Southern Turners Project Sheet

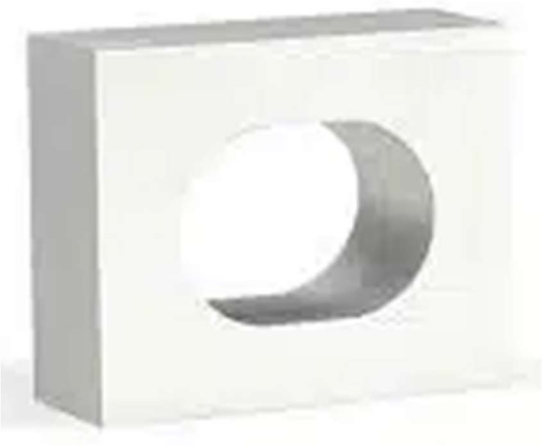
Baby Rattle

This project explains one of many ways to make a baby's rattle. When undertaking this project, while being mindful of your own safety, consideration also needs to be given to the child using the rattle.

Things to keep in mind include:

- Timber toxicity - only use known safe species.
- Choke hazards, please see below regulations, but also avoid fragile/splintery timber to minimise risk of the body fracturing.
- Finish toxicity (if in doubt, leave it unfinished).
- Keep everything smooth, avoid any sharp edges.
- Keep it small and light.

Safety regulations:

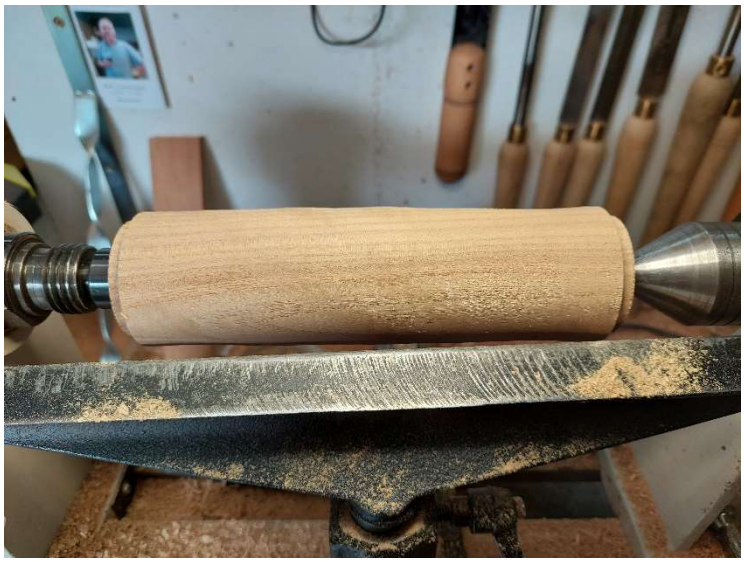


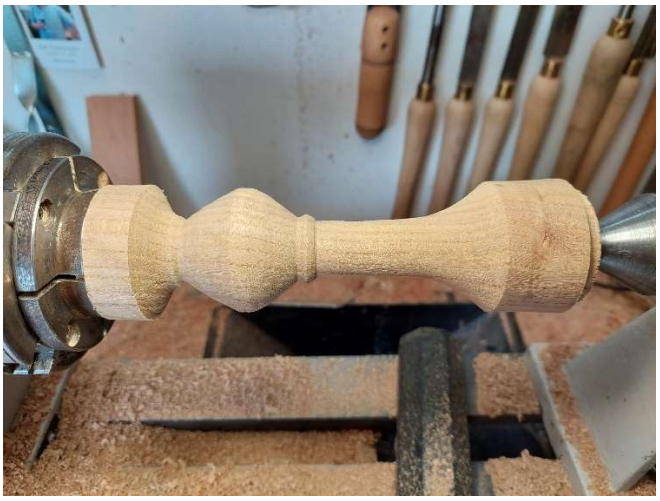
The Australian standard is that no part of a rattle can go through an impaction gauge designed to test for shape and size of such toys. It must be constructed such that no part can protrude through the test gauge. This illustration depicts a test gauge, that's used to identify a part that is of such a size and shape that it presents a throat impaction to young children. The cut-out section has a total length of 50mm, and width of 35mm. The half-circles at each end of the rectangle have a radius of 17.5mm, and the central rectangle of the cut-out is 15mm in length, and 35mm in width.

