

master class

Carved pulls give a handmade touch

USE THEM BEHIND DOORS
OR LET THEM BE A FOCAL POINT



THROUGH-PULLS



STOPPED PULLS



BY TIMOTHY
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Handmade drawer and door pulls are the perfect finishing touches on a fine piece of furniture. Yes, they do the job of opening and closing, but they do much more. They can create a focal point, add a contrasting dash of color or texture, or add a touch of whimsy.

The usual approach is to make a projecting pull or handle of some kind, but there are times when that pull just doesn't seem right, or is not practical, as in drawers located behind doors. For these situations, a pull that is carved into the surface can be an ideal solution. It's a technique I learned from Jim Krenov, my teacher in the 1980s.

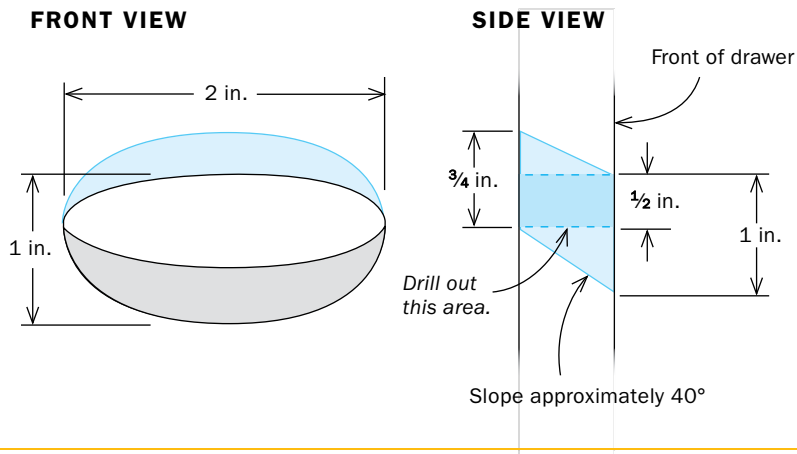
Two approaches I've used numerous times over the years are pulls that go all the way through the drawer front and pulls that are carved only into the surface—I call them stopped pulls. Both designs are sloped at the top to make it easy to catch hold with one or two fingers and pull the drawer out.

In this article, I will guide you through the process of carving the through-pull, which is the most basic approach. You won't need a bundle of carving tools for the job. Although a carving

Photos, except where noted: Thomas McKenna; this page: Kelly J. Dunton

Through-pulls

Coleman begins the through-pull with some drilling and uses a large carving gouge to waste away material quickly. He uses narrower gouges to get into the tight spots, but you don't really need them. You can finish the job with files.



WORK FROM THE FRONT



Trace it. Use a combination square to locate the pull from the top edge of the drawer. Align the centerline of the template with the centerline of the drawer front. Because the inside surfaces slope upward, mark the orientation of the drawer front.



Drill out the waste. Drill all the way through to waste away material in the middle.



Tenon prevents blowout. With the drawer front faceup, insert a short tenon, which acts as a stop for the gouge.



Start at the bottom rim. With the drawer front faceup, Coleman uses a #8-20mm gouge to rough in the slope that starts at the bottom and goes up toward the back (see side-view drawing above). Once most of the material is removed, he removes the tenon and uses the same gouge to cut with the grain along the top (right).



THEN FLIP TO THE BACK



Same tools, same methods. With the drawer front facedown, use the same wide gouge to carve the top portion of the pull. Work against the grain and then with it to create an easy-to-grasp undercut.



Check by feel and by eye. The undercut at the top is difficult to measure as you work, so you need to check how it feels with your fingers (inset). You want enough undercut that your fingers can pull without slipping out. You also need to see how it looks from the outside (above).

gouge with a moderate to severe sweep is necessary to start the curved excavation, you can finish up with rasps, files, and sandpaper, if needed. I'll also show you how to do the stopped pull, which does require a few more carving tools. In each example, I carve the pull with the drawer front cut to size but before the joinery is cut.

Trace first, then rough it in

I begin by making a full-size template that shows the outline of the pull on the surface. This is a simple cardboard cutout that I use to transfer the outline from one face to another. I also draw a cross section that shows the thickness of the drawer front, the slope of the pull, and the undercut needed for fingers to grab onto. The undercut is the most important part of the pull, and while a drawing can be a rough guide, it is mostly worked out in the process by feel.

If I'm making more than one pull, I lay out all of them at the same time but carve each pull, one at a time, close to completion. Then I'll compare the lot and fix any distracting variations. I want the pulls to look alike, but it's important for me to retain the handmade look and feel.

