

# The Steady Rest

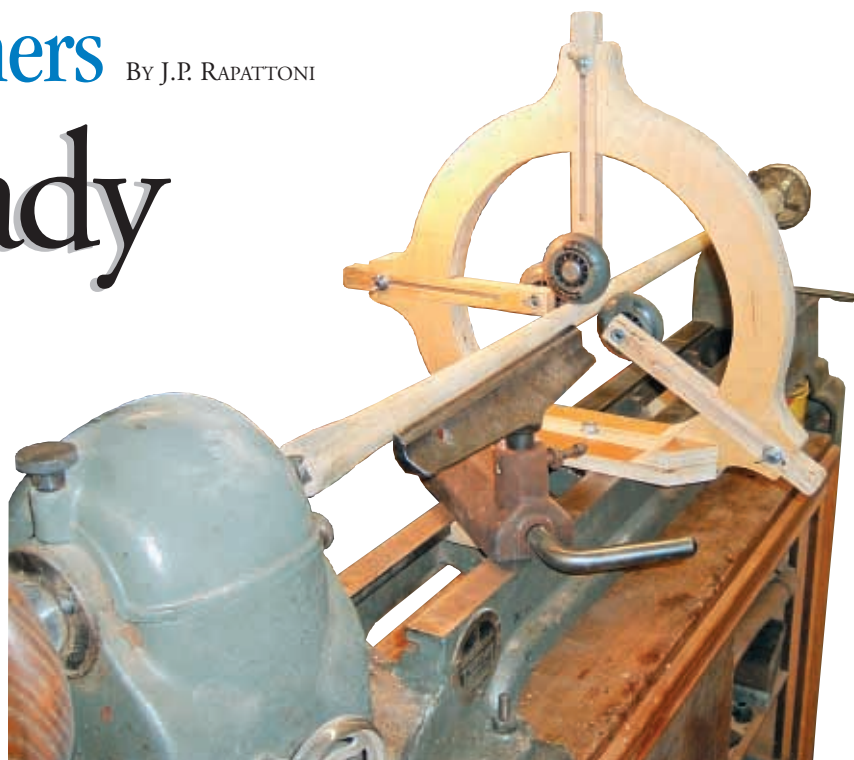
To achieve the very best results in your turning, vibration must be kept to a minimum. Vibration is problematic for any turning, but it is particularly problematic when turning long spindles, or hollowing out deep vessels. To reduce vibration, you can build a support for your work as you turn.

A steady rest is just such a support. It is an excellent accessory for reducing stock vibration.

Extend the wheels all the way out, and you can support the outside of a vessel as large as 11" in diameter. Turn the top wheel to face in the opposite direction, and you can support a spindle as small as 1/4" diameter.

There are several steady rests available commercially, but I like to make my own.

Cut the three sliders to finished size from a piece of maple (or similar hardwood).



Put them aside for later use. Next, make two identical rings (see illustration), using good quality plywood, Baltic birch or 'medium density overlay'.

Mark the entire layout on one piece of 3/4" x 20" x 17" material. Make sure you include the 1" cut-out for the slider slot on your layout piece (for later reference). Fasten this to a second piece of plywood using two-sided tape.

