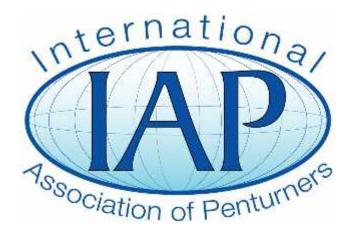
How to Turn a Wooden Egg

By Alex Elias (Alxe24) January 2008

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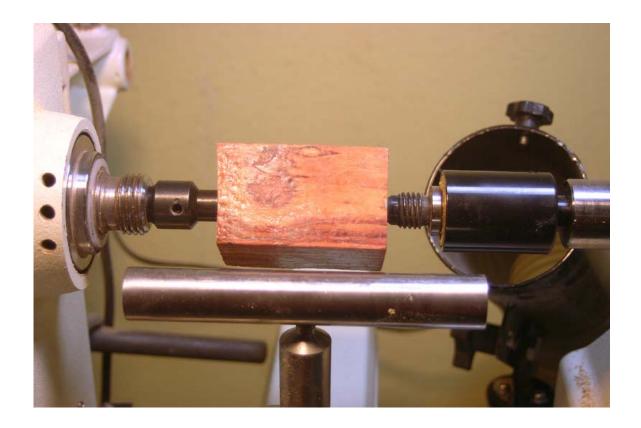
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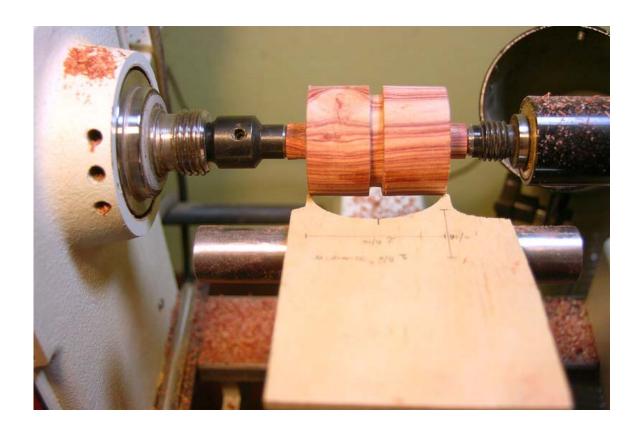
This tutorial will show, step by step, the process for turning a life-sized wooden egg, how to make the templates needed to get a consistent size and shape, and how to make a Wooden Egg Chuck (hereinafter referred to as an Egg Chuck) to hold the egg concentrically while turning the ends.

The eggs are roughly 1-5/8"(D) by 2-3/8"(L), which is about life-size depending on the egg. The one dimension that should remain constant for all eggs is the diameter since the interior diameter of the Egg Chuck as described herein is about 1-5/8". It has some latitude either way; but not a great deal, so a standard diameter is important.

The first step is to cut a blank to fit the size of the project and turn it round between centers. This blank is 2" x 2" x 3-1/4".



Once the blank is round, mark a line on the widest part of the egg and at both ends. With a parting tool turn the centerline close to the final diameter and turn down the waste at the ends. Mark the centerline again with a pencil and use it as an aid to align the template later. It is a lot easier to make a few progressive templates with the contour of the egg. This will save a lot of time getting to the right shape. I suggest four (4) working templates and one master template. The working templates are as follows: one for each end and two for the center. The center templates are one with the partial shape of the center top and the other close to the full profile; but, with an allowance for the nubs needed for turning. The fifth template or master template is a full profile template and can be used for layout of the original lines and checking the finished profile.



Once happy with the look, sand and finish the egg. Don't part off the ends, yet, since they are going to aid in getting the egg centered and running true when mounted in the Egg Chuck.



