back; then the supports are added.

With my long clamps taken care of, I turned my attention to my C-clamps and accessories.

MATERIALS

BAR & PIPE CLAMP RACK

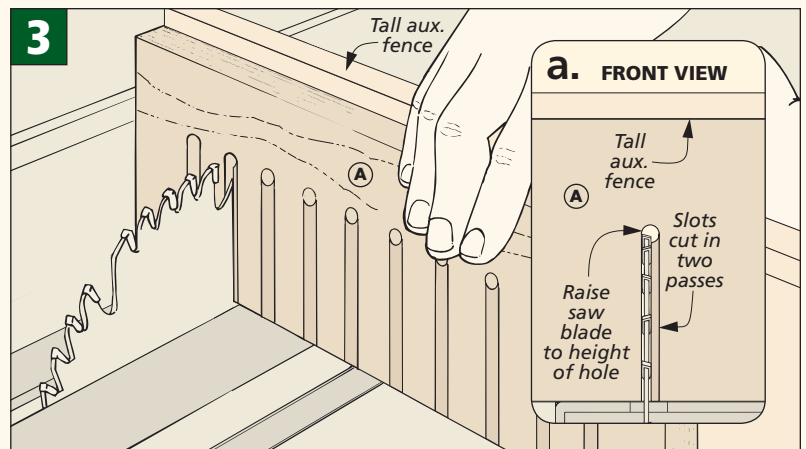
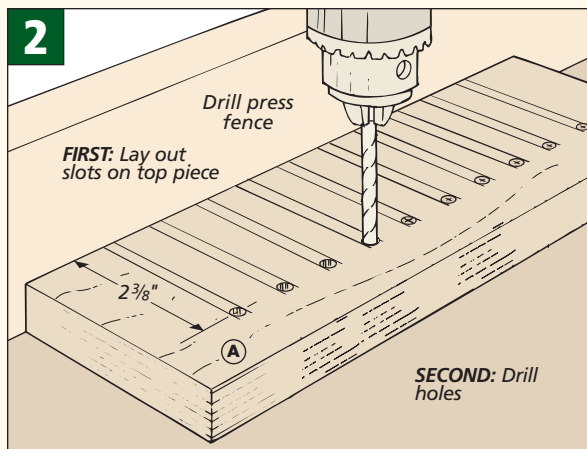
- A Top (1) $\frac{3}{4}$ ply. - 4 x $12\frac{1}{2}$
- B Back (1) $\frac{3}{4}$ ply. - $3\frac{1}{4}$ x $12\frac{1}{2}$
- C Supports (2) $\frac{3}{4}$ ply. - $3\frac{1}{4}$ x $3\frac{1}{4}$

C-CLAMP RACK & STORAGE BOX

- D C-Clamp Back (1) $\frac{3}{4}$ ply. - $3\frac{1}{4}$ x $12\frac{1}{2}$
- E Dowels (2) $\frac{3}{4}$ dia. x $5\frac{1}{2}$
- F Box Front (1) $\frac{3}{4}$ ply. - $4\frac{1}{2}$ x $12\frac{1}{2}$
- G Box Back (1) $\frac{3}{4}$ ply. - $4\frac{1}{2}$ x $12\frac{1}{2}$
- H Box Sides (2) $\frac{3}{4}$ ply. - 4 x $4\frac{1}{2}$
- I Box Bottom (1) $\frac{3}{4}$ ply. - $4\frac{1}{2}$ x 12

CLAMP CADDY

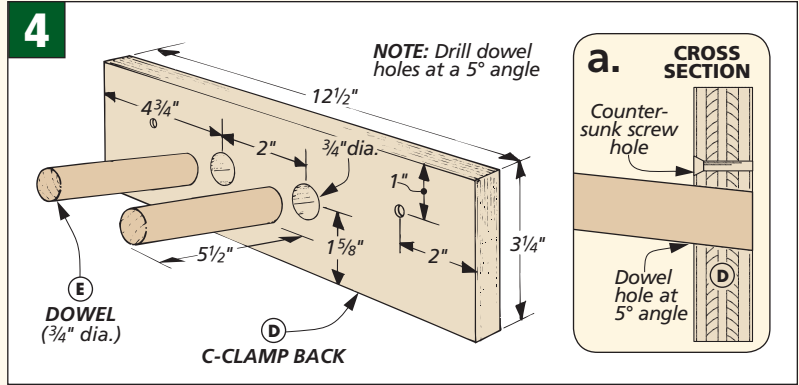
- J Sides (2) $\frac{3}{4}$ ply. - 14 x 48
- K Bottom (1) $\frac{3}{4}$ ply. - 14 x $25\frac{1}{2}$
- L Divider (1) $\frac{3}{4}$ ply. - $25\frac{1}{2}$ x $47\frac{1}{2}$
- M Base (1) $\frac{3}{4}$ ply. - 22 x 28



