

# Using Clamps Outside the Box

They're not just for gluing up: Clamps can serve as handles and locks, or as helpers that never file for unemployment

BY JOHN CARROLL

**H**ave you ever needed an extra hand for just a few minutes to hold the opposite end of a long board? Maybe you've used rope, wire or even a nail to hold the other end of that teetering fascia board. Or maybe you've resorted to temporary labor, but that turned out to be more of a curse than a blessing. Working as a self-employed builder for 25 years—most of that time

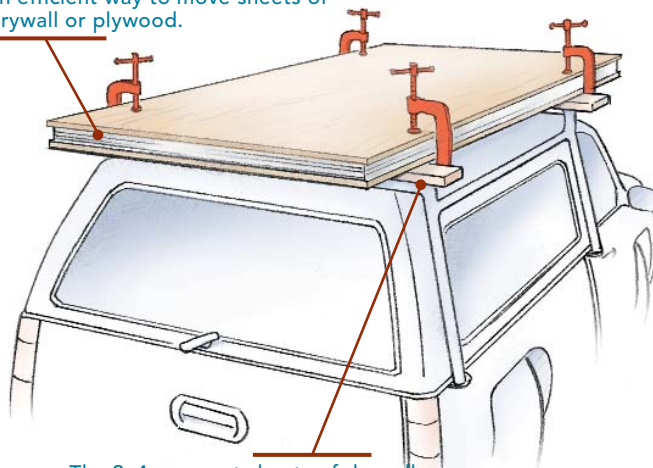
alone—has led me to develop a few techniques that make the work go a little more smoothly. Some of those techniques involve using clamps, which have a variety of uses outside the cabinet shop, as you'll see in the following illustrations. □

John Carroll, a builder and frequent contributor to *Fine Homebuilding*, is the author of *Working Alone* (The Taunton Press, 2001). Photos by Scott Phillips.

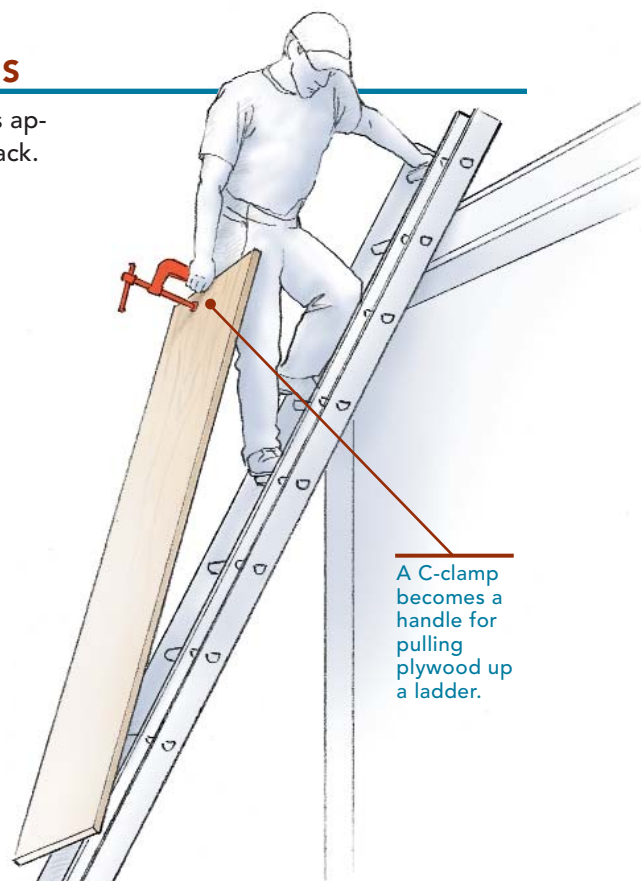
## MATERIALS HANDLING WITH CLAMPS

Because of great clamping pressure, C-clamps work well as applied handles or as a way of securing materials to a truck rack.

A light-duty pickup with a roof rack is an efficient way to move sheets of drywall or plywood.



The 2x4s support sheets of drywall affixed to the roof rack; plywood sheets above and below the drywall protect it from damage.



A C-clamp becomes a handle for pulling plywood up a ladder.

4-in. C-clamp

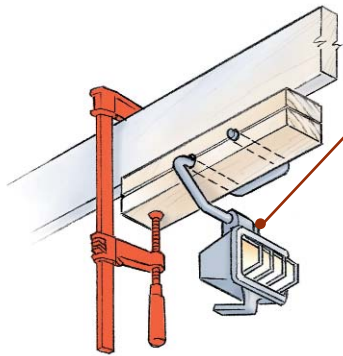
6-in. C-clamp

**C-CLAMPS** are common and can apply great clamping pressure. For example, the load limit on the 4-in. Jorgensen clamp shown above is 4100 psi.

