



My lathe made with an old 2 x 4. In all it cost about \$1.00 and it works very well. The mandrel drive runs smoothly in the wooden bearings. The copper wheel is made with a penny and is set into the mandrel drive using wax. This is often called a Wax lathe. A small section of broom handle is used for the power drive which is also attached to the mandrel drive with wax. Very simple and it works.



This is an assortment of tool tips I made using the government issued copper penny for some. All the mandrels are made of 1/8" welding rod. The tips are soldered onto the mandrels using silver solder.



The images above and below were made using the copper wheel to grind and polish the grooves. The grit used was traditional emery in grades 200 and micro grit and finished with pumice.

Here below is the lathe used with a simple guide to cut a parallel groove around the inside of the bowl. This is actually a very efficient process. One groove around took about 20 minutes to make a satisfactory groove in this 3.5" diameter bowl shape.



This is the finished piece I made for the workshop. This is a cast bowl, aka slumped. I used a pair of step forms to heat this disk over to slump to this shape. The actual grooving took in total 1.25 hours. However before that I spent about 5 hours grinding and polishing to a pumice finish the final bowl shape. This was all hand grinding. There are still many facets of this ancient grinding work that are unknown such as how they achieved the soft grinding pressure against the bowl. I think wood is a good answer. I used cork and diamond pads for some of it.