C-Clamp Rack

To keep 4" C-clamps in order, I made this small rack. It's nothing more than a pair of short $\frac{3}{4}$ " dowels attached to a plywood back.

If you take a look at Fig. 4a, you can see that the holes for the dowels are drilled at a slight angle. This keeps the clamps from sliding off the front. For larger or smaller C-clamps, just change the spacing between the dowels. The completed rack is then screwed to the wall.

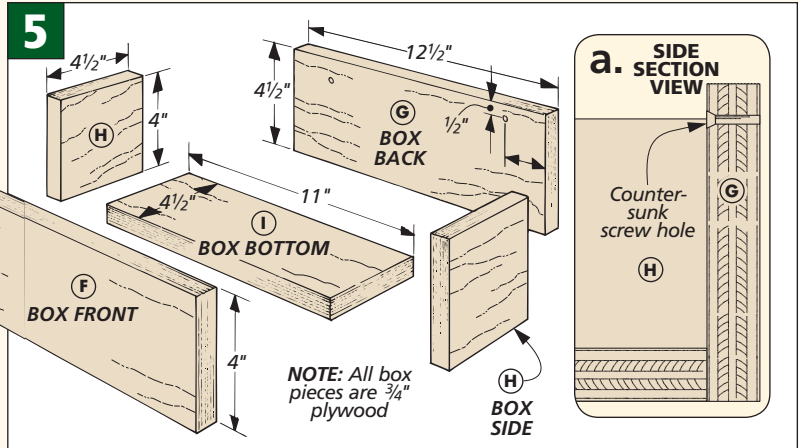


▲ C-clamps hang neatly on a rack made with a plywood back and a couple of dowels.

Storage Box

Once you start a glue-up, you can't really stop to hunt for some accessory you forgot. That's why I like this simple storage box. It gives me one convenient place to keep bottles of glue, clamp pads, band clamps, brushes, and other odds and ends that seem to "wander off" just as I'm ready to start a glue-up.

Like the racks, the box is made from $\frac{3}{4}$ " plywood. And keeping with the modular design of the storage system, the box is the same length as the racks. If you look at Fig. 5, you can see one thing that's a little unusual about the box — the back is $\frac{1}{2}$ " taller than the front. As you



▲ A storage box will hold gluing accessories and keep them close at hand during assemblies.

can see in Fig. 5a, this allows the mounting screws to be up higher so they can be reached easily with a screwdriver. (It's a good idea to drill the holes for these screws before the box is glued up.)

Assembly of the storage box is pretty straightforward. I just spread glue on all four edges of the bottom piece, then sandwiched it between the sides before adding the front and back pieces.

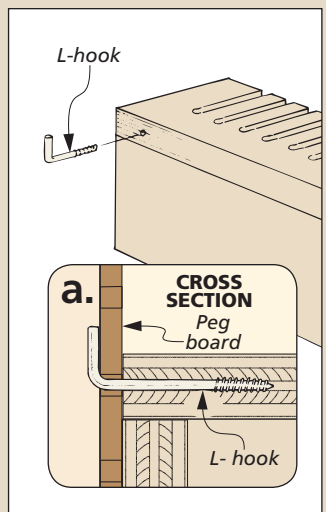
ALTERNATIVE MOUNTING OPTIONS

These small racks don't take much wall space. Even so, the weight of the clamps will play a big part in where and how you mount the racks.

