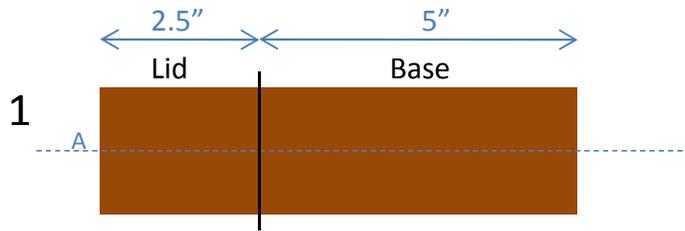


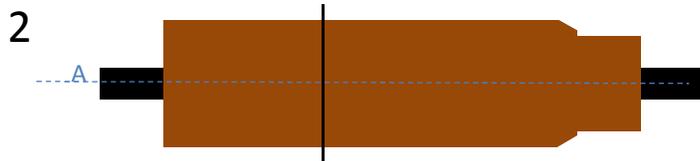
# Multi-Axis Egg Box



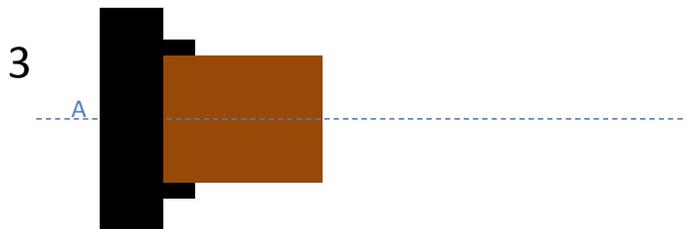
Design and Notes By: Arnold Ward



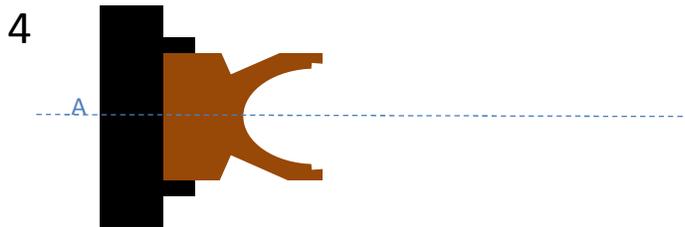
Start with a 2" square about 7.5" long. Draw a mark for the lid at about 2.5".



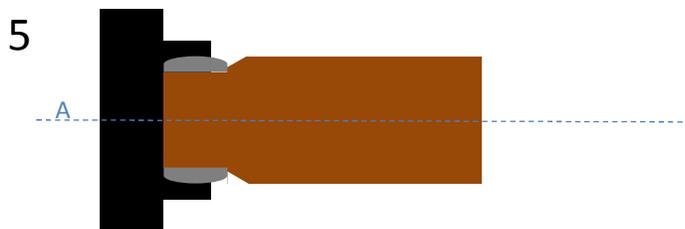
While between centers, cut the whole piece round and then cut a 1 inch tapered tenon to fit in the Escoulen cup chuck. Part the piece in half at the line.



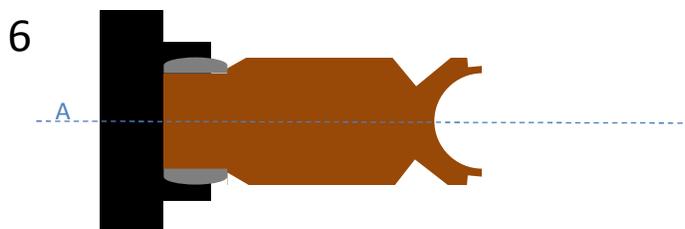
Take the lid piece and put the top of the piece into a four jaw chuck. Make sure you have the top of the piece in the jaws and not the middle. Cut a flat clean surface on the end.



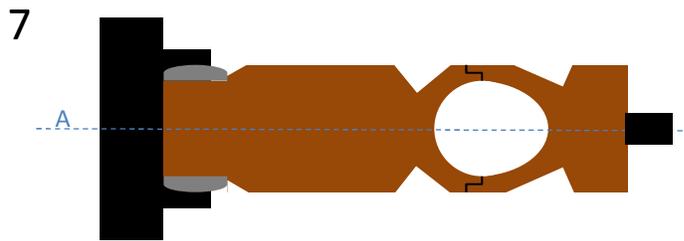
Cut the inside of the egg box. This is the longer half of the egg. Sand the inside curve completely. Cut a wide outline of the egg. Then cut a slightly tapered outside tenon. The taper is cut so that the lid will snap over the inside tenon. Apply finish.



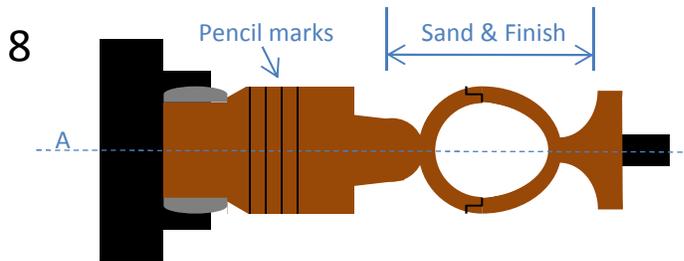
Insert the tenon of the base piece into the Escoulen chuck. If the fit is any bit loose, put a little water on the end grain of the tenon so it swells to a tight fit.