Cut the outside profile of both rings at the

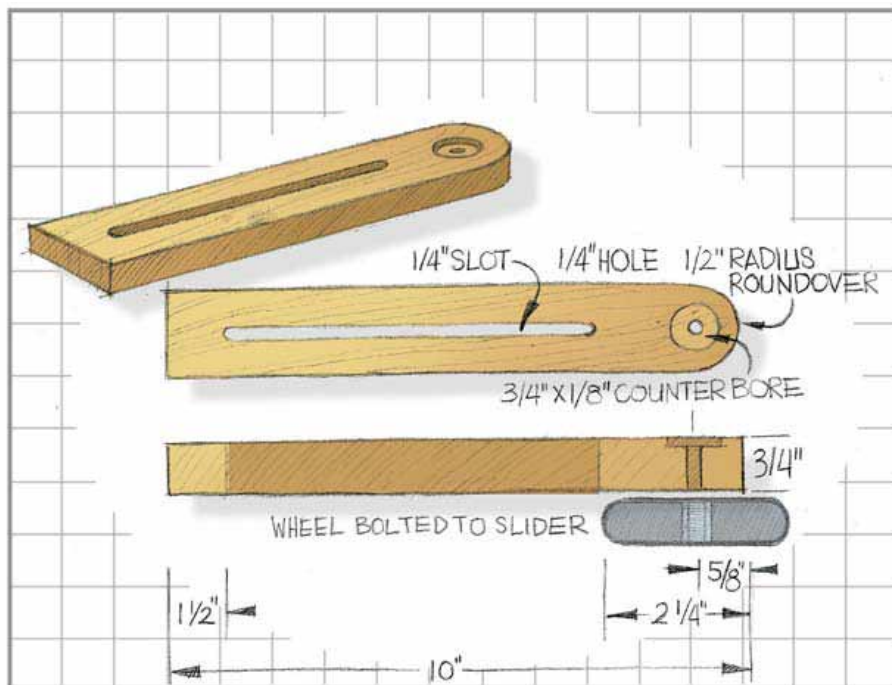
same time. Drill an access hole near the inside layout line, and remove the center portion with a jigsaw.

On the layout piece only, cut out each of the three 1" slider slots to the inside of the line. Assemble the three pieces with the sliders, and place on top of the second ring. Check the fit.

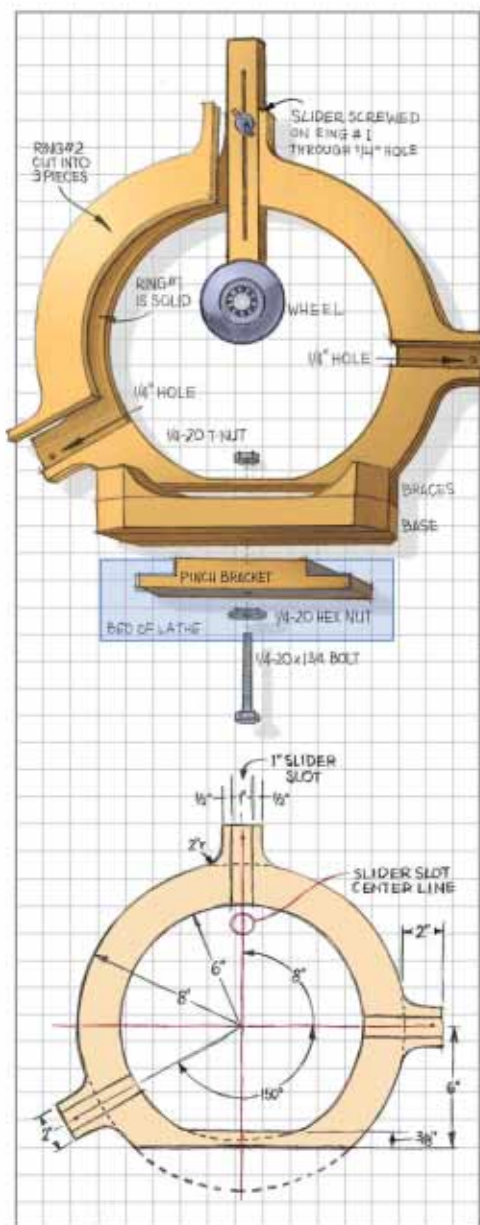
Use a belt sander, and sand the sides of the 1" slots to the line, checking the fit often. All the pieces should align with the sliders and the edges of the rings. Once you're satisfied with the fit, glue the three parts of ring 1 (the layout piece) to ring 2. Use the sliders to ensure proper spacing of the slider slot. Clamp the two rings together, remove the sliders and clean up any excess glue.

Once the glue has cured, sand all the edges smooth. Drill and counter bore the holes for the "T" nuts with a 3/4" x 1/8" counter bore bit. Use a router to mill the slots in the sliders. Drill and counter bore for the "T" nuts. Before milling the slot in the base, check the thickness of your plywood and size the slot to ensure a snug fit.

