

Wooden Eggs with the Use of an “Egg Chuck”

There are many ways to turn eggs on the lathe, some simpler than others. This method is somewhat more complicated. It allows you to produce eggs that are evenly finished on the ends, highly polished and feel good to pickup and handle. Our three little grandsons have a delightful time with them and they are pretty much indestructible.



Completed Egg Chuck mounted in a Oneway Talon Chuck

1) Making The Chuck

Since this turning is not complicated, I will not detail all the various stages with pictures. Use a hardwood blank, Maple is excellent, 3” H x 3” W x ~3 ¼”L. Turn between centres to a diameter of about 2 ¾”. On one end turn a 3/8” wide tenon suitable for your four-jawed chuck. For the Oneway Talon Chuck fitted with #2 jaws, I used a 2 ¼” diameter tenon. When completed, mount the rounded blank in the four-jaw chuck. With a 2” Forstner Bit mounted in a Jacobs chuck in the tailstock, set your lathe speed to about 500 RPM or your lowest speed and drill a hole in the face of the chuck about 1 ¼” to 1 ½” deep. Finished eggs are about 2 ½” to just under 3” in length. With a ¾” Forstner bit, drill a hole on the inside bottom of the egg chuck about 3/8” deep, followed by a 3/8” diameter hole completely through the base of the egg chuck. This will serve for a knock-out device to be turned from hardwood. I used some ¾” Maple dowel that was handy. A 3/8” Box End Wrench serves well as a caliper to size the shaft or tenon. Turn with the large end towards the headstock and then you can slide the back of the chuck over it and resize the shaft portion with sandpaper to make a good fit. Reduce the large end diameter somewhat if using dowelling. Spigot jaws are handy for this work. Size the length of the tenon according to your Chuck dimensions. It should stick out the back end of the chuck about ½”, so that the Knock Out bar on your lathe can be used to push a completed egg out of the chuck if firmly held when the clamp is relaxed. You can also just demount the egg chuck and push from behind with your thumb.

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Sizing shaft of Knock-out Device with 3/8” Box End Wrench

I sawed the slots using a Sabre Saw with a shortened blade, but they could also be cut with a handsaw through the endgrain with the chuck mounted in a vise. A suitable V groove in a piece of 2x6 to support it on a bandsaw could also be used. Cut 6 or 8 grooves. If you make a double width cut, you will have a little more tightening range. Reduce the wall thickness of the jaws of the wooden chuck to 1/4” to 5/16” in thickness. If you find them a bit too firm, just turn the jaws down a bit more. With a spindle gouge or parting tool, cut a 1/8” deep indent about a 1/2” back from the front of the chuck, wide enough to accommodate the width of the clamp to stop the pipe clamp from sliding off. The Pipe Clamp used is good from 2 1/16” to 3” or 52-75 mm diameter. Many stores do not carry that size, so you may have to search around a bit. A larger clamp allows more free metal from the extension to be whirling around.

I found that for one reason or another, I had some variation in the diameter of my eggs, so I made chucks to accommodate 1 7/8” and 1 3/4” eggs. If they are a bit too small for any particular chuck, a layer or two of paper towel around the egg will help secure it better. This completes the egg chuck.

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2) Turning an egg – Stage 1

Each egg requires a blank approximately 2 1/8” W x 2 1/8” H x 4” L. I found it preferable to turn the blank round between centres. When turning the egg with one end mounted in the four-jaw chuck, if there is a catch and the blank is dislodged, it is easier to remount and re-centre a round end rather than a square. The indents at each end are useful for re-centering the tailstock end in the final stage when the egg is mounted and properly aligned in the egg chuck.



Stage 1 Turning completed prior to finishing

Mount the rounded blank in the four-jaw chuck with the tailstock drawn up to it. The first time you try to turn an egg, hard boil an egg to use as a form. I turn the Rounded end first on the tailstock side. The basic shape will be achieved at this stage. Turn the Pointy end as far as you can get on the left hand Headstock side, but be wary of the chuck jaws. That end will be finished using the Egg Chuck in Stage 2. I use a combination of a detail Spindle Gouge and the Skew when necessary. Soft woods tend to tear badly with a gouge and make it necessary to use the skew. Rough the shape with the gouge and then use the skew to plane if necessary. Check the outside dimension frequently so that you have just under the 2” and allow for sanding. You can test fit with the egg chuck as the tailstock is now drawn back. I find inexpensive plastic calipers good for measurements like this. If like myself, the minute you get out the skew, you will be glad you have the smaller chucks to fall back on as design changes occur. When cutting is completed, sand progressively from 120 to 320 or 400 grit. Apply sanding sealer and friction dry and sand again lightly with 400 paper. Apply a turner’s polish such as Mylands Quick Build or Lee Valley Turners Polish. Something as simple as alternating Boiled linseed Oil and Shellac until a good build is achieved can also be used. Finally a coat of paste wax or Carnuba wax or both can be applied and buffed with a soft paper towel or buffing wheel. This stage can also be left to the end and the whole egg buffed on a polishing wheel. Alternatively, you

