

Mike Maffitt  
Canteen Demo  
April 22, 2017

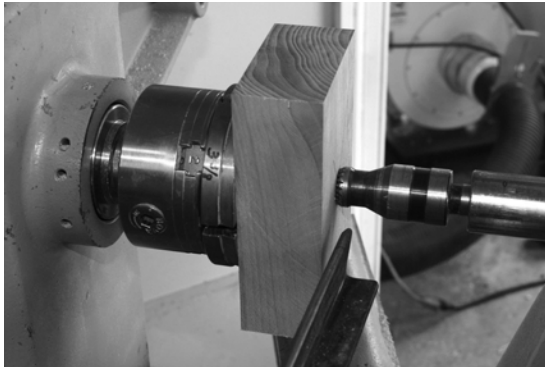
## Turning a Wooden Canteen



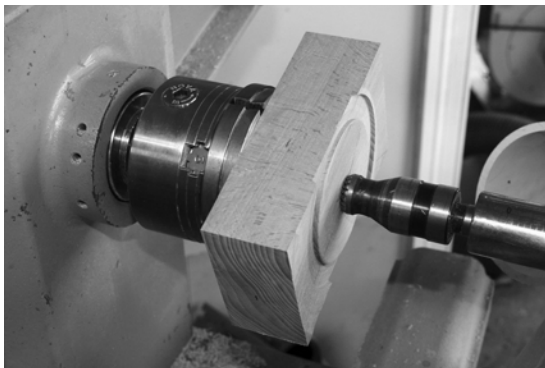
Using common turning techniques you can create this awesome wooden canteen.



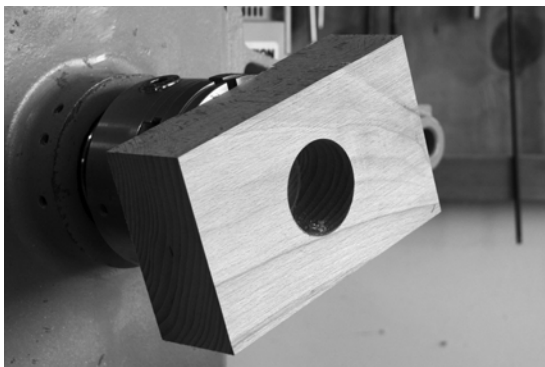
Carefully mark the center of your wooden block. The side to side mark is critical. A blank 4" x 6 1/2" x 2 1/8" is a nice starting size.



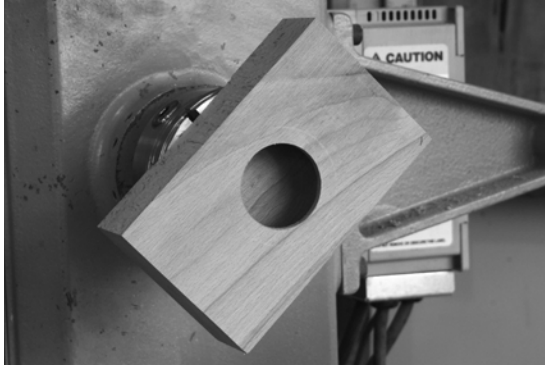
I capture the piece between the chuck and a live spur center.



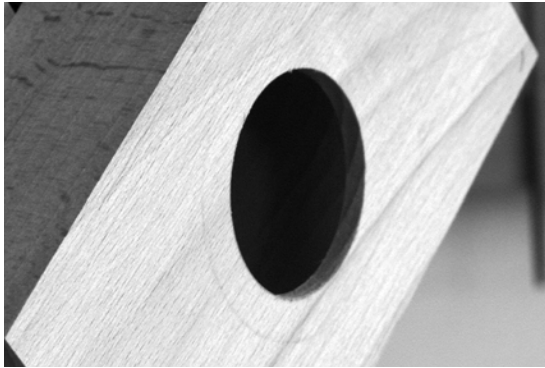
Face the piece off and make a tenon which fits your chuck jaws. Reverse the piece and mount in your chuck using the tenon.



