

Top it Off In Style Olive Oil Dispenser

by Jerry Hubschman

Match the wood to your favorite salad bowl, add an attractive bottle, and you have a useful item for dinner time.

With the current elevated interest in nutrition or eating right, the use of olive oil has extended well beyond ethnic cooking. In many restaurants, a bottle of olive oil (often lightly flavored) accompanies the bread tray. In our house, we keep one or more with a sprig of rosemary, a clove of garlic, or a couple of chile peppers for table use. In this project, the turning is simple and straight forward, but the assembly can be a bit more challenging (See Cutaway Diagram *opposite*). My suggestions here are based upon my experience of making about a dozen dispensers at one time. If you plan this as a one-off project, omit some of my procedures and jigs. Part of the fun will be how to do it your way in your shop.

The dispenser body

Start by ripping your stock to 1"-square billets. Cut these into 2½" sections and mount in a four-jaw chuck. With a 15/64" bit mounted in the tailstock, bore through the blank (Photo A). I do this for two reasons. First, you can turn the body of

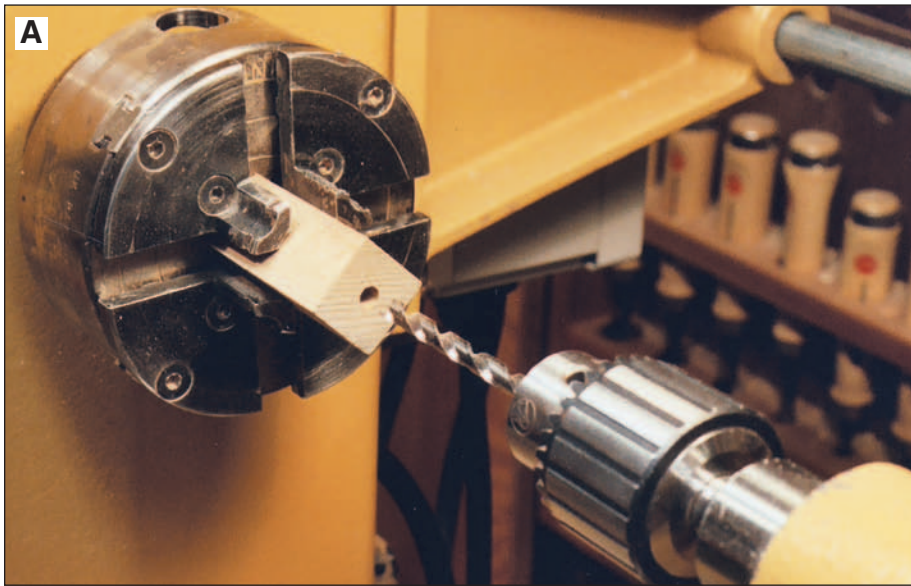
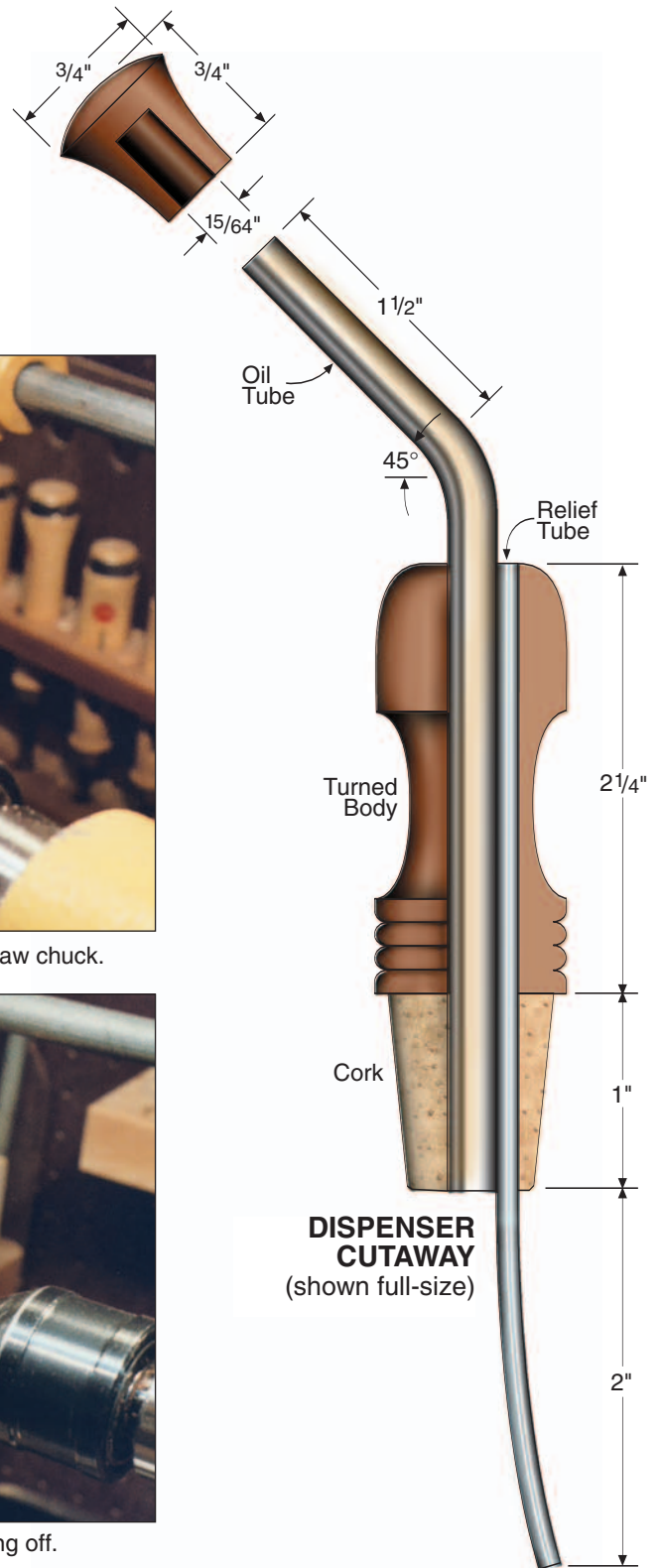
the dispenser using a friction drive in the headstock and a live center in the tailstock. I use a short section of the 1/4" tubing in a Jacobs chuck for the jam fit when turning (Photo B). This provides automatic centering of the hole in the finished turning. This method requires no extra material at the ends, should that be important with exotic wood.