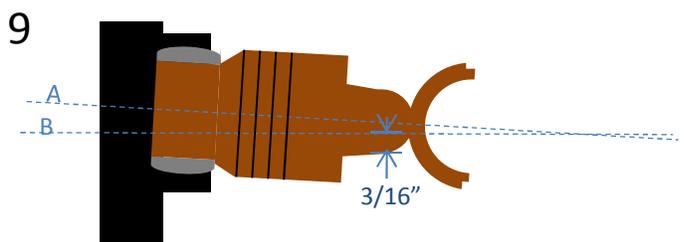
Cut the inside of the base of the box. Sand it and finish it. Cut a rough egg shape on the outside. Cut the inside tenon with a slight taper. Frequently test the fit with the lid until you have a perfect snap fit.



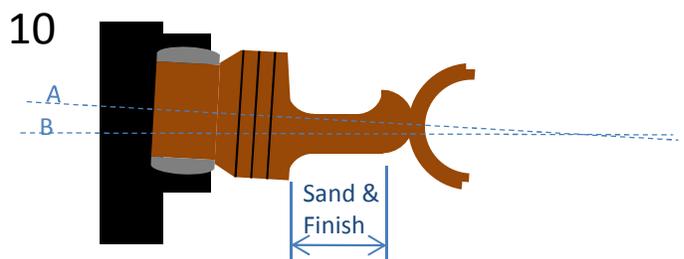
Line up the grain and then snap the lid on. If it is any bit loose, add tissue or paper towel between the joint to firm it up. Remove any point from the tailstock live center and bring it up to ensure a clean connection.



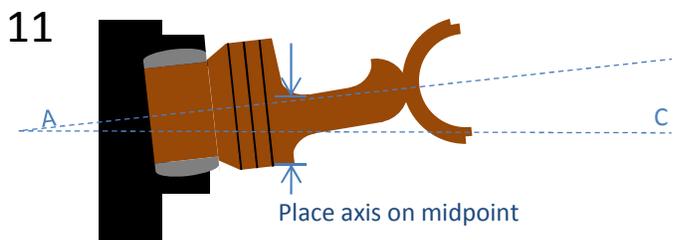
Cut the egg shape on the outside of the box. Sand and finish the outside of the egg. Make pencil marks on base every  $1/8''$  for future use.



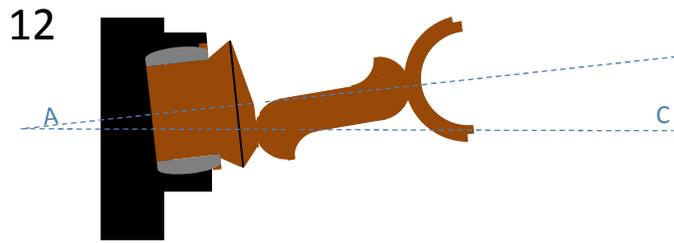
Remove the top. Tilt the piece about  $-5$  degrees (towards yourself) on the chuck axis that is parallel to the shift. Shift the piece away until the lathe axis will leave the half of the width of the stem from center to outside of the top curve (about  $1/8'' - 3/16''$ ).



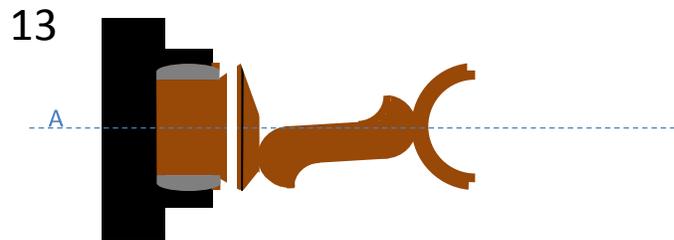
Cut the stem. Make sure not to cut below the outside of the upper curve. Make the top and bottom curves match and make the walls steep to the bottom of the curve. Sand and finish the stem.



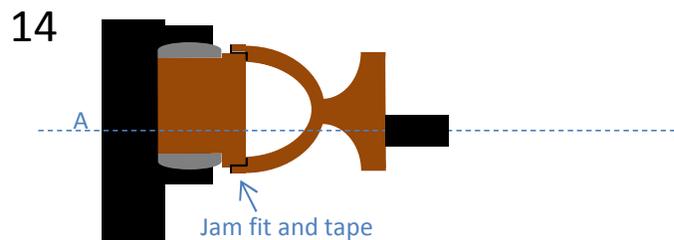
Tilt the piece to full  $15$  degrees on the #1 chuck axis (Away from yourself). Shift the axis back until the axis is midway between top of stem and bottom of curve.



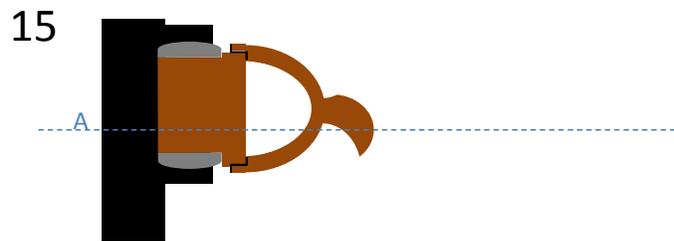
Cut the bottom of the stem curve. Cut until the inside of the stem matches with the bottom curve. Try to match the size of the top curve. Then use the reference lines to cut the base so the edge matches one of the lines. Sand and finish the base.



Center the ball in the chuck and shift it back to zero. Cut off the piece. Sand and finish the bottom off of the lathe.



Before cutting the handle, re-attach the lid to the base and mark the direction you want the handle to be pointing. Using the remaining base, jam fit the top of the box over a tenon. Put the mark toward yourself and then use tape to make sure it is secure. Shift the piece about a 1/2" away from yourself. Use the tail stock very lightly while trimming the knob.



Cut a pleasing curve on the top of the handle. Sand and finish.



Assemble and either admire it for it's beauty and perfection, or burn it before anyone sees it!