A Simple Cork Lathe for Rodbuilders

by Mike McGuire



An expensive obstacle to rodbuilders who would like to shape their own cork grips is a lathe to do the job. About the the cheapest thing around is from <u>Flex Coat</u>. It costs around \$150 and doesn't have too many other uses. However looking at it, one can see the elements of what is required to do the job: An electric hand drill, a way to hold it, and a bearing arrangement for the other end of the rod. A drill most of us have, so we need a way to hold it and a bearing. Maybe we have those also.

I have a small fold-up work bench offered by Black and Decker called a <u>WorkMate(R)</u>. There are various models. The simplest and cheapest one, around \$35, is adequate for this job and does have a variety of other uses. It's like a sawhorse with two top boards whose spacing is adjusted with cranks at both ends. The drill handle is placed between the boards which are cranked tight to hold it in place. I found this was quite sufficient to hold it, with nothing more needed. The drill needs a means to hold the trigger switch on, because the switch is between the boards. Most drills have a button. The drill is then turned on and off by plugging and

unplugging it, or one could arrange a switch in the line. The rod is attached to the drill by clamping a 1/4" drill in the chuck, padding it up with masking tape to the inside diameter of the rod, and jamming it in. Some more tape around the outside may be needed to hold it if it slips See below for improved method.



The bearing is a simple hardware store item called a "rod end." The swiveling ball part turns with respect to the rest of object. They come in various sizes. Inside diameter of the ball that I use is 7/16". They come in two genders. This one is female thread up inside from the left end in the picture. It has flat sides with make it easy to clamp. Ones with male threads are not so easy to clamp.



Here is a detail of the picture above showing how I have used a couple of pieces of 1x2 and three C-clamps to position the bearing. The free swiveling ball eases the alignment problem. The rod is padded with a good thickness of masking tape and jammed into the ball, which turns with the rod. A little oil to lubricate it will keep it happy and cool.

The reel seat and exposed parts of the rod should be well protected with masking tape before starting. The handle is built up on the rod from cork rings using standard methods described in the rod building literature. I like to use urethane glue because it expands as it sets,

filling up some of the voids in the cork. This allows me to use a more economical grade of cork. I use 60 grit sandpaper for the rough shaping, followed by 100, 220 and finally 400. The way to work is to hold the paper stretched over the cork. Below is my most recent job, a Full Wells style grip for an 8 weight. I have also done a couple of spey rod handles this way with good results, so there is no particular limitation on the length that can be worked. The black



butt cap at the right was also made with this lathe arrangement and is the subject of another <u>article</u>.

Improved Method to Connect Drill to Rod

Above I had recommended using masking tape to connect the drill to the rod. The problem was that it slipped a lot, and by the time the handle was finished, there was quite a gob of tape there. Since then, I have gone to heat shrink tubing and the results are much better. Here's how I do it. I take a quarter inch bolt 2 to 3 inches long and spin three of four nuts up against the head and tighten them so they are jammed together. This gives some "texture" for the shrink tubing to grip on the bolt. Below are pictures of the arrangement for a spey rod handle. I usually use two layers of heat shrink tubing, shrinking it with an electric heat gun.









For a regular fly rod, I shrink onto the reel seat like this. Again, I use two layers of shrink tubing. When it's done, it can actually be unscrewed from the reel seat and reused.