

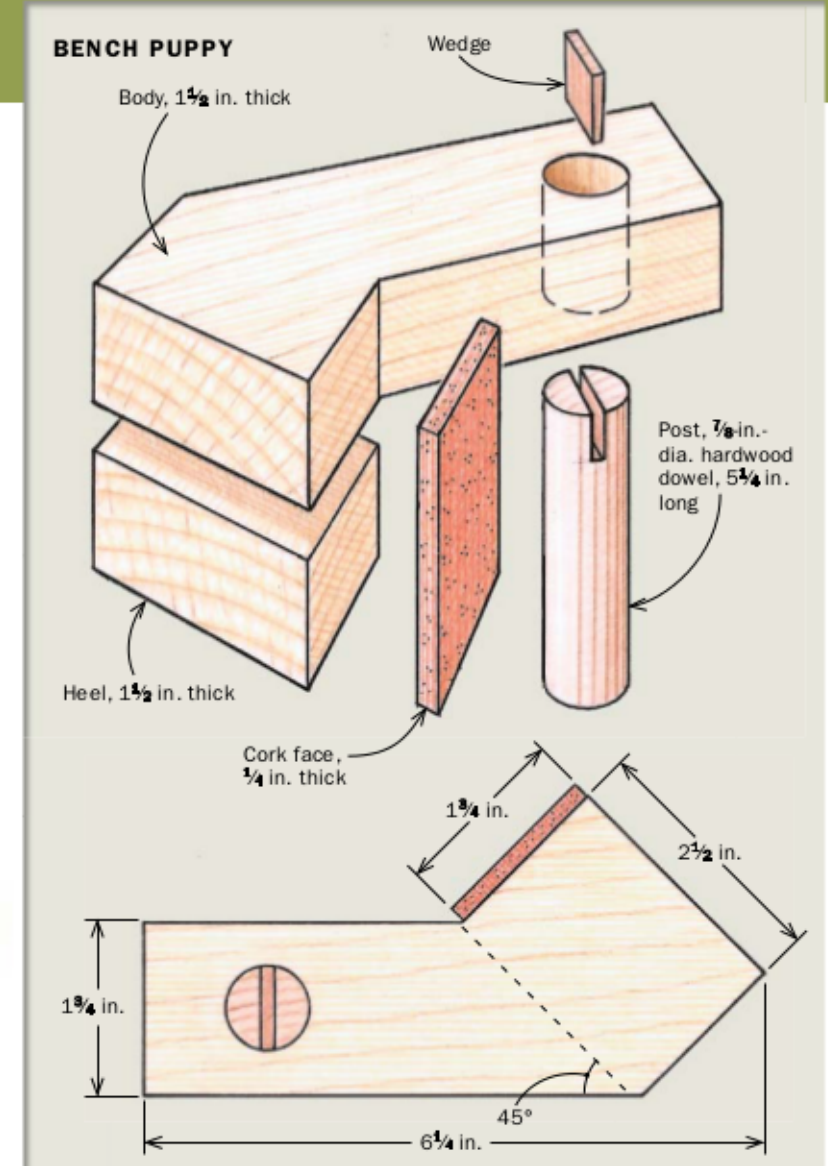
These Puppies Have Bite

Clever bench jigs grip workpieces of any size or shape

BY TIMOTHY COLEMAN

My workbench is one of the most valuable tools in my shop. It is a traditional European design and, with a few accessories, it has served me well for nearly 30 years. One accessory that I reach for often is a pair of shopmade jaws that slip into the dog holes in the benchtop and tail vise to clamp a workpiece on edge. I was introduced to these devices as a student at the College of the Redwoods, where they were affectionately known as "bench puppies."

These helpers are about as simple as it gets when it comes to bench jigs. They're made from scrap hardwood and a dowel, with a cork cushion glued to



The gift of grab

Used in conjunction with a tail vise, bench puppies can hold any size or shape workpiece against the front of the bench. Insert one puppy in a benchtop dog hole, hold the work against it, then insert the opposite puppy in a tail vise dog hole and tighten.