Measure the depth of the piece 3/8" from the base of the tenon. Drill a 1 3/4" hole with a forstner bit to this determined depth. You don't want to push the forstner bit point through the wall of your piece.



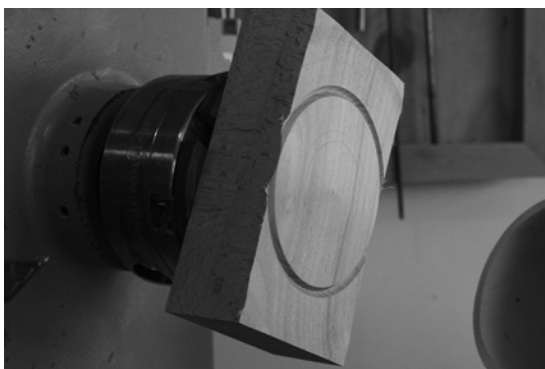
Hollow vessel to a wall thickness of approximately 1/4". This allows for a small variance if your initial center point isn't exactly in the center.



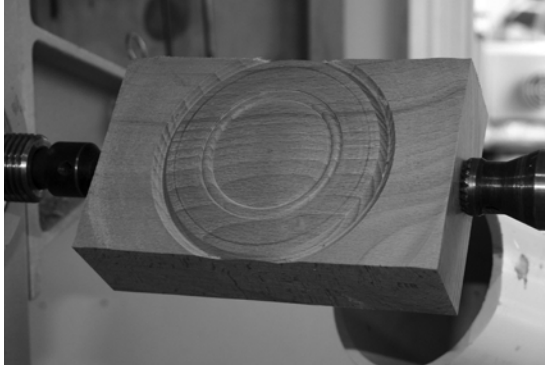
Sand and add any details to this side before moving on. You will not get a chance to come back to it. Here I ran a chatter tool around the opening on this piece.



I use the Smooth Spigot Jaws For The Stronghold Chuck. It is Part No. 3235. This allows for a tight fit to the chuck expanding into the hollowed opening in the blank.



This is the piece mounted to the spigot jaws. Slowly make a V cut until it makes a complete circle. This will become a guide as you round your vessel in later steps between centers. Finish any details now to the surface.



**Mount piece between centers. Dead center is critical in both directions. You can see details on the back that I added in the previous step. I try to match the front and the back details.**



**Begin to shape the outside of your piece. At this point be conscious not to remove too much material from what will be the base. Start creating your curve to the body.**



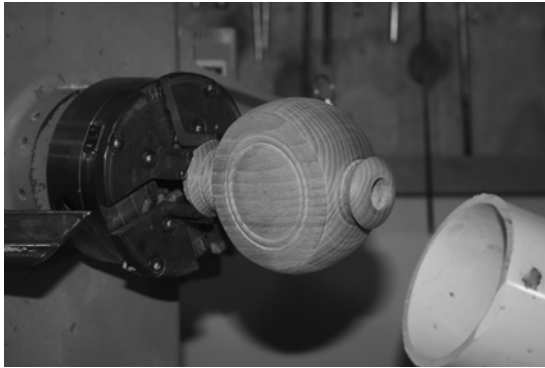
**Continue refining the shape of the body and begin shaping the base and spigot. At this point you want to get the body very close to the finished dimension.**



**Here the body is nicely refined and ready for work on the base and spigot. You can sand the body at this point.**



Shape the base and spigot and get the base prepared with a tenon for mounting to the chuck. There will be an opportunity to work further on the spigot in the next step.



Part off the base and mount via the tenon in your chuck jaws. Drill a 5/8" hole in the spigot. Taper the hole to fit your cork or bung, whichever you intend to use. Sand the spigot and hole.



This is the completed body with a nicely tapered spigot hole ready for the side plate.