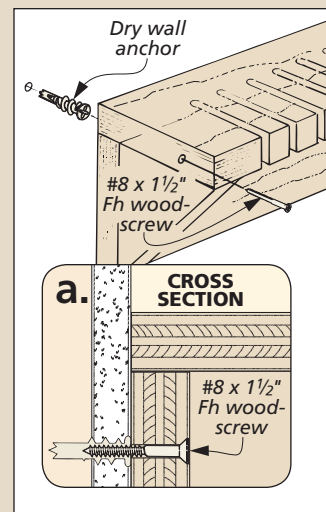
Pegboard will be suitable for a short rack with small clamps. But it may not be strong enough to hold a rack filled with long pipe clamps.

If you're fastening the racks to drywall, try to find one stud to screw into. The other end of the rack can be attached with a drywall anchor.

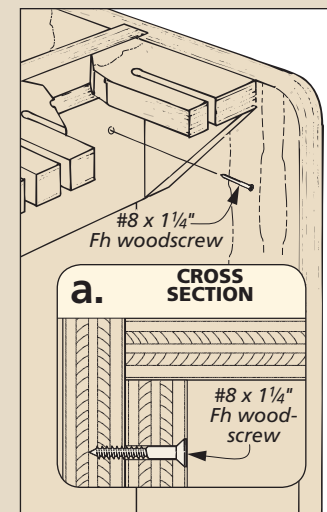
Solid wood or plywood (like on the caddy on page 4) will provide the strongest mounting surface for heavy racks.



Pegboard. L-screws in the edge of the top allow you to hang a rack on pegboard.



Drywall. Hollow wall hangers will hold a rack, but drive at least one screw into a stud.



Caddy. To fasten racks to the caddy, drill pilot and shank holes and use woodscrews.

Optional Clamp Caddy

While the clamp racks are designed to be small enough to fit just about any available wall space, you might want to consider building this roll-around caddy to hold them. It provides plenty of room to fasten clamp racks and storage boxes.

Two clamp racks will fit between the sides. As shown in the photos below, more racks can be fastened to the outside faces. And best of all, the caddy is mounted on locking swivel casters, so it's easy to roll it to wherever you need it.

The caddy can be made from a single sheet of plywood (with enough left over to make a few racks). The pieces fit together with a series of dados and rabbets.