EDGE-PLANING



DRAWERS

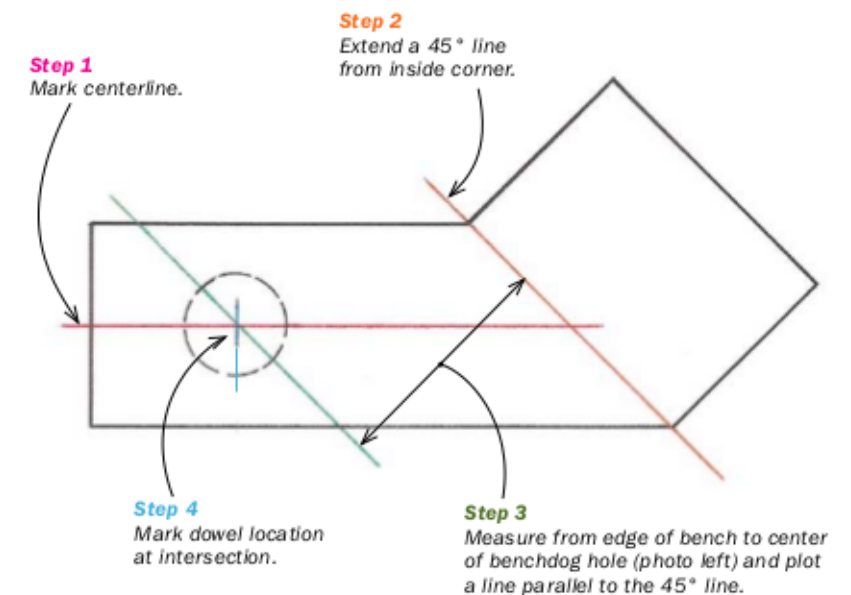


ODD SHAPES



LOCATE THE POST HOLE

The post anchors the puppy in the workbench's dog hole. Because the dog-hole placement varies from bench to bench, you'll have to figure out the dowel location yourself. Fortunately, it's not difficult. Start with a full-size plan view of the puppy, then follow the steps at right.



Assemble the body

The process begins with two hardwood blanks for each puppy—one for the body and one for the heel.



Cut the body to shape. All the cuts are easily made on the bandsaw. Make the angled cuts first (above), then use a fence to finish the straight inside cut (right).



Drill for the post. The post anchors the puppy in the benchdog hole. Transfer its location from the plan and then drill the hole for it using a Forstner bit.



Glue the heel to the body. Be careful at this stage. Make sure you don't make two righties or two lefties. You want one of each.

the clamping faces to protect the workpiece as the puppies bite down.

The problem with a tail vise is that its grip is limited. It often leaves one end of a workpiece unsupported, and it doesn't easily hold odd-shaped pieces or drawers for planing. Bench puppies step in to stretch the clamping limits of the tail vise. They grab both ends of the workpiece and hold it against the front of the bench. They'll hold any shape workpiece, whether it's a long board that needs edge-planing, a door that needs fitting, or an odd-shaped piece that needs fine-tuning with hand tools. They even grip drawers securely.

The hardest part about making them is putting the dowel in the right spot. The location will vary based on the distance between the dog holes and the front edge of your bench. You'll also need to make two of them, a right- and left-hand puppy. Make sure you

Add the post

The post is a store-bought hardwood dowel that gets glued and wedged into the body of the puppy.



A cradle for the wedge cut. The post is slotted on one end for the wedge that anchors it to the body. To support the post for the slotting cut, Coleman uses a cradle made from a scrap block (above). After marking the stopping point of the cut on the top face of the cradle, he inserts the post and uses the bandsaw fence to ensure a straight cut (right).



Glue it in. Be sure to orient the slot perpendicular to the grain of the body so that you don't split it when you drive in the wedge.

label each one, so you don't end up with two righties or two lefties.

Start with two hardwood blocks for each puppy, one for the body and one for the heel. Use a full-size drawing to lay out the shape on the body, and to mark for the dowel location. Cut out the shape on the bandsaw and drill the hole using a Forstner bit. Glue the heel to the body, and then add the dowel and wedge. You don't have to spend a lot of time sanding the body. I simply break the hard corners with a sanding block. Finally, glue the cork pad to the jaw. You can get cork from almost any office-supply store. That's it. The puppies are ready for business.

Once you've made and used these, you will have reached clamping nirvana. □

Timothy Coleman is an award-winning furniture maker in Shelburne, Mass.



Add the jaw pad. Glue and clamp the cork face to the jaw of the puppy. A light sanding to break the hard corners is all that's left before you can put the jigs to work.