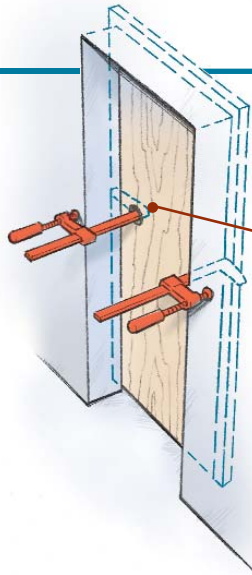
8-in. C-clamp

## CLAMPS AS HOLDFASTS

Bar clamps adjust quickly and work well as temporary fasteners.



An overhead work light is clamped in place with a pair of 2x4s predrilled to accommodate the light's tubular base.



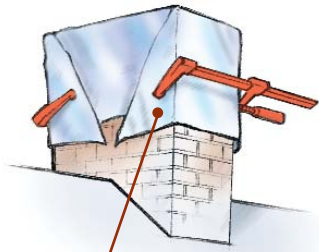
Holes drilled into a sheet of plywood enable bar clamps to secure an unfinished opening.



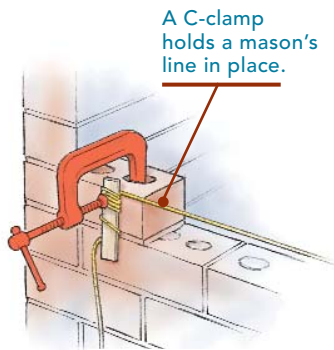
**BESSEY 36-IN. BAR CLAMP** is useful for clamping wider objects and adjusts quickly.

## CLAMPS FOR MASONRY

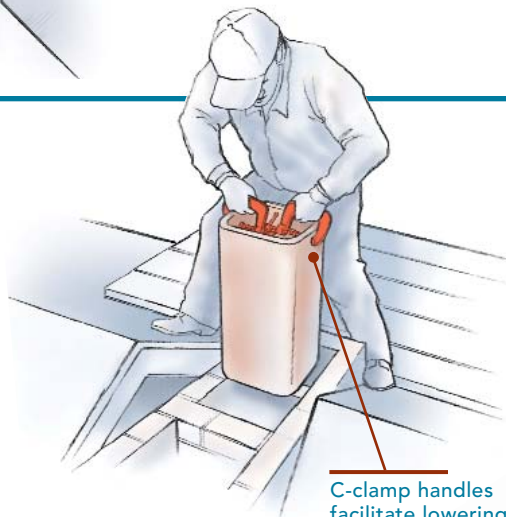
Clamps used in masonry can secure forms or serve as handles. Fasteners are not needed.



A plastic sheet clamped to the chimney protects freshly laid bricks from rain.

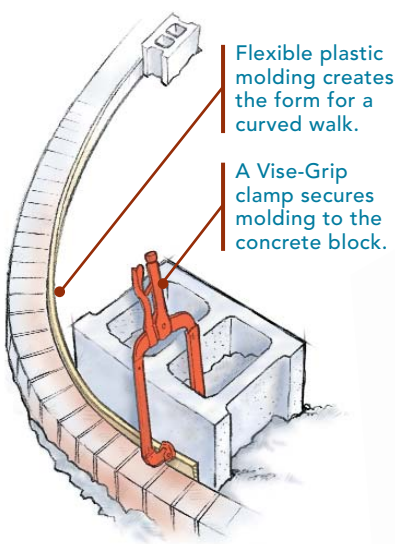


A C-clamp holds a mason's line in place.



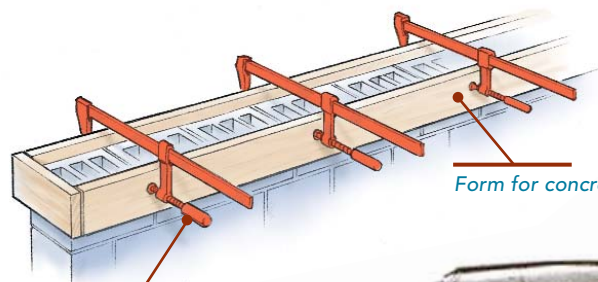
C-clamp handles facilitate lowering the clay flue liner into the chimney.

**WISE-GRIP 18SP'S** 9½-in. throat depth eases clamping in hard-to-reach places.



Flexible plastic molding creates the form for a curved walk.

A Vise-Grip clamp secures molding to the concrete block.



Form for concrete cap

Deep bar clamps (7-in. jaws or longer) hold 2x8 forms on block retaining wall.