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may find it better to turn the pointy end down to about a ½” shaft remaining, finishing as above and then just part it off and mount in the egg chuck carefully centering with the tailstock on the remaining stub.

Turning an Egg – Stage 2

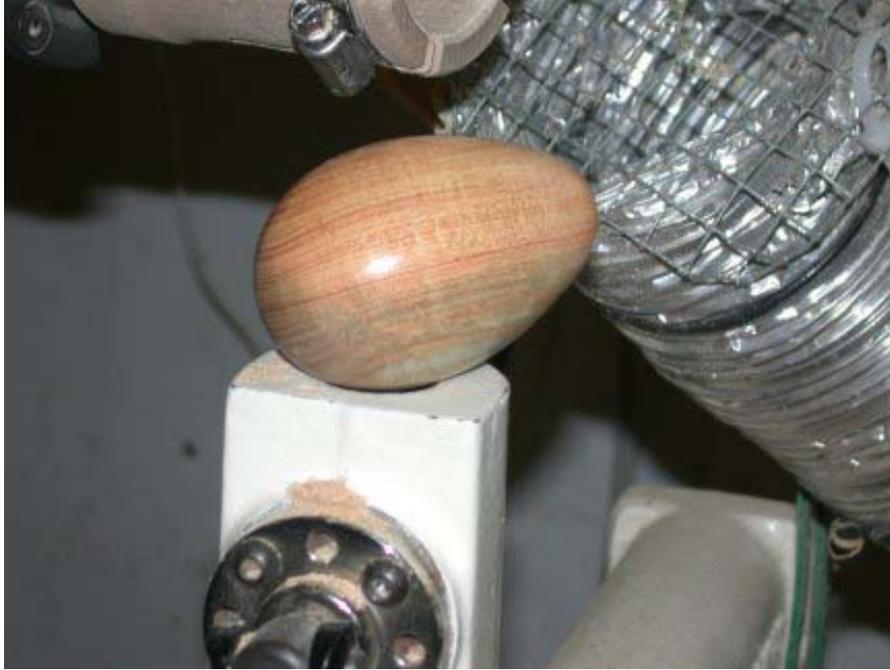
Mount the egg chuck in your four-jawed chuck. Insert the previously finished rounded end of the egg in the egg chuck and align the tailstock centre with the indent formed when originally rounding the blank or centre stub carefully with the tailstock centre. Make sure the pipe clamp is mounted so that the metal that moves out as the clamp tightens, trails as it goes round. Tighten the tailstock gently and also tighten the pipe clamp. A piece of duct tape over the clamp may prevent any mangled fingers. Be careful of the tool rest position. Since you are clamping on a finished surface, be gentle with the turning. If concerned about marking the surface, use a layer of paper towel to cushion the egg. Keep the tail stock centre in place as long as possible. Caution is needed even when using a detail gouge here, as it can be prone to catching as you go around the end. When the pointy end is cleaned off, sand progressively as before and finish in the same fashion. Be careful not to sand too close to the egg chuck jaws and watch that the coarser grits do not mar the already finished portion too close to the wooden jaws.



Pointy end turning completed and sanded and ready for finishing

Loosen the clamp and the egg should pull out. If it is tight use your knock out bar through the headstock or remove the egg chuck from the four-jawed chuck and tap the knock out device to expel the egg. A final touch up buffing can be done with a cotton buffing wheel mounted on the lathe or in a drill.

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The finished product, this one is Honey Locust and below a bowl of eggs completed for Easter 2005.



I haven't tried it yet, but a wire could be used to burn circular grooves, followed by pyrography along the length or random patterns created and coloured markers used to make decorated Easter Eggs. I am working to make eggs from as many different woods as I can. This is a great way to use up off cuts or limb wood.

Enjoy.

Mike Brazeau, March 10, 2006 www.picturetrail.com/mikebrazeau