Baby rattle with captive rings

Important considerations:

- A baby rattle will almost certainly be chewed on by a young child, therefore …
  - Avoid wood and/or finish that is toxic or can induce an allergic reaction
  - Avoid easily broken details
  - Avoid pokey ends

Key technique: UNDERCUTTING

Tools for undercutting:

- Skew
- Gouge
- Parting tool
- Ring cutting tool

A ring cutting tool allows fairly narrow relief cuts to the either side of the ring to minimize "wasted" wood. This can be important for some projects, e.g., baby rattle, but not so important for other projects, e.g., goblet with captive ring.

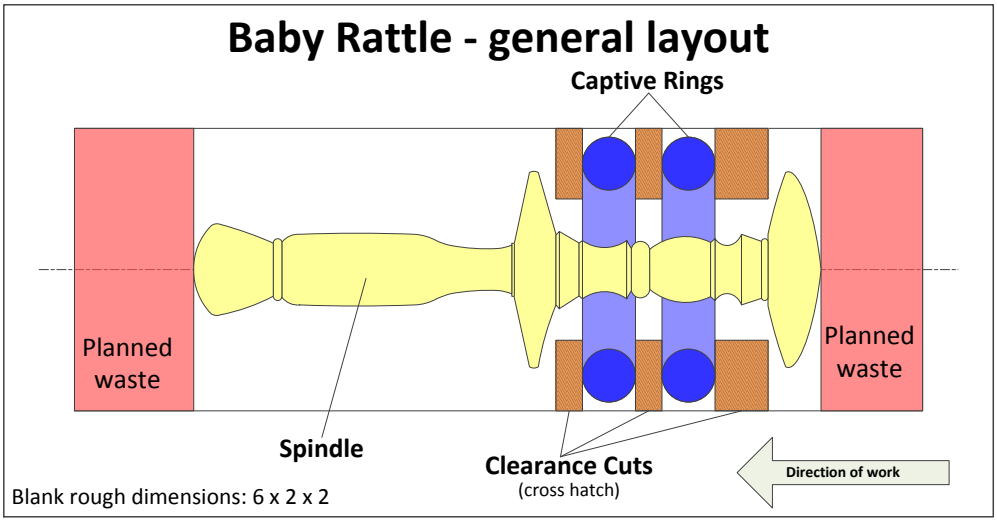
Commercial Ring Cutting tools

Crown & Hamlet	Sorby	Penn State	WoodRiver
			

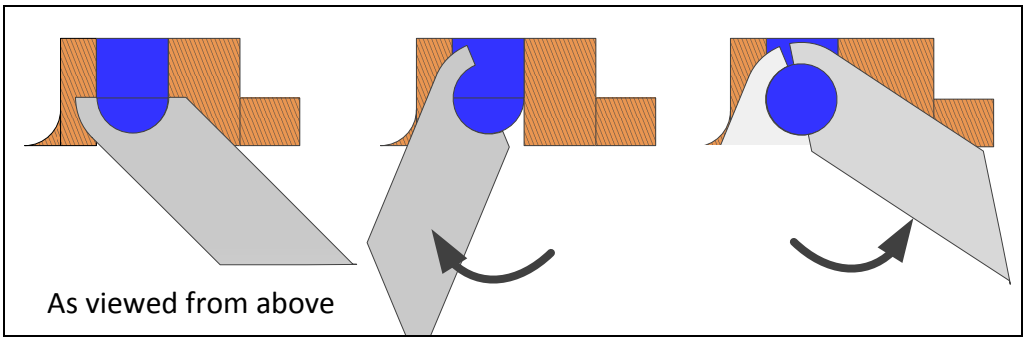
Ring cutting tools

- Cuts by scraping
- Cutting action & resulting finish are similar to that of a parting tool
- Can be used as a profile cutter (to get a ring with a round cross-section)
- Sharpen by honing the bevel

General Layout



Cutting the ring



Ring cutting tips:

- For a round cross-section to the ring, adjust the tool rest so that the ring cutting tool is aimed at the centerline of the spindle. Pointing above or below will cause oval rings, and could cause a catch.
- Cut the outer "bead" of the ring with your favorite tool, e.g., gouge or skew.
- With the lathe stopped, make sure the bead fits within the arc of the ring cutting tool.
- When cutting the ring, apply pressure to keep the arc of the cutting tool pressed against the bead, AND press downward on the tool rest.
- Note: the clearance cuts allow space for the ring cutting tool as the tool pivots around the ring without binding.
- When cutting the first ring, you can get a bit more clearance by rounding part of the second ring.
- The spindle under the rings can be shaped as a dowel (somewhat difficult and uninteresting) or with beads, coves tapers and other spindle turning shapes.
- With lathe stopped, the rings can be sanded by hand. There is plenty of space under the ring for sanding, especially after shaping the spindle under the rings.