My pulls are primarily created with carving tools, but with a through-pull I drill a mortise all the way through to waste away material. Then I insert a stub tenon into the mortise to act as a stop for the gouges I'll use to begin roughing out the recess.

I typically start by shaping the lower part of the pull, with the front faceup. Working in this order gives me more room later to maneuver the tools for the upper part. I use a wide carving gouge with a wide sweep (#8-20mm) to waste away material quickly. I then move to a #7 gouge, which has a shallower sweep (27mm), to refine the interior. With both tools I work across the grain first, and then with it to minimize tearout.

Once I have the lower slope roughed out with enough room to slip in a finger or two, I flip the piece over to work on the top portion, which slopes upward from the face of the drawer front to the back at about 40°. This undercut is



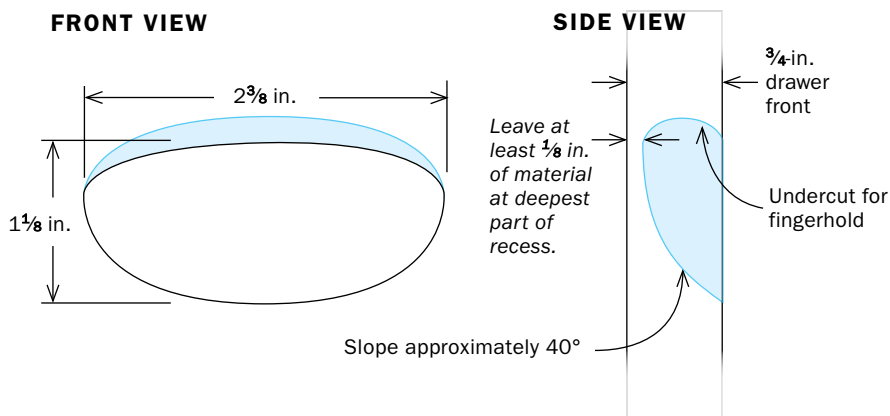
Finish with files. Though narrow gouges are handy for tight areas, files work, too. A 6-in. half-round file handles the broad surfaces (left). Needle files can handle the inside corners (right).



Kiss with sandpaper. Finish by easing the edges with P400-grit sandpaper, but don't remove the tool marks.

Stopped pulls are trickier

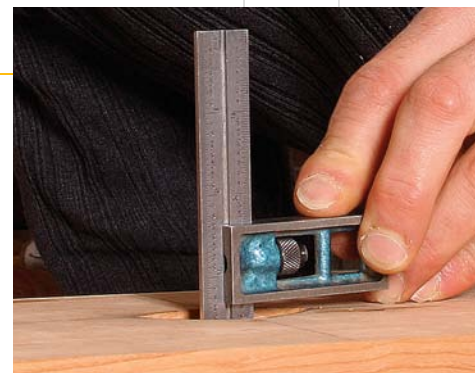
With a stopped pull, you can't clear the waste by drilling. The biggest challenge is carving the undercut at the top, where the confined space requires a greater variety of gouges, especially smaller ones. The drawer front must be at least $\frac{3}{4}$ in. thick to hold a pull that's deep enough to grasp firmly.



DIG IT OUT



Work around the rim. Use a #8-20mm and #7-27mm gouge to rough in the perimeter. Work across the grain first (left), then with it (above).



Check the depth. Use a combination square or a caliper with a depth gauge to measure the depth. This will help you avoid making an accidental through-pull.

difficult to measure as you work, and it is only by feeling it with my fingers that I get it right. I want enough undercut for my fingers to catch onto comfortably so they don't slip out when I pull. Sometimes this means digging out more material at the undercut, sometimes it's a matter of deepening the recess below.

Refine, but leave the facets

Now I have the outline of the pull clearly established and the bottom slope and undercut above where I want them. There still is some roughness to the surfaces and irregularities that need to be smoothed out with files.

When using the files, I don't want to fully erase the tool marks made by the gouges. These subtle facets are not only a sign of fine craftsmanship, but a delight to feel as well. When making multiples, it's here that I compare all of them and use the files to fix any major mismatches on the front. Inside, slight variations don't bother me. They can't be seen, and they only add to the hand-worked character.

Finally, I use P400-grit sandpaper around the perimeter to break any hard edges and to smooth the leading edge and surface of the undercut. Again, I don't want to erase the tool marks.

The pull is done at this point, and the drawer is ready to be joined and assembled. □

Tim Coleman is a renowned furniture designer and maker.



Get under. You need a smaller gouge to create the undercut at the top of the pull (left). Coleman uses a #8-4mm gouge there. In the middle (right), he uses a #8-10mm and a #5-10mm.



Get a feel for it. Gauge your progress by feeling the pull. You want to be able to grab the undercut comfortably with two fingers.