Note: With captive ring rattles, the rings tend to be fragile, and if broken are not likely to meet above guidelines thereby presenting a choking hazard.

Now on to the making:

Select a spindle blank around 200 mm long and 50-60 mm square. Mount between centres and use a roughing gouge to reduce the blank to a cylinder. Create a tenon on both ends of the blank to suit your chuck.

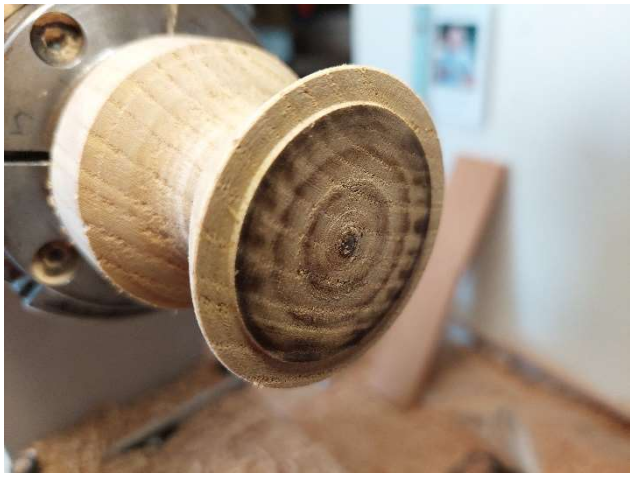


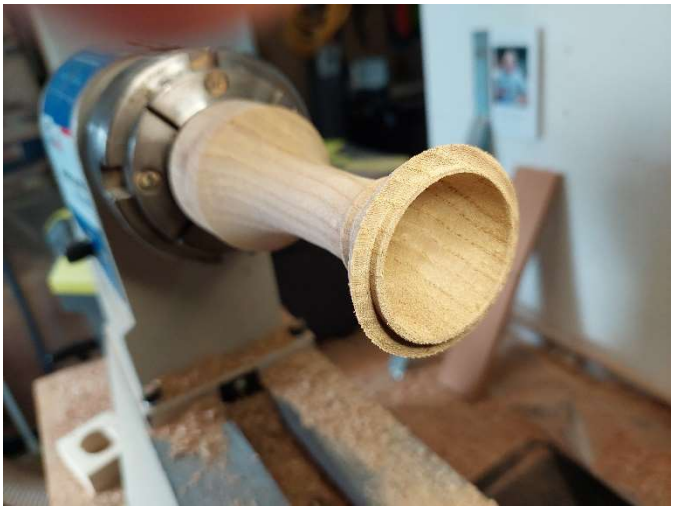


Mount in the chuck with tailstock support. Turn a rough shape of the finished rattle to make hollowing and shaping easier later on, keeping the top of the rattle at the headstock end. When roughing out the shape of the rattle head, allow for removal of the mid piece when the two parts are separated. Don't go too thin on the handle yet, as we'll be re-mounting from that end and need stability.

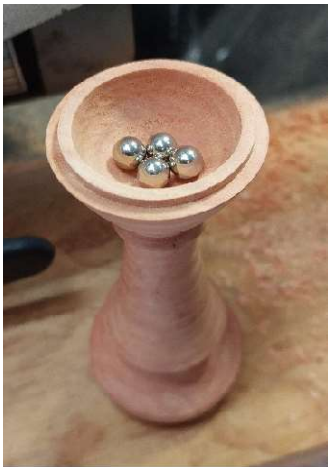
Part off the top section of the rattle. Leave a small remaining tenon connected to the headstock end that will help in sizing a snug fit for joining the two hollowed parts together. Keep this parting as thin as possible to help with grain alignment. The depth from the edge of this tenon determines how much material can be removed in final shaping, and wall thickness.

