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Turning the "Write Stuff" for Friends and Family



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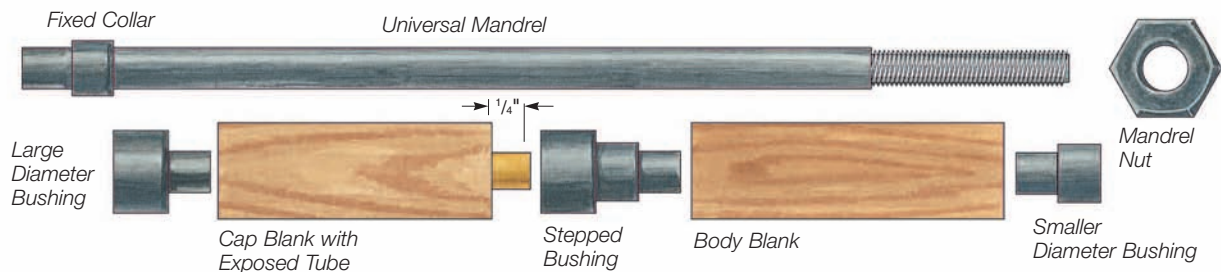


*May the wonderful
spirit of Christmas
bring joy to You and Yours*

The Carrolls

Turning the “Write Stuff” for Friends and Family

Even if it’s not exactly the night before Christmas, any time of the year is a good time for turners to start turning holiday gifts. Pens are an excellent gift-giving option: they’re quick to turn, look great when you’re through and don’t cost an arm and a leg. Another pleasant aspect of turning pens is that you get a chance to work with small amounts of exotic stock. It’s a cheap route to learn plenty about a variety of different wood species, and every pen you make looks uniquely different than the rest.



The pen design featured in this article is called Montblanc. It’s a common style, and the pen parts retail for about \$6 from most turning supply sources. The wood, depending on your approach, will cost from nothing (scrap bin) to a couple of dollars. Not bad, considering you can easily spend over \$100 for one of the real things at an

office supply store. Pens may just be the ultimate scrap wood projects. With such small blanks, you can really be selective in the material you choose.

The hardware kit you buy should include two brass tubes (a longer one for the body and a shorter one for the cap) and the other various pen parts.

If you’re not set up to turn pens,

the *illustration* above overviews the other lathe accessories you’ll need to get started. These are sold in an inexpensive kit. Also, the pen tubes must fit very tightly into the blank. We recommend that you buy an “O”-diameter bit for making the Montblanc style set.

As far as a lathe goes, all you really need is a mini-lathe.

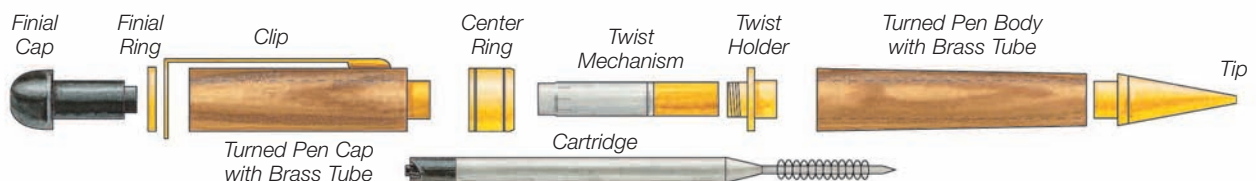




Figure 1: Equip your drill press with a good fence and stop system for this production project. Remember to continually back out the waste as you drill through the blank to prevent splitting.



Figure 2: When turning the pen's elliptical shape, don't get aggressive and trim your bushings. It dulls turning tools and makes for very small pens toward the end of a run. Get close and switch to sandpaper.

Inserting Brass Tubes into Turning Blanks

To get started, select your pen blank material and machine it into 5/8"-square strips if it doesn't come this way already. Crosscut a group of body blanks to 2 $\frac{3}{8}$ " (the exact length of the longer brass tube) and a second group of cap blanks to 1 $\frac{1}{2}$ " (about 1/4" short of the shorter brass tube). Keep the sets together (use a matching number on each set) and be sure your blanks are crosscut perfectly square. This results in a pen with tight joints between the turned material and the fittings.

Make a stop jig for your drill press (see *Figure 1*) and, using an "O" drill bit, drill a hole through all your precut stock. Keep lifting the bit out of the stock to remove waste and be careful—the blank gets warm while drilling.

