MY METHOD FOR TURNING A CAPTIVE RING BABY RATTLE

I start out with a Sugar Maple stock which I get from a supplier in Maine off E-Bay. The stock is already rough turned and is 7 inches in length and a diameter of 2 inches. I use sugar maple because it is a tightly grained wood with no harmful substances which could harm a baby and doesn't have a tendency to break or splinter easily.

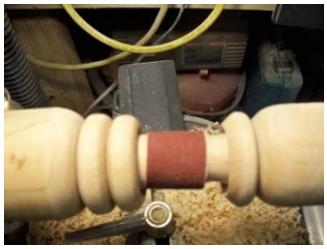
The first step I do is to find the center of the stock using a center finder, pencil and a spring tool punch.

Next I mount the stock in my SS and layout where the captive rings will be. I measure 6 inches which is from the material outside the chuck jaws which takes ½" and then ½" from the end on the tail stock live center end and rough them out using a parting tool to define where they will be. Then I find the center of the stock which is 3" from each end and mark out my center ring on each side of this line and then mark the other two rings on each side of the center one as evenly as possible. I use the parting tool to rough them out. The chisels I use for this project are the parting tool, 3/8" & 1" gouge that came with my Shopsmith. The captive ring tool is from Sorby as well as the skew. I like this particular skew because it is oval shaped instead of rectangle shaped which makes it easy to maneuver without getting catches.

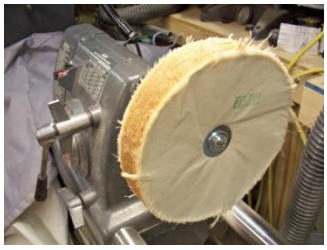
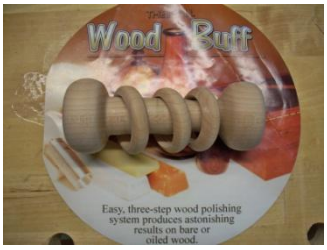
Once I have them roughed out to a depth I need, I will round them using the 3/8" gouge then smooth them with the skew and then sand them to a desired finish. The next step is to undercut them with the captive ring chisel from Sorby. I have found that this particular chisel is user friendly and I find it easier to use compared to other captive ring chisels.

From this stage I next undercut the other side of the captive rings and free them from the stock.


After the captive rings are free then I clean up the spindle portion of the rattle with a 3/8 gouge, then sand it smooth. Next I will use double sided tape and wrap a strip of sandpaper around the spindle and sand the inside of the captive rings by holding them in place with my hand over this sandpaper and get them as smooth as possible.



At this point the captive rings and spindle portion of the rattle are done. I now turn each end of the rattle to its desired shape using the 3/8" gouge and skew, and then sand them smooth. Once the rattle is to my satisfaction then I part off the tailstock end down to about a half inch diameter and do the same on the chuck end using the parting tool. Then I use a flush cutting saw to remove the final material and remove it for the finishing step. I use a sheet sander to clean up the ends where I cut the rattle loose and then any hand sanding that may be needed. I use the Beal Buffing System to finish the rattle.

The picture above is the Tripoli Wheel, the rattle before buffing and then after buffing. It uses three steps, and each step has its own wheel, first using Tripoli wax, then white diamond wax and finally the finishing buffing of caroba wax, which is a natural wax that will not cause any problems with the babies putting the rattle in their mouths. My finished rattles are 6" long and a diameter of around 1.75" One important item is to make sure to follow the federal guidelines in regards to the diameter of the rattle which can be no smaller than 1.68". The following is a link to these guidelines.

http://www.cpsc.gov/BUSINFO/regsumrattle.pdf