

# 2 Classic Pulls



◀ Soup up store-bought  
or start from scratch ▶

BY MICHAEL PEKOVICH



I've made a lot of traditional furniture and I've learned the importance of getting the drawer and door pulls just right. Fortunately, you don't need to own a lathe to make the elegant turned pulls that are the hallmark of Shaker furniture, and you don't need to commission hand-hammered hardware every time you tackle an Arts and Crafts project. Instead, there's a really easy way to customize store-bought pulls, and I'll share a simple jig that will help you make your own classic pyramid pulls quickly and safely.

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*Michael Pekovich is Fine Woodworking's art director.*

## SHAKER PULLS MADE BY MACHINE, PERFECTED BY HAND



**Before and after.** The mass-produced piece (left) is rough and rounded over. A little sanding at the drill press reshapes it into a period-perfect Shaker pull (right).

You can get turned pulls in a variety of woods from most woodworking retailers. They are a convenient option, but the machine-duplicated profiles leave a lot to be desired. Typically, they lack the crisp detail and graceful curves of a hand-turned pull. They also tend to have heavy scratch marks and a nib at the center of the cap. Finally, the limited size selection often forces you to choose between a knob that's slightly too large and one that's too small.

The good news is that it doesn't take special tools or a lot of time to remedy any of these shortcomings. All you need is a drill press (even a handheld drill will do) and five minutes of sanding to change the profile or the diameter and to transform a generic pull into one suited for fine furniture.



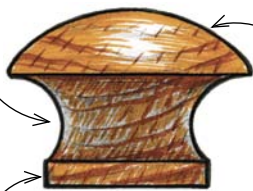
**Two ways to mount the pull in the drill press.** A tenoned end-grain pull can be mounted directly in the drill-press chuck (top). To mount a face-grain pull with a hole, cut the end off a bolt, chuck it onto the drill, and thread the knob in place (bottom).



## FROM ROUGH TO REFINED IN MINUTES

### THREE STEPS TO A FINISHED PULL

1. Hollow out the waist to create crisper transitions at the base and cap.



2. Square up the base for a hand-turned look.

3. Shape and smooth the cap. Fine-tune the overall diameter while you're at it.



**Trim the waistline.** Wrap coarse sandpaper around a dowel to establish the waist (left), then sand up to 600 grit before moving on to the base. To shape and smooth the base (right), wrap the sandpaper around a small block to establish a flat face.



**A smooth cap is the topper.** A sanding block helps reduce the diameter (left), which can make pulls look more proportional on large pieces with graduated drawers. With the diameter established, shape a gentle, continuous curve across the cap (right). There should be no flat spots and no point at the center.

**TIP**

**THE SECRET TO A SCRATCH-FREE CAP**



Sanding while the pull is spinning will result in rings or a nib at the center. The trick to removing them is to stop the drill after every grit and sand across the cap by hand. Just a couple of strokes will do.

**High-speed finish.** With the pull spinning, wipe on a thin coat of shellac; it will dry almost instantly. Burnish with wax and fine steel wool for a satin luster that's pleasing to the touch.





## PYRAMID PULLS ARE BEST MADE FROM SCRATCH



MAKE THE BLANK



HOLLOW THE WAIST



BEVEL THE CAP



TRIM THE BASE

You can buy square pulls, but the profiles are usually rounded over, lacking the crisp facets that catch the light. Also, the wood selection offers few choices of species or grain orientation. You can do better on your own. The trick, when working with any small part on power tools, is to do it safely. A simple jig solves the problem. Not only is it easy to make, it's also a true multi-tasker. Use it on the drill press to drill the screw hole and shape the waist. Then move it to the tablesaw to bevel the top.

### START WITH PERFECT SQUARES

Mill the stock to  $\frac{7}{8}$  in. thick and  $1\frac{1}{4}$  in. wide. Make the strip longer than you need and save the excess to make the jig at right.