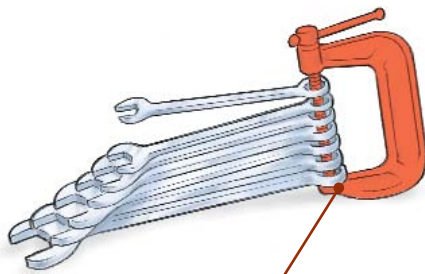


**BAR CLAMPS** are lightweight and come in a variety of sizes. The Jorgensen #3718 shown here has a load limit of 600 psi.



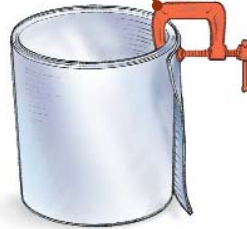
## TOOL AND MATERIAL STORAGE

Clamps can conquer clutter, providing just the organizational assistance needed on the job.

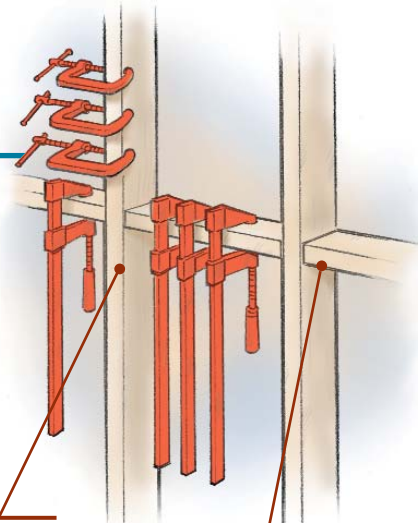


C-clamp serves as box-wrench storage with a handle.

A small C-clamp keeps an unruly aluminum coil wrapped up.



Open framing in the workshop or on the job site accommodates clamp storage.



Horizontal blocking works well for bar clamps.

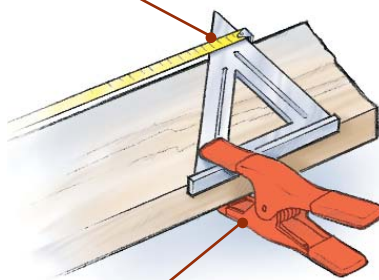
## CLAMPS USED IN FRAMING

Easy-to-apply clamps have made nontraditional clamping techniques possible and framing alone a little easier.

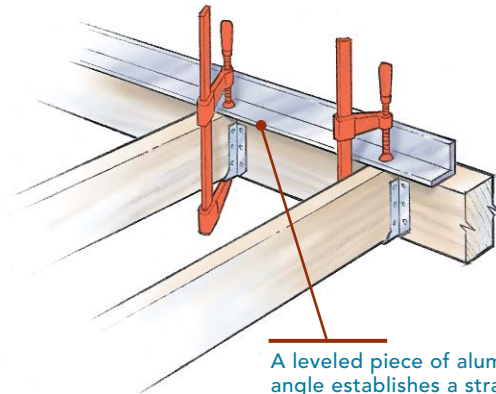
**SPRING CLAMPS** are useful for light-duty clamping.



Square creates a lip on which to hook the measuring tape.



A spring clamp holds a 12-in. square in place.

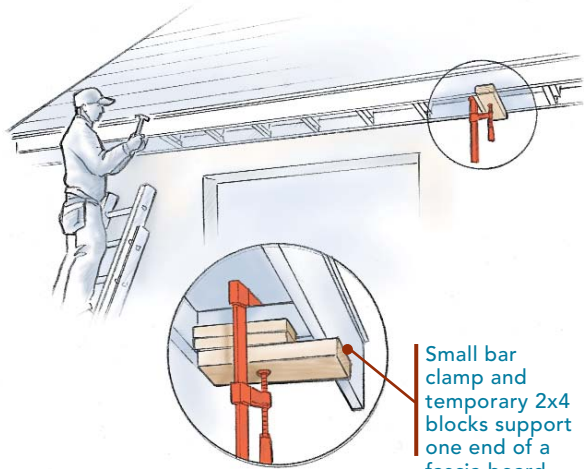


A leveled piece of aluminum angle establishes a straight line to index the tops of floor joists.



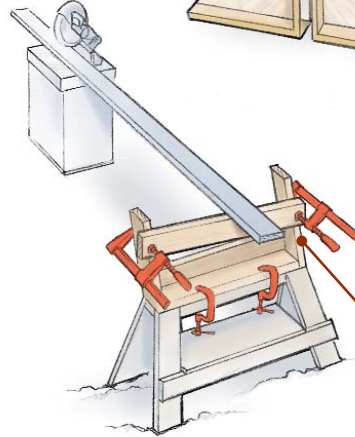
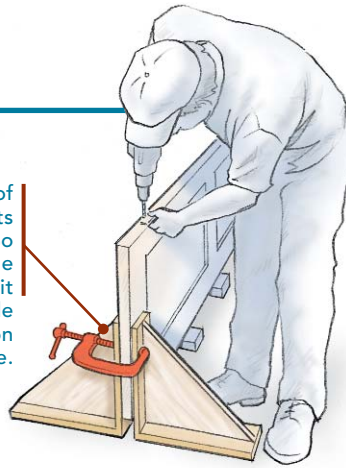
## CLAMPS FOR FINISH CARPENTRY

Commonly used for gluing and fastening stock, clamps also can serve as an extra pair of hands.