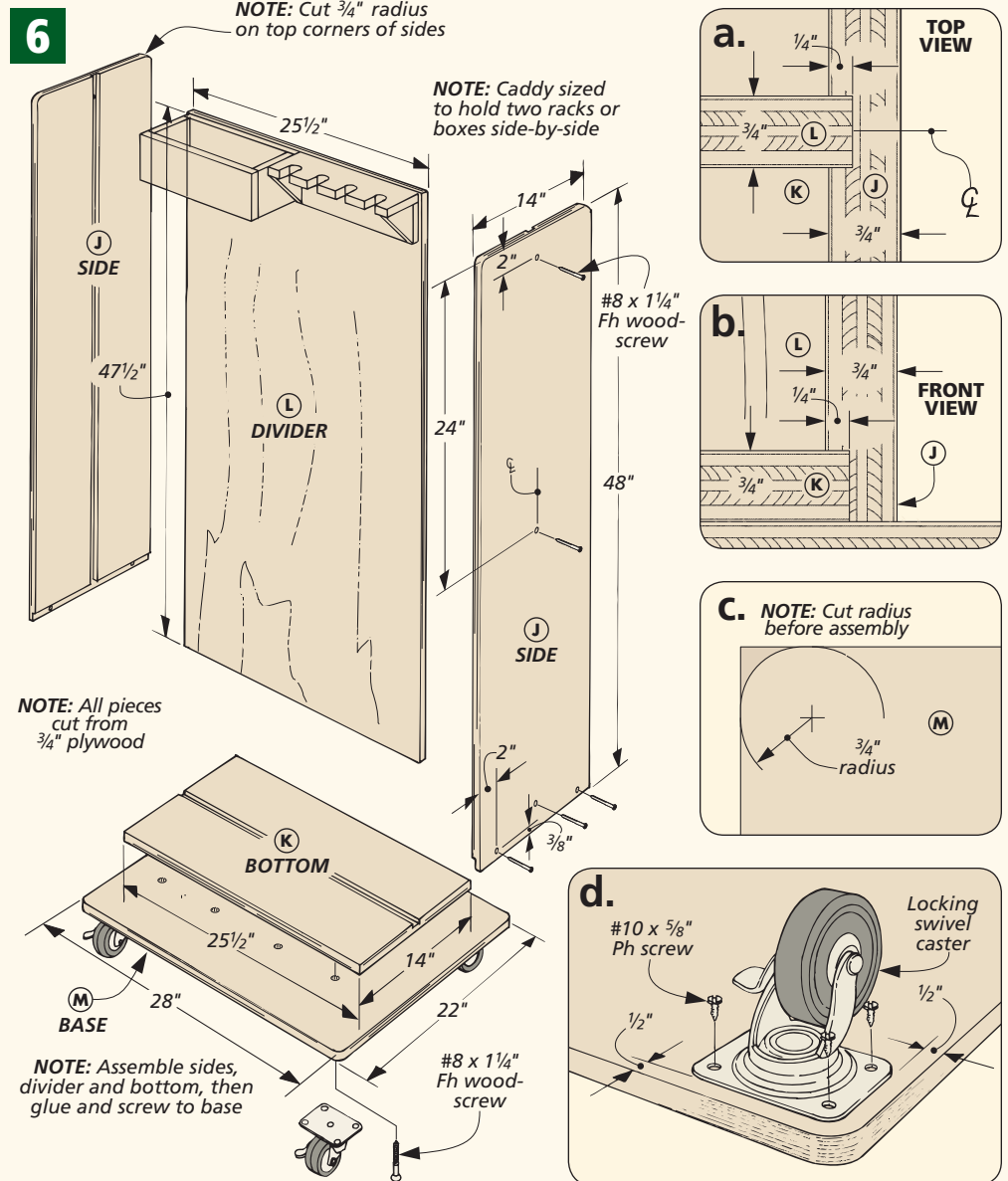
CONSTRUCTION. There are only five pieces in the caddy. So the place to start is by cutting the sides (J), bottom (K), divider (L) and base (M) to size, as shown in Fig. 6.

Next, dados are cut in the sides and bottom to fit the divider (Fig. 6a). Then as Fig. 6b shows, the side pieces also receive a rabbet that accepts the bottom panel.

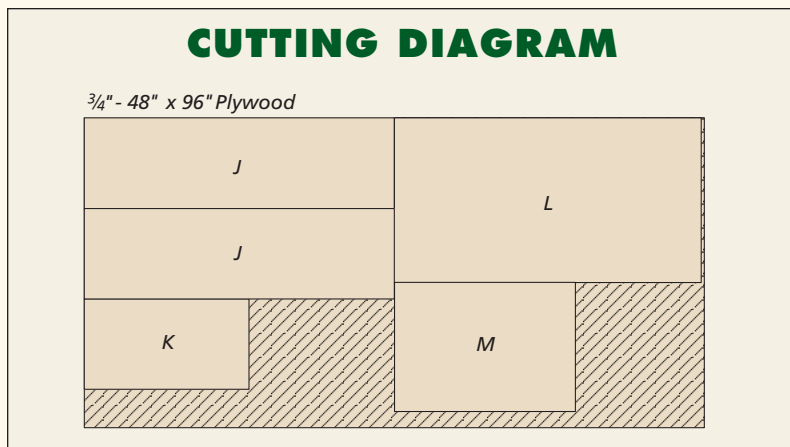
Before assembling the caddy, I rounded the corners of the base to make it "ankle friendly" (Fig. 6c). The top corners of the sides receive the same treatment.

ASSEMBLY. To assemble the caddy, first glue the divider to the bottom and then add the sides. A few screws along the dados and rabbets help reinforce the joints.

There are just a few things left. One is to screw a locking swivel caster to each corner of the base (Fig. 6d).



Then the caddy assembly is centered on the base, glued, and screwed down. Finally, you can attach the racks and fill them with clamps. **W**



▲ **Take it for a Spin.** The four casters on this caddy make it mobile, so you can wheel it over to an assembly and have your clamps (and accessories) right at hand. Plus, the casters allow you to spin the caddy around easily, which means quick access to the clamps on all four sides.