Mill the parts for the base and braces from the scrap removed from the rings. To make the arch on the bottom brace, cut the parts square, hold them in place, and mark the arch using the rings as a guide. Cut the arch with a bandsaw or jigsaw. You will have to size the lower 'pinch bracket' to suit your lathe. The wheels I used are from



Sliders



## MATERIALS LIST

- 2 Plywood  
3/4" x 20" x 17"
- 3 Maple (or other hardwood)  
1" x 3/4" x 10"
- 1 Base  
3/4" x 11 1/2" x 4 1/2"
- 4 Base braces  
3/4" x 1 1/2" x 3 1/4"
- 1 Pinch bracket  
Sized to fit your lathe

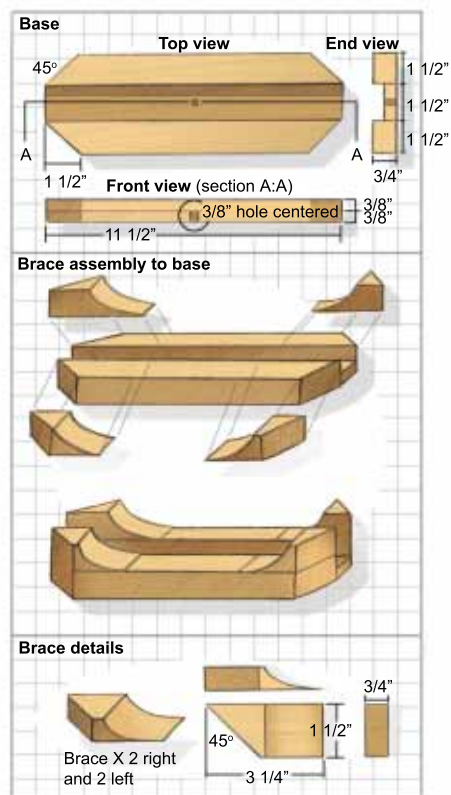
## HARDWARE LIST

- 3 Wing screws  
1 1/2" x 1/4" 20 tpi
- 6 T-nuts  
1/4" 20 tpi
- 6 Flat washers  
1/4"
- 3 Hex nuts  
1/4" 20 tpi
- 3 Hex head bolts  
1 3/4" x 1/4" 20 tpi
- 1 Hex bolt with nut  
Sized for your lathe bed

### Note

This design is for a 12" lathe. For a different sized lathe make the inner radius 1/2 the lathe capacity (i.e. 5" for a 10" lathe). Add 2" to that for the outside radius. Adjust the width of the base and the length of the sliders to suit.

**Steadyrest Exploded**



### Steadyrest Base

a set of inline skates that I picked up at a yard sale. If you buy them second hand make sure you check the bearings for play. If you prefer, you can purchase new wheels from a sports supply store.

Assemble the base and braces (as shown). To use the jig, bolt it to the lathe, adjust the top wheel first, then the back wheel so they just touch the work piece. Then, adjust the front wheel to exert only slight pressure on the work piece.

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# lettersfrom

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French, I used a free on-line translator. If you ever need to do a quick translation, check it out: <http://babelfish.altavista.digital.com> Bonne chance!)

### Hi:

I have checked through your internet site but could not find the answer I was looking for.

I have a coffee table that has a couple scratches on it, approx. 4" long. I don't know if it is real wood, I kind of think it is the photo finish type. I am wondering how I would go about fixing it. I was wondering if

there is a product out there that could be poured in the scratch just to make it less noticeable. I really don't want to have to sand it and then try to refinish it because I think I will make a worse mess than just leaving it alone.

**NEW**

The design on the table is the type that looks like it has different wood grain going towards the middle and then there is an outer edge about 1 1/2" from the outside that goes all the way around the table in another type of wood grain. I also have quite a large gouge in the edge of the table.

I hope you have some suggestions for me.  
**Thanks, Deanna**