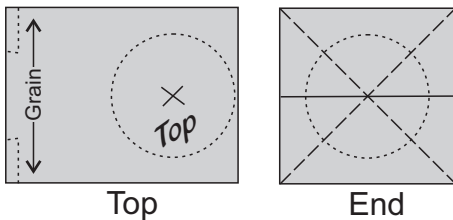


## EMERGING BOX

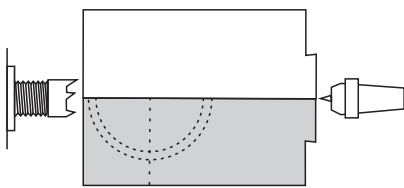
Guilio Marcolongo design

This produces an intriguing emerging box which may utilise natural wood colours or subsequent decoration. Start with wood with proportions 3 x 3 square and 4 long. The wood should be excellent quality for the grain in the lid to match the bowl.

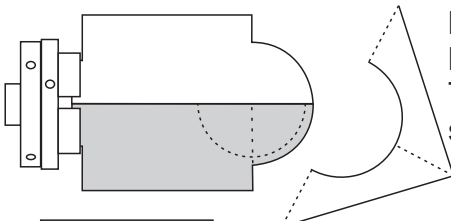


Cut the block in half lengthwise. Place the halves back together for the markup stage of the project.

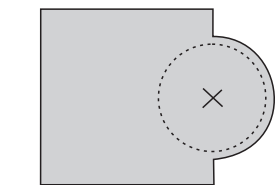
Mark it up with your intended centre marks and cuts. Set the top part of the wood aside for later cutting to be the top of the box. Sand all the long sides of the lower half and the underside of the top.



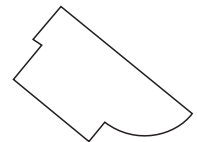
Replace the top block, which will be used later, with a block of waste wood of exactly the same size. Sand the underside of this for a better fit. Glue around the edges or bind this securely to the bottom half. Re-mark the centres. Mount the wood between centres and cut a chuck bite on one face.



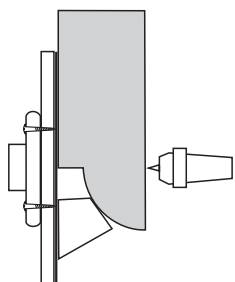
Remount in a chuck and cut the emerging part to an exact hemisphere. Use a template to ensure a perfect hemisphere and the correct dimensions. See "Circle Template" on <https://sawg.org.nz/tipsnjigs/> Sand this surface.



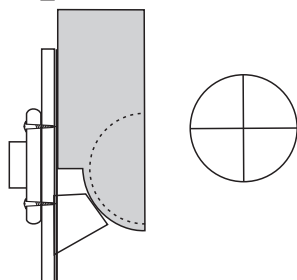
Remove the wood from the chuck and separate it into two halves. The top half is now wasted. Cut the chuck bite off the lower half. On that half carefully measure and mark on the flat top surface the exact centre of the diameter of the hollow you will make for the bottom part of the box.



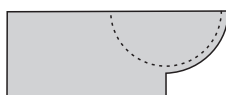
If the box is to have thin walls then you may be wise to remount it as shown on the next page. If the walls are strong the following method will work.



Attach the wood to a faceplate. Hot melt glue is recommended. Or secure a strap over the square end of the block. To ensure that the centre of the box is at the centre of the faceplate bring the tailstock up to the central mark you made. Add glued-in support blocks around the emerging box.



Hollow the bottom of the box. Make yourself a template to ensure an exact internal hemisphere and correct wall thickness. If you want a lip within the rim to fit the lid, cut it now. Sand and finish the inside.

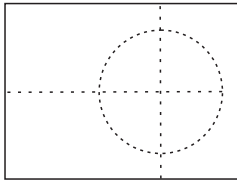


Remove the wood from the faceplate. Dress and finish all the flat surfaces.

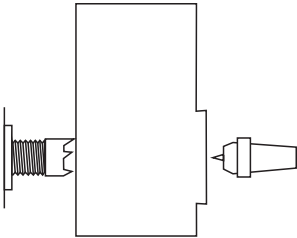
## EMERGING BOX

Page 2

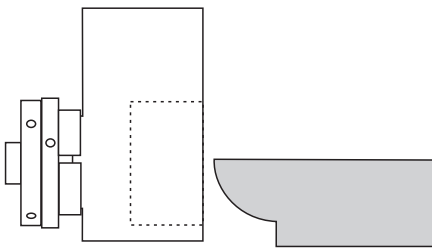
This page is a method for makers of the Emerging Box to create a box with thin walls. Part of the box wall is cross-grain and needs support while it is hollowed.



