## Baby Rattle Presentation By Bill Loitz 1/8/2012



Materials:
2 x 2 x 6 hardwood blank
BBs (18 per rattle)
Thick CA Glue

Start with a 2x2x6 (1/3/4 would work). Put the best grain or figure at the head stock between centers and turn to about 1-3/4 diameter. Make a tenon at the tailstock end to fit your chuck jaws. Chuck on the tenon with the live center in the mark left from the drive spur. Turn about the last 3" to about 1-5/8" diameter. Make a tenon about 1" diameter by 3/32 long on the tailstock end that is perfectly square. Using a thin parting tool, part off a 1-1/4" long piece from the end of the piece.

This will be the top of the rattle. Now make a good-fitting mortise in the end of the piece to receive the 1" tenon that you just made. Reverse the top piece and attach to the main body with hot melt glue in about 4 places.



True the OD if needed and make a  $1/16 \times 1/16$  tenon on the end of the piece. Now hollow out a semi-spherical bowl about 3/4 to 7/8 deep in the end, leaving a 3/32 to 1/8 wall at the rim.



Remove the piece from the main body and set aside. Clean up the face of the main body and cut a mortise to accept the  $1/16 \times 1/16$  tenon on the top piece. Use the live center in the tailstock to hold the top piece in place and turn the outside shape of the top, removing the top periodically to check your wall thickness. Leave a small nub on the end where the center is. When finished set the top aside.

Hollow the bowl shape in the end of the main body the same as you did the top. Leave a 3/32 to 1/8 wall thickness. Reinstall the top and hold with the live center while you turn the outside of the main body and clean up the joint line if needed. Leave the handle about 3/4" diameter for stability. Once you are happy with the wall thickness and the outside shape, align the grain on the two pieces and make a pencil mark to assist in gluing them together. Leave the main part in the chuck and remove the chuck from the lathe. Set the chuck on the bench and place about 18 BBs in the bowl. Put a bead of thick CA glue on the tenon of the top, try to keep the glue out of the inside of the bowl. Assemble the two pieces with the grain aligned.



Reinstall the chuck on the lathe and support the piece with the live center. Sand the rattle to final grit and then make 3 small V cuts about 3/16 apart to guide the wire when burning (the middle v is on the glue line). Burn the 3 lines with a wire. Pull the tailstock back and carefully remove the nub from the end of the piece. Sand as required to remove any tool marks.

Install a large V cup on the live center and bring the tailstock in to support the end of the piece. Turn the rest of the handle to about 2" long by 5/16" diameter, leaving a bead on the end of the handle. Sand the handle and the ball as needed.



Finish cutting the bead end off of the waste stock. Clean up the end of the handle and sand by hand to remove the last little bit.

I finish the rattle with either food-safe salad bowl finish or shellac. I usually write the baby's name and date of birth, along with my signature, between 2 of the burnt lines.