

SHOP BUILT STEADY RESTS FOR THIN TURNING

After the December meeting, I was asked to describe the steady rest that I used to turn a three foot long trembler style Christmas ornament. See top picture at <http://members.tripod.com/jackhanley/20021221/driver.html> Actually, I used three different kinds of shop made steady rests. I have provided drawings and text for each style.

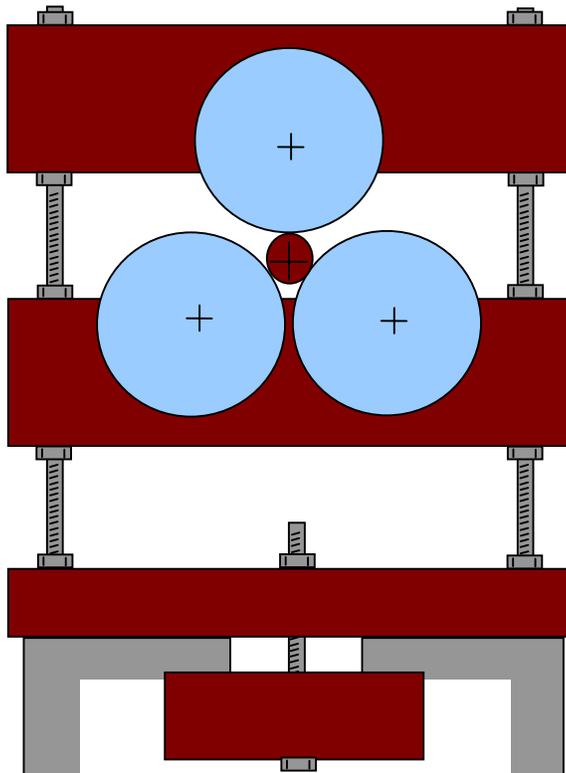
USAGE

I keep the primary steady rest right next to the portion being turned. Of course, the portion which will be turned thin has first been turned round so it runs smoothly in the steady rest rollers. After positioning the steady rest about an inch back from the live center, I turn it down to the finished diameter in half-inch sections. Sand that portion, and then move the steady rest back an inch or so, and repeat the process. After a few inches, or when it begins to whip, I install one of the other steady rests to prevent the whipping. I then continue working back towards the headstock.

PRIMARY STEADY REST

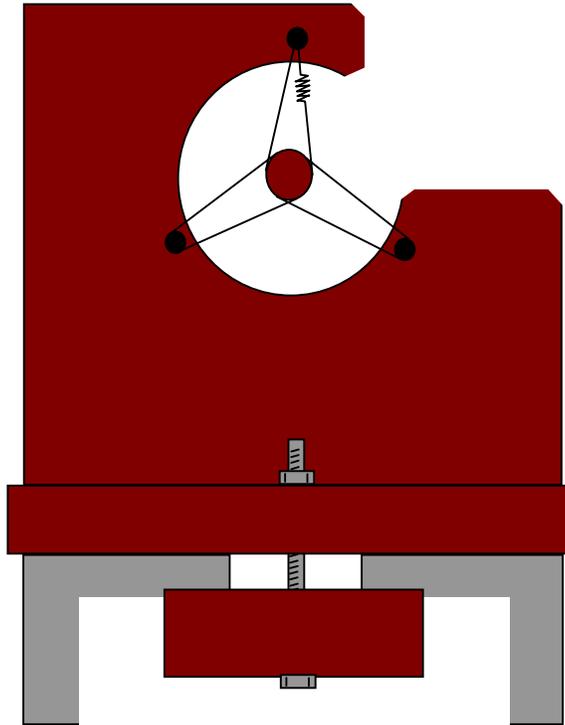
This steady rest is built around three in-line skate wheels taken from a \$10 pair of Goodwill store skates. The base is just a six-inch length of 2x6 with a bolt clamping it to the bed ways. Two sections of all-thread are countersunk in the base and support two 1x2 oak cross pieces that hold the wheels. The original wheel bolts and nuts are used to mount the wheels to the crosspiece. The bottom two wheels are mounted on either side of the vertical centerline, as close as possible without touching. The top wheel is centered.

Improvements would include wing nuts instead of hex nuts and a knob for mounting to the bed ways.



TEMPORARY STEADYREST

This is an easy steady rest to build. It is used to support a finished portion to prevent whipping. It consists of the same flat base with a board screwed to the end at 90 degrees. Hold the vertical board up (plywood is best) and mark the lathe's center point with an "X". Drill a large hole dead center. Cut an access notch to allow installation without removing the tailstock. Then install three screws around the circle but don't run them down all the way. Tie some string (waxed linen thread is best) to a small light spring at the 12:00 position. Run it under the work and around the screw at the 8:00 position, then over the work and around the 4:00 screw, and then back under the work and up to wrap around the starting screw. The tension should be just enough to stretch the spring and keep a light tension on the string.



QUICK STEADY REST

An even quicker steady rest consists of the same flat base with a board screwed to the end at 90 degrees. Hold the vertical board up to mark the lathe's center point with an "X". Scribe a horizontal line through the center point and cut. Then, reattach it using a couple of screws down through the top. Drill a hole right on the "X". The hole should be about a 1/16 of an inch larger than the diameter of the work. Protect the work with a layer of masking tape.