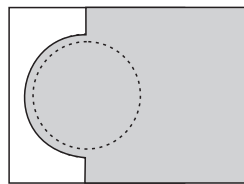
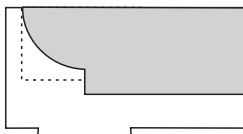
Take a block of waste wood the same dimensions long and wide as the initial block for making the Emerging Box. It can be the same thickness but only 3/4 of the thickness is needed. Mark this with the box offset, outer diameter and cross lines as you did for the initial block but move these a little towards the centre to ensure there is adequate strength on the narrower side. Mark the underside of this block with the same centre of the box diameter - exactly opposite the centre on the top side.



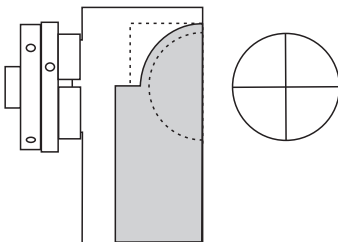
Mount this wood between the centres you marked on the block. Turn a chuck bite on the under side.



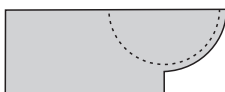
Remount on a chuck. Cut a hole on the face side to the exact diameter of the outside of the box bottom. Internally this can be square (as shown side-view here) and deeper than half the diameter of the box bottom.



Take the wood off the lathe and cut away the longer side of the block as shown. The box bottom should now fit snugly into this block. The rim of the box should touch all around the hole in the support block. Secure it in place with straps or hot melt glue.



Remount the block with box bottom attached in a chuck. Hollow the box bottom. Make yourself a template to ensure an exact internal hemisphere and correct wall thickness. If you want a lip within the rim to fit the lid, cut it now. Sand and finish the inside.

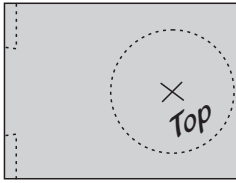


Remove the wood from the holding block. Dress and finish all the flat surfaces.

## EMERGING BOX

Page 3

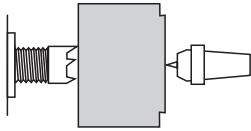
This page is the method for makers of the Emerging Box to make the lid for the box.



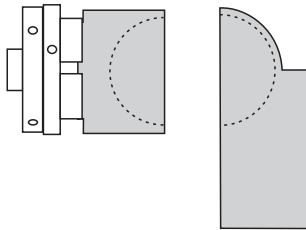
Retrieve the block that you marked up and set aside for the top of the box at the beginning of this project. Accurately replicate the circle and centre mark on the under side of the block.



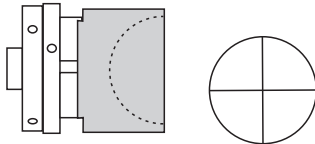
Saw away the spare wood. Remember that the circle you drew earlier is the planned exact diameter of the lid.



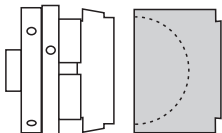
Hold the wood between centres. Cut a chuck bite on the side you labelled "Top".



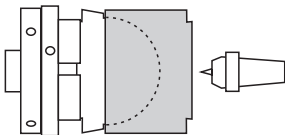
Mount the block in a chuck. Slightly hollow it and make the rim and outer diameter exactly match the box bottom completed earlier.



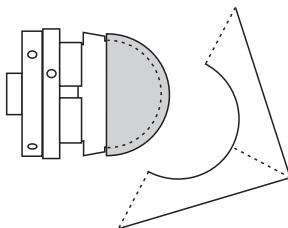
Complete hollowing the inside. Use a template to ensure the correct size and curves. Sand and finish the inside. Remove this wood from the chuck.



Mount a piece of waste wood in the chuck. Turn this to make a jam chuck for the box lid. Note that the outer points of this jam chuck are slightly smaller than the planned outer diameter of the box lid.



Mount the box lid on the jam chuck. Some hot-melt glue can be used to hold it there. Bring up the tailstock for added security. You may choose to leave a knob on the top of the box, or drill a hole to add a handle.



Use a template to ensure the outer surface is correct. Sand and finish.