Turn a plug sized to fit the side hole in the vessel. Use any complimentary piece of wood you like. This is a great opportunity to use up scraps.



**Finished vessel.**

**Equipment used:**

**1/2" Spindle Gouge**

**3/8" Spindle Gouge**

**3/8" Detail Gouge**

**John Jordan Hollowing Tool**

**Easy Way Hollowing Tool (Cleaning Up"**

**1 3/4" Forstner Bit**

**5/8" Forstner Bit**

**Smooth Spigot Jaws For The Stronghold Chuck. It is Part No. 3235**

**Keyless Jacobs Chuck**

**#6 or #7 cork (Lowe's Hardware Aisle) or turn down a wine cork.**

**Notes:**

**If coated with wax, I would not use a hot beverage in this container.**

**Denser woods will more likely seal better than soft porous woods.**

**Some woods impart coloring or flavors to the liquid stored in it.**

**Experiment with different woods to find a wood that works for your**

**needs.**

### Beeswax sealant:

Mix 1 part by weight beeswax to 1.5 parts by weight olive oil, melt together over medium heat using a pan or double boiler. Don't use your wife's best cookware, (or don't tell her). I have a pan I purchased from Goodwill. Set on low to keep it in a melted state.

Heat the vessel in the microwave for about 10 seconds. I think this makes it more receptive to the wax mixture.

Pour the wax mixture into the vessel using a funnel and move the vessel to coat all inside surfaces.

Pour out the remaining wax mixture and lay the vessel on the plug side to help seal the plug.

Let vessel cool for an hour.

### Pine Resin Sealant:

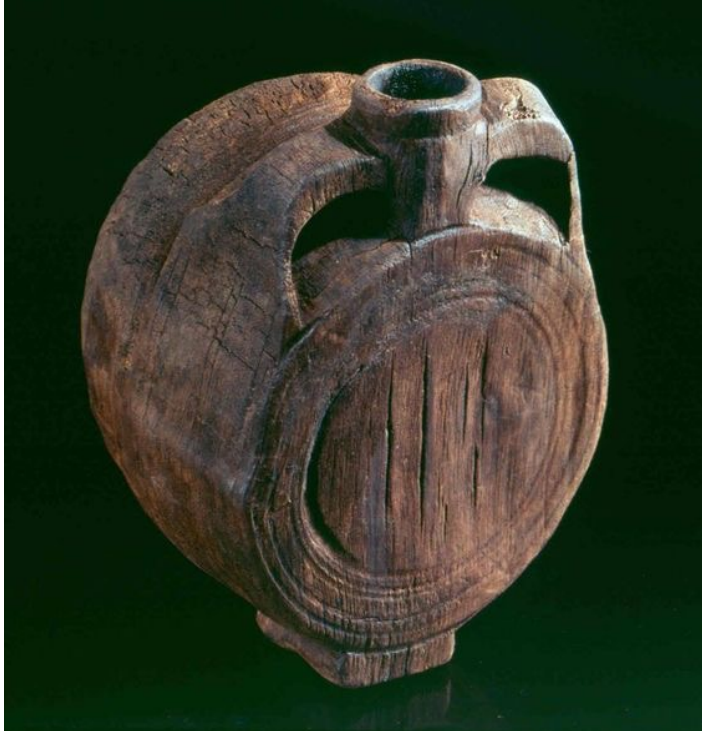
Mix Equal weight of pine resin and denatured alcohol.

Let pine resin desolve in the alcohol.

Pour into the vessel and move vessel to coat all inside surfaces.

Let dry and repeat. I put 4 coats in the vessel.

Very messy if you have a leak!



This is a vessel recovered from a dig site in Germany.

This vessel was dated to the 3rd century A.D. and was found to have the remains of a malt beverage still contained within.

This item was probably turned on a pole lathe or a bow lathe and would have taken a day or more to completely turn.

There is evidence of woodturning that dates back to 1300 years B.C. where in illustrations the Egyptians had developed a two person lathe powered by leather straps.