Second, the 15/64" bit is needed when boring the corks and caps in later steps. For boring, use the best quality bit obtainable. I found that a high speed brad-point with lips designed for clean entry work well (Lee Valley; 800-871-8158). This bit will not wander and won't produce tearout. These qualities are important when boring the corks and the close-fit hole for the relief tube.

Mount the bored blank between centers, rough to a cylinder, and turn to desired shape. Be careful to allow enough diameter for both the delivery tube and twice the size of the relief tube. Otherwise, your second boring will break through a slim-waisted turning. Off the lathe, rebore the original 15/64" center hole to the full 1/4" for the delivery tube. I use a conventional 1/4" bit in a drill press and hand-

Continued





Bore the 1"-square body with a $\frac{15}{64}$ " bit. Note the secure hold with a 4-jaw chuck.



Friction drive between $\frac{1}{4}$ " spindles eliminates waste and need for parting off.

hold the body, entering from the base. The body is now ready for finishing.

Corks: quality challenge

Corks presented a special problem for me. Those available from turners supply houses come prebored with a $\frac{3}{8}$ " hole. You may wish to go this route, but I consider a $\frac{3}{8}$ " delivery tube clumsy both in function and appearance. I prefer standard No. 7 tapered corks available in stores that sell wine-making supplies. Unfortunately, all the shops in my area carry the same brand of corks which are

uniformly of poor quality.