Mount the Egg Chuck on your lathe and put the egg inside. (If the fit is a bit loose, wrap a paper towel around the egg.) Bring up the tailstock and position the point of the live center on the dimple. Lock the tailstock in place and push the egg against the live center while the Egg Chuck is still semi-loose. (Don't use the tailstock spindle to make the adjustments since the egg will be pushed into the Egg Chuck.) Then tighten the hose clamps. (I install the clamp heads opposite to each other to keep the Egg Chuck balanced and the pressure even.) Check the end to be sure it runs true and then turn the first end to shape.

MAKE SURE THE HOSE CLAMPS CLEAR THE TOOL REST AND KEEP YOUR HANDS FAR FROM THEM. THOSE CLAMPS ARE VERY UNFORGIVING OF YOUR FINGERS.

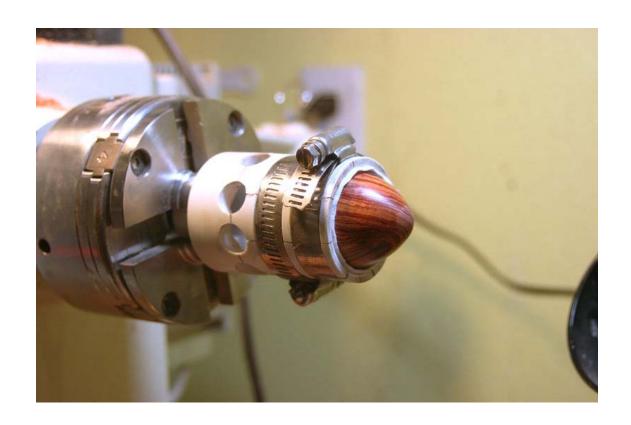


When one end is completed, sand and finish it.



Then turn the egg around and repeat the process at the other end.





NOTE: I JUST FLIPPED THE CLAMPS OPPOSITE TO THE WAY THEY ARE SHOWN IN MOST PICTURES SO THAT THE FREE ENDS OF THE CLAMPS FACE AWAY FROM THE DIRECTION OF ROTATION FOR AN EXTRA MARGIN OF SAFETY. BELOW IS A PICTURE OF THE PREFERRED ORIENTATION FOR THE HOSE CLAMPS.



EDITOR'S NOTE: FOR EXTRA SAFETY IT MIGHT BE WISE TO USE A PROTECTIVE COVERING OVER THE HOSE CLAMP HEADS. A WRAP OF DUCT TAPE IS PROBABLY THE EASIEST SOLUTION; BUT REMOVING IT AND REAPPLYING IT SEVERAL TIMES DURING THE TURNING OF AN EGG MIGHT BE SOMEWHAT INCONVENIENT. USING A 2" SECTION OF BICYCLE INNERTUBE WOULD PROBABLY WORK IF YOU HAVE AN OLD ONE LYING AROUND AND ONE OF THOSE WRIST SWEAT BANDS THAT TENNIS PLAYERS USE COULD BE A SOLUTION, TOO.

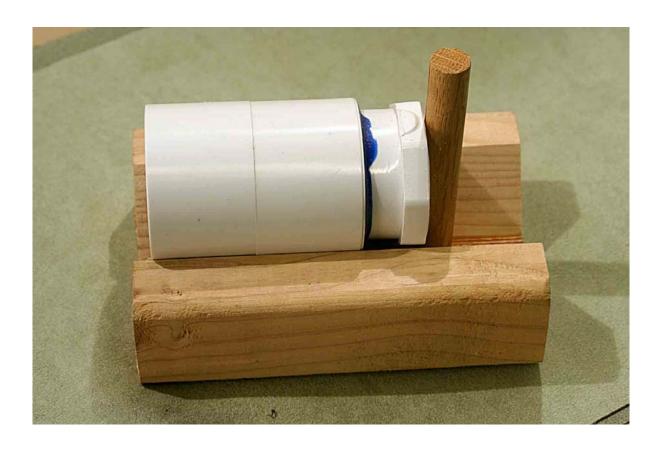
After the effort, comes the reward. This egg will be buffed in a few days to give a nice shine and then once more for the collection. I normally sand them up to 800 grit depending upon the wood. If it's light in color, I stop at 400 to 600 and with a dark one I would sand to 1500. I chose BLO to finish these eggs since they are not handled very much; but any finishing oil should work or you could even skip a finish altogether depending upon the type of wood.

