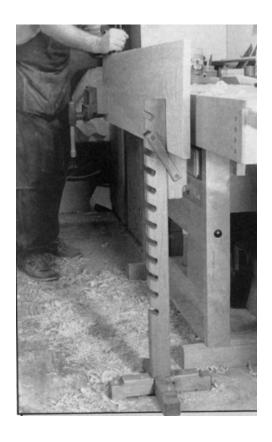
Project 20518EZ: Workbench Helper

Generations of craftsmen have used these handy helpers to hold the other end of the board. They're especially useful for hand planing or jointing boards too long for a vise to support. Once you make this shop project, you'll wonder how you got along without it.

The inspiration for this helper has a cracked and blackened surface that bears witness to untold years of service. There's no telling how many craftsmen the ancient device has outlived.



We used rock maple salvaged from a pallet for our helper. The maple wears like iron. But the helper dimensions are hefty enough to allow use of a softwood for all but the swing arms (D) and hanger pins (E).

Workbench Helper Materials List

Part	Description	Size	No. Req'd
Α	Post	1-3/4" x 2-1/4" x 34"*	1
В	Foot	1-3/4" x 2-1/4" x 12"	2
С	Work Support	1-3/4" x 2-1/4" x 5-1/2"	1
D	Swing Arm	1/2" x 1" x 6"	2
Е	Hanger Pin	1/2" dia. x 2-13/16" long	2

^{*} Length includes tenon.

Workbench Helper Step-by-Step Instructions

- 1. Cut all parts to the dimensions specified in the materials list.
- 2. Use a tenon jig to support the post while cutting the 2" tenon length for the double mortise and tenon used to set the post (A) into the half-lapped feet (B).
- 3. Use standard techniques to cut the mortises, chiseling them to make them square.
- 4. Bore a 9/16" diameter hole for the 1/2" diameter support pin that allows the work support (C) to move freely on the swing arm.
- 5. Use a drill press to bore the 5/8" diameter holes for the angled slots in the post, located as shown. These slots will allow the pins to move easily.
- 6. Use the band saw to make the 30-degree angled cutouts.
- 7. Finish as desired, or leave unfinished.

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