You will have to pick carefully. To bore your own corks, use a shop-made jam chuck mounted on a faceplate (Photo C) or held in a four jaw chuck. Now bore a tapered hole to fit



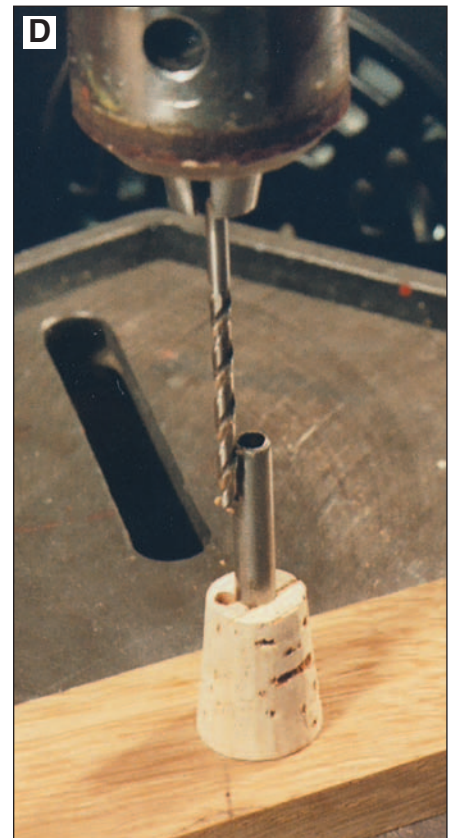
A simple jam chuck simplifies the boring of corks.

the cork.

If your faceplate has a center opening, bore your pilot hole all the way through the jam block, then taper the walls. This will allow you to push out the cork with a blunt dowel. Otherwise, fit the cork proud of the block face to facilitate removal. Since cork tends to compress and distort, use a high quality $\frac{1}{4}$ " brad-point bit with rounded spurs. Bore at high speed with slow advance to avoid tearout.

Bending the delivery tube

The delivery tube is $\frac{1}{4}$ " OD stainless steel purchased locally. I use #304 seamless tubing because it is less likely to split when bending. While my constitutional bias is to buy the best tool available, an economy-grade tube bender (Harbor Freight; 800-423-2567) works just fine for the next step. Cut the tubing about 5" long and bend one end about 45° as shown in



A short section of steel tubing helps guide the drill bit when boring the relief tube. Use the same technique when boring the dispenser body.

the Cutaway Diagram.

Whether you cut it with a hacksaw or a tubing cutter, the ends will require de-burring. I do it with a H.S. steel countersink.

The challenging relief tube

I use 1/8" OD polyethylene tubing purchased locally. Unlike dispensers intended for liquor bottles, the relief tube should extend well beyond the base of the stopper. Due to the viscosity of olive oil, the incoming air needs a head start. It also provides better control of oil flow for table use. Boring the holes (both body and cork) may be the most challenging step.

In order to drill an 1/8" hole parallel with and tangent to the oil tube, I built a simple jig (Photo D). This consists of a wooden base that supports a small section of the same stainless steel tubing used in the dispenser. Again, use a high quality 1/8" brad-point bit with curved spurs (it won't wander).

Mount the jig on a drill press table and guide the drill bit down the side of the support tube. For my jig, I lightly sanded the tubing to reduce the diameter slightly. This allows both the body and the cork to slip on and off with ease.

The tiny but important cap

The cap is not intended to provide a seal, but simply to keep out dust and critters between uses. Start with a cylinder of stock about 3/4" in diameter. Mount this in a chuck and end-bore a hole about 1/2" deep with the 15/64" spur bit (Photo E).



Tape wrapped around the drill bit helps you limit the depth of the hole in the cap stock.



For the 3/4"-diameter cap, friction-fit the stock then turn with a 3/8" spindle gouge.

Smooth the end grain around the bored opening and part off about 3/4" long. For turning, jam-fit this piece on a short section of stainless steel tubing mounted in a Jacobs chuck (Photo F). For use, the cap will not need to be rebored to 1/4", but will have a nice snug fit. Sand and finish as you do the body.

Now, apply the finish

I make my dispensers from native hardwoods. Some species such as cherry and walnut require staining. (Since most people keep their olive oil out of direct

sunlight, the wood won't have 10 years to develop a mellow color). I follow with a light coat of thinned satin polyethylene. I found that some finishes such as lacquer or rub-on finishes applied on the lathe don't hold up well. (Eventual creep by the oil softens these finishes; the cap is the first victim.) To allow a good glue bond with the cork during assembly, be sure to leave an area on the bottom of the

Jerry Hubschman is a retired biologist and amateur woodturner who lives in Yellow Springs and Put In Bay, OH. He is a member of the Central Ohio Woodturners.