Before gluing the brass tubes from the pen kit into your

freshly drilled blanks, rough up their surfaces with a little steel wool. A great little tip is to jam one end of each brass tube into a raw potato. The resulting plug keeps glue out of the tube. Apply cyanoacrylate glue to the inside of one end of the blank and quickly push the brass tube into this end, until it is flush with the opposite end. The shorter blank will leave about 1/4" of the brass exposed. This glue dries very quickly, so only apply glue to one blank at a time during the process. Once all the body and cap blanks have brass tubes inserted, remove any excess glue and use a skinny dowel to pop out your potato plugs.

Turning, Sanding and Finishing

Now you're just about ready to move onto the lathe. You'll need a lathe chuck with a Morse taper and a universal mandrel. Mount your bushing parts and first set of blanks on the mandrel (see the *Elevation Drawing* on page 141), finger-tighten the nut and snug up the tail stock.

Get those safety glasses on, lose the long sleeve shirt and choose your weapons. Our author uses a set of Sorby micro tools that work great for small turnings like this. Start with an 8 mm roughing gouge and wrap up with a 6 mm spindle gouge. The Montblanc style features an elliptical taper on both the cap and the body. Keep this taper in mind as you turn the blanks down almost even with the diameter of the bushings (see *Figure 2*), and then sand through the grits until you're flush with the bushings (see *Figure 3*). Apply finish when the blanks are polished smooth; padding lacquer is an easy-to-use option that produces great results. Once you get

QuickTip

Color Your Edges to Sharpen Turning Tools

One way to develop a razor edge on turning tools is to first use a permanent felt-tipped pen to coat the entire cutting edge. This way, you can see how you are progressing while you grind and hone the edge. It's an old machinist's trick that really works.

the hang of the process, you'll be able to mount, turn, sand, finish and assemble a pen in about half an hour.

Final Assembly—Parting Thoughts

Before you start fitting the two halves of your pens together, take time to align the grain. Pens look most attractive if the grain lines up when the pen is capped.

Moderate force is required to press-fit the pen parts and blanks together; once you do, it's just about impossible to separate them. Be sure to develop a system to keep your parts in order. Start with the pen body and press-fit the tip into position, as shown in the *photo* below. Loosen up the clamp and do the same with the unthreaded stem of the twist holder at the other end. Slide the spring onto the ink refill and insert both through the twist holder. Complete the body by screwing the twist mechanism onto the twist holder.

Now switch to the cap assembly and insert the stem of the finial cap through the finial ring and then through the clip's ring. Follow the same clamping procedure to press these pieces onto the cap. Slide the center ring over the exposed brass tube, flush to the shoulder of the pen cap. If the center ring is a little loose, you can carefully glue it into place with a drop or two of cyanoacrylate glue.

Once you complete a production run, a simple padded clamp brings the pens together in short order. Just stay organized during this process.

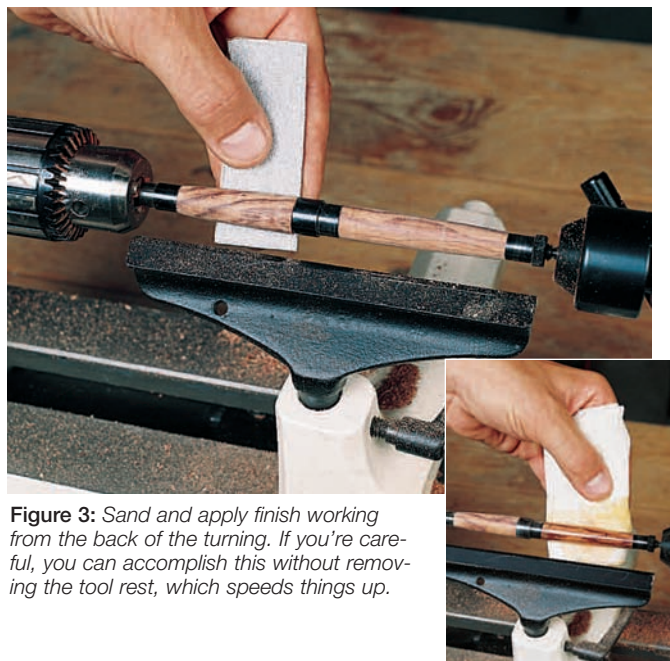


Figure 3: Sand and apply finish working from the back of the turning. If you're careful, you can accomplish this without removing the tool rest, which speeds things up.

Finally, slide the cap over the twist mechanism and sign some lucky relative's card—you're done, at least for the moment. How many more pens you've got to go depends on how many happy relatives you're aiming for this coming holiday season. Have fun!

