Eggception Project Step-by-step

by Michael Anderson

1. If starting with a non-round blank, round it between centers. Turn a tenon on one end to fit standard chuck jaws (50mm).

2. Place your blank in the chuck, and turn the top of the egg to completion on the tailstock side. Begin shaping the bottom of the egg as well.

3. Turn a small bowl in a scrap piece of wood to create a glue chuck. This should fit the top curve of the egg. Turn an extra channel just outside of the dish. This will allow a bit more surface area for glue to contact the egg. Be sure to soften any hard edges, as these could mark your egg.

4. Place the top of the egg in the glue chuck's bowl, using the center point (and a live/cone center) on the tenon end to align the egg. Place hot melt glue around the egg in the channel to secure the egg to the glue chuck.

5. Once the glue has solidified, turn off the tenon and shape the bottom of the egg. This should be in the shape of a half-sphere.

6. Drill a ½" diameter recess in the bottom of the egg to fit a magnet. Drill deep enough so that the magnet sits just below the surface of the egg.

7. Remove the egg from the glue chuck carefully using a chisel. If needed, denatured alcohol can soften the glue. Turn away any excess glue that remains on the glue chuck, and turn a slightly wider bowl than before. This bowl will fit the curve of the egg as it sits on an angle. Turn a small channel around the new bowl.

8. Cover the drilled hole on the bottom the egg with a piece of tape, and then glue the egg into the glue chuck bowl at a ~40° angle (relative to the glue chuck). Use tailstock support to secure the egg while the glue solidifies.

9. Begin turning away the face of the egg. Aim for a sweeping curve that extends just in front of the apex of the egg to about a third from the bottom of the egg. Turn away the egg as if you were turn a parabolic box interior.

10. Continue turning until you are satisfied with the amount of material removed from the egg. If desired, add embellishments to the interior (for example, that will surround the cavity you will soon create).

11. Determine the diameter of the cavity you want to create. Note, this diameter will be the size of the opening, but the cavity will be wider on the interior. A good rule of thumb is to make the diameter ~60% as wide as the width of your egg's turned face. Once the diameter is determined, mark the perimeter with a pencil on the egg's face.

12. Drill a pilot hole in your egg's face. The hole should be deeper than the entrance hole's radius (ideally, the hole should be at least 5mm deeper than the entrance radius).

13. Hollow out the cavity, being sure not to turn past the pencil line you drew. Make the cavity wider than the entrance, and be sure the bottom of the cavity is spacious. Imagine making a sphere-shaped hollow.

14. Remove chuck from the lathe. *Do not* remove the glue block or egg yet—you will use them in a later step. Place a small blank between centers and round the surface as needed. This will become the smaller egg. If desired, turn a tenon and place the blank in small jaws.

15. Measure the size of your large egg's entrance hole with calipers. in the middle of your small blank, use a parting tool to size a band that is 3mm larger than the diameter of the large egg's entrance. Turn the rough shape of the small egg.

16. Once the small egg is turned, carefully start reducing its diameter so that it is ~1mm larger than the diameter of your large egg's entrance hole.

17. Carefully finish turning/parting/sawing the little egg to free it from the rest of the blank. Sand away any nubs on the top of the egg. The bottom's quality doesn't matter, as it won't be visible in the end.

18. Place your chuck (and glue chuck and egg) back on the lathe. Carefully sand the entrance hole with 400g sand paper. Remove just enough material so that the entrance hole is 1/2mm smaller than the small egg's diameter.

19. Force the small egg into the large egg's entrance hole. If needed, use a soft mallet—be sure to cushion the small egg to prevent damage.

20. Use a chisel to remove the large egg from the glue chuck. Clean up the glue as needed. Remove the glue block from the chuck.

21. Place a new blank between centers, and round as needed. This will become a pedestal to display the eggs. Turn one end so that it will fit in small chuck jaws, or will be small enough to fit between chuck jaw plates.

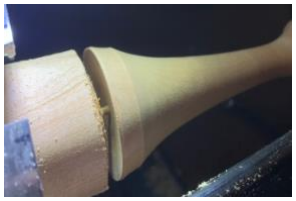
22. Secure the blank in your chuck. Maintain tailstock support. Use a parting tool to mark the bottom boundary of the pedestal.

23. Drill a ½" diameter recess in the top of the blank to fit a magnet. This should be deep enough so that the magnet sits flush or slightly below the surface. At this time, you can also turn the top surface so that it is slightly concave to match the large egg's bottom curve. Turn a slight bevel leading into the recess.

24. Using a live center and tailstock support, begin shaping the top of the pedestal. This should be about half to two-thirds the diameter of the bottom.

25. Begin shaping the bottom of the pedestal as desired. Continue turning until you have a nice continuous curve with no flat spots.

26. Once the pedestal is shaped as desired, use a parting tool to make the bottom of the pedestal concave. Turn until only a small connection remains, and then use a saw to free the pedestal.



27. Carve or sand away the bottom nub, and then finish as desired.

28. Use epoxy to glue the magnets in place on the large egg and pedestal. Double check that your magnets are glued such that the mating faces attract and don't repel.

29. Finish the egg as desired—done!

If you have any questions, please reach out to me at maa198@gmail.com. Alternatively, you can connect with me on Instagram @ulmus.woodturning