After a few days I buffed them with the Beall 3 on 1 buffing system using Tripoli, White Diamonds and Carnuba wax. If I were selling them, I would consider lacquer or another more durable finish.



Here are a few pictures of the Wooden Egg Chuck. The design came from an article by Dick Sing. It is made with a 1-1/4" PVC coupling (Lasco #429-012) and a 1-1/4" reducer bushing (Lasco #438-167) glued in one end. (Leave 3/4" of the reducer bushing exposed.) I purchased the PVC fittings at Lowe's and their stock numbers are 23854 and 23914. Put the open end in your scroll chuck and turn the end with the reducer bushing round. Then turn the assembly around and clean up the inside and outside coupling if it does not run true. Cut two shallow grooves to accept the 2" x 1/2" hose clamps. Then make a registration mark on the Egg Chuck. The #1 marked on the Egg Chuck corresponds to the #1 jaw of the scroll chuck. This way I can make sure the Egg Chuck runs true every time. Using a V-block, drill eight 1/2" holes uniformly spaced around the circumference of the Egg Chuck and then cut slots as shown. The centers of the holes should be about 7/8" from the end of the coupling. This will give the Egg Chuck some flexibility allowing it to act like a collet chuck.

Note: If you want to make bigger eggs or smaller eggs, you can make chucks using larger or smaller couplings and reducer bushings as desired.

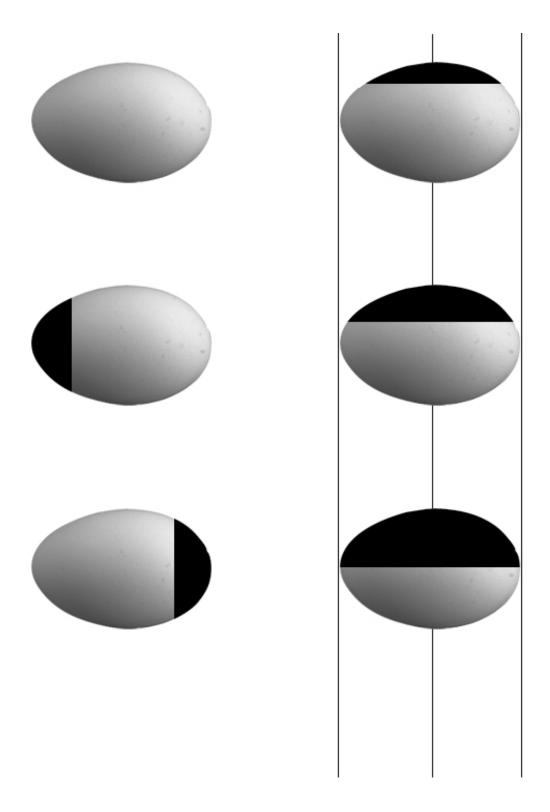






NOTE; I INSTALL THE CLAMP HEADS 180° TO EACH OTHER (RATHER THAN AS SHOWN) TO KEEP THE EGG CHUCK BALANCED AND THE PRESSURE EVEN.

This is an egg shape I happen to like so I photographed it and resized it to fit the Egg Chuck. The black portions represent the templates I've made to aid in turning. (If this page is printed, the eggs should be the correct scale to make life-size templates. The 3 lines are to assist with the alignment when making the templates.)



Here is a picture of the new set of templates and a new egg made with them. Make sure you mark the center and which end is which so they can be positioned accurately every time.



Even if the same template is used every time and careful attention is paid to every egg, it takes just a small shaving here and there to make an egg look very different from a neighboring one. One sixteenth inch (1/16) more or less on the curve makes a big difference and that is one of the great parts about making eggs.

Have fun turning and try as many different woods as you can.

Now, it is production time!