Hollow the top part of the rattle to 3-4 mm thickness, using the tenon to determine overall size. Test fit with the base section as you go to ensure a snug fit. Going too thin makes the rattle fragile, but too thick dulls the sound. The interior doesn't need to be perfect, but should be somewhat smooth, as too rough dulls the sound.



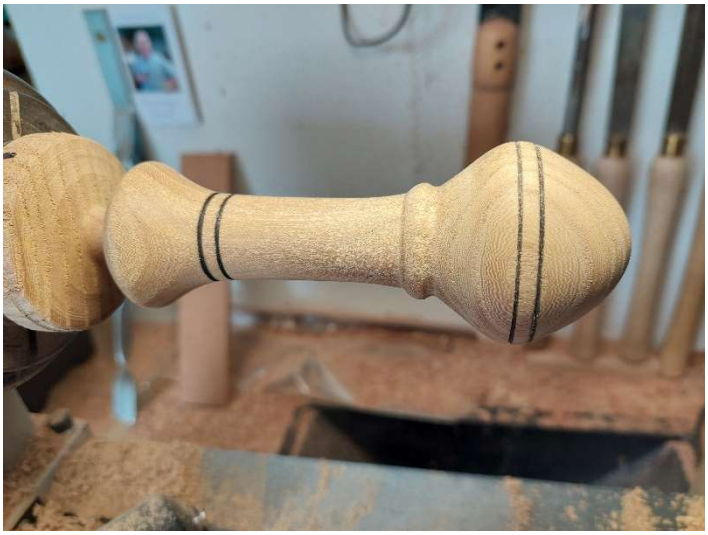


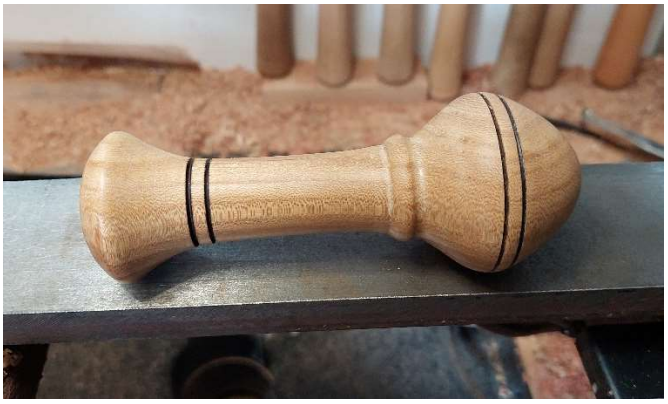
Remove the top part from the chuck and fit the base piece. Hollow this part to create the other half of the rattle chamber. Once satisfied with shape, it's time to select and test the rattle medium. Remove the base from the chuck, insert your preferred medium and while holding, or taping, both halves together give it a shake. Experiment with the number and type of medium to get the desired result, keeping in mind mediums like pasta/split peas/seeds will likely break down over time. This is also one of those times that often 'less is more', too much medium often restricts movement/sound. Keep in mind when choosing your medium, that if the rattle were ever broken, the contents shouldn't pose a health/choking hazard.



When you are satisfied with the sound, ensure your medium is in the base of your rattle, and glue the two halves together. Be careful to keep the glue outside the tenon, so any squeeze out will move away from the chamber, ensuring the glue doesn't interfere with the medium. Be mindful of the grain alignment, and also ensure there is glue where the face grain meets (not just end grain to end grain).

Once the glue has cured, re-mount and continue shaping with the handle of the rattle in the chuck, and the head supported by the tailstock. Concentrate on the head of the rattle at this time, keeping the handle relatively thick to provide support. Be very careful not to turn through the side of the chamber, as you don't want to meet the contents at speed. Beading, or burn lines can be incorporated at this point to disguise the join. Continue shaping of the handle, leaving enough support in the chuck for sanding, before parting off the head.





Complete sanding, and apply your finish of choice before parting off. Hand sand the end of the handle where it was parted off, and job done!