1

**A sliding stop is safe and accurate.** Use the width of the blank to set the stop's distance from the blade.



2

**Position the workpiece.** Hold the stop firmly in place while sliding the stock against it.

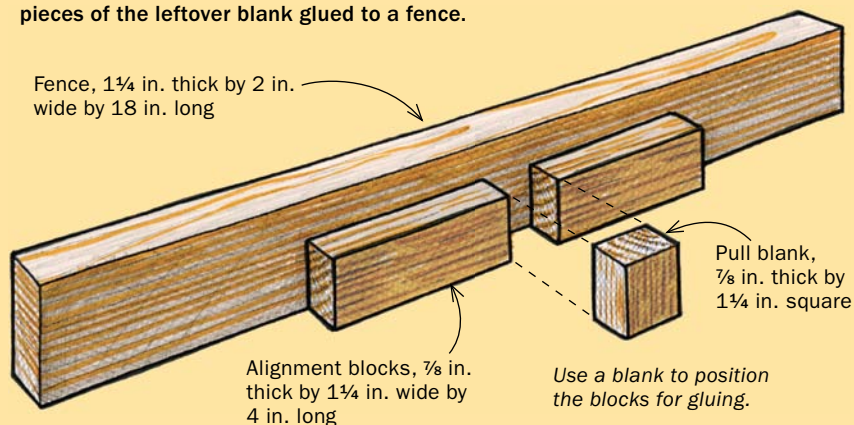


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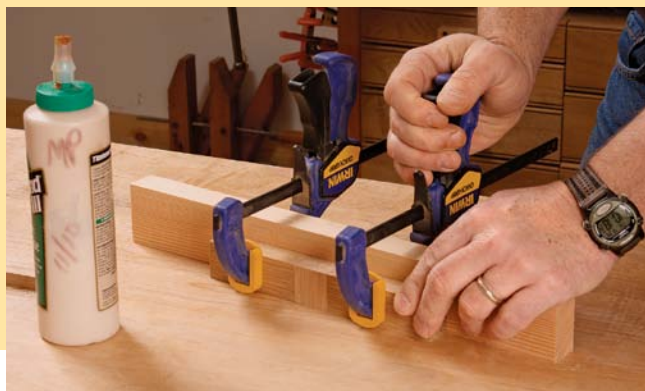
**Slide the stop out of the way before making the cut.** This prevents the block from being trapped against the blade.

### MAKE THIS SMART JIG

This jig takes you through the rest of the steps. But it's nothing more than two pieces of the leftover blank glued to a fence.



**Secure the blocks with pins.** To prevent the blocks from sliding around during glue-up, Pekovich drives 23-gauge pins into the inside face and clips them off just above the surface.



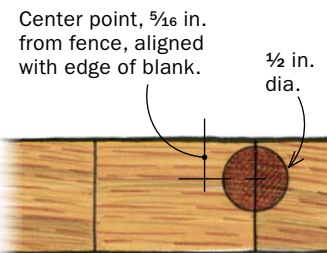
**Set the spacing during glue-up.** When assembling the jig, sandwich a blank snugly between the two pieces to set the proper distance between them.





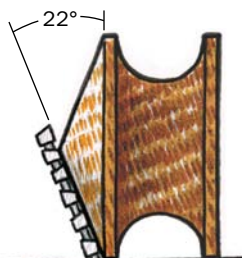
**Drill the mounting holes.** Insert a blank facedown on the table with the center point marked. Align the blank with the drill bit and clamp the jig in place. Now all the mounting holes can be drilled after marking just a single blank.

## DRILL THE SCREW HOLE AND WAIST ON THE DRILL PRESS



**A Forstner bit shapes the waist.** Install a blank with its bottom toward the jig's fence and position the jig so that the bit is centered on the edge of the blank. Drill the blank and rotate until all four sides are complete.

## BEVEL THE CAP ON THE TABLESAW



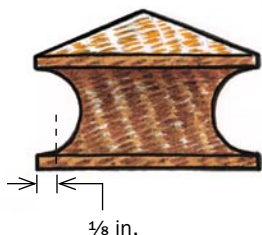
**Set up the bevel cut.** Draw a center line on the jig, tilt the blade 22°, and adjust the rip fence until the blade cuts just to the line. When the setup looks right, insert the first pull.



**Cut the facets.** Use a normal push stick on the jig and a simpler stick (a piece of scrap will work) to keep the pull in place throughout the cut. Rotate the blank after each pass until all four sides are beveled.

## USE A CROSSCUT SLED TO TRIM THE BASE

**Final cuts.** Clamp a stop block to the crosscut sled and cut each edge of the base.



## TIP HOW TO SAND THE FACETS CLEANLY



Place sandpaper on a flat surface and rock the piece up onto one of its facets. Keep it flat as you sand to maintain a crisp profile.