Small bar clamp and temporary 2x4 blocks support one end of a fascia board while the other is nailed.

A couple of 90° brackets clamped to each side of the door hold it upright while work is done on the edge.



A site-made jig clamped to a sawhorse supports long material on uneven terrain.

## ONE-HANDED BAR CLAMP

The Bessey Power Grip is a stout one-handed bar clamp that combines an adjustable lever with a standard screw adjustment. Both of these features on one clamp yield quick adjustment and hefty clamping pressure (approximately 1000 psi). The advancing lever works in both directions by being squeezed either toward the bar or toward the handle.

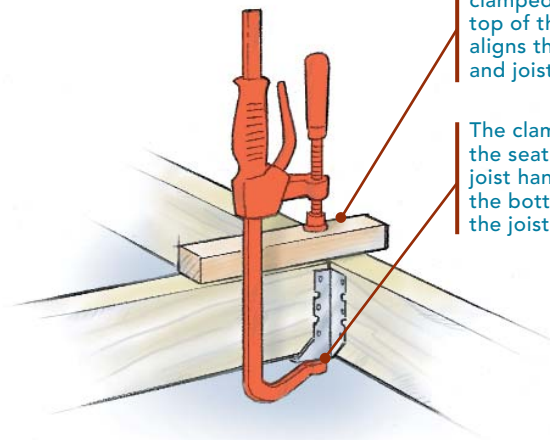
**BESSEY POWER GRIP** 24-in. bar clamp is useful for clamping larger objects and adjusts quickly with one hand.

One hand positions a 2x10 against the post while the other tightens the clamp.

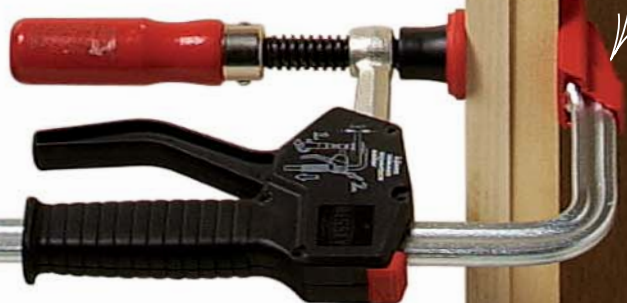
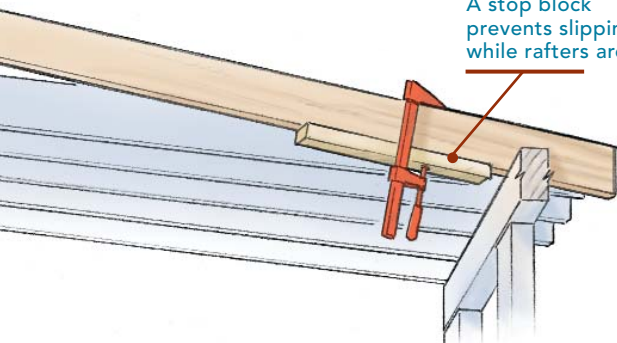


A wooden block clamped to the top of the joist aligns the beam and joist tops.

The clamp presses the seat of the joist hanger to the bottom of the joist.



A stop block prevents slipping while rafters are set.



continued

## **Reader Response**

### **Don't clamp loads onto your truck**

I learned a lot from John Carroll's excellent article "Using Clamps Outside the Box" (*FHB* #150, pp. 62-65). But I'd never, ever hold sheets of drywall or plywood on top of a cargo rack of a mini-pickup with four C-clamps. Vibration, even on a short trip, could easily cause the clamps to loosen. The hapless driver might then find his cargo scattered to the four winds or, worse, through another driver's windshield. Even if only one clamp loosened, what might it hit if it fell?

A better way to hold such cargo to a rack is with the medium-duty cargo straps that can be tightened with their own built-in ratchets. (I use these things for a variety of purposes, only some of which involve what was intended.) Can they loosen? Yes, to a very limited degree, due to stretching of the woven strapping. However, in a sudden stop or heavy acceleration, even a strap that's slightly loose from stretching is automatically tightened.

—*Rick Shaffer, Sedona, AZ*