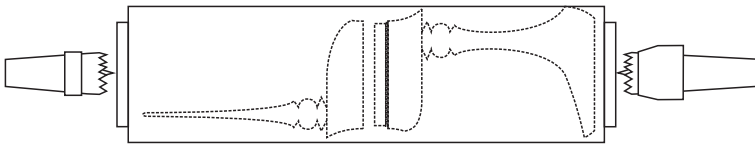


## Spire Box

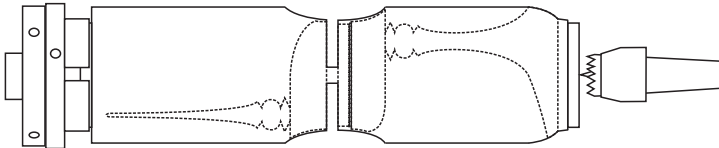
Adapted from Box 46 in *Turned Boxes 50 Designs* by Chris Stott

This multi-centre turning is enhanced if a strongly grained wood is used. Start with a block 220mm long and 70mm square. Or you may choose different dimensions.

When marking the centres also mark the offsets on both ends: 13mm for the lower supporting stem and 17mm for the finial on the top.

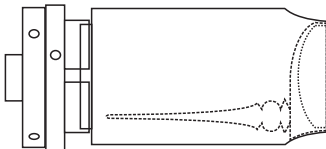


Mount the wood between centres. Cut a spigot for the chuck of your choice at both ends. Round the wood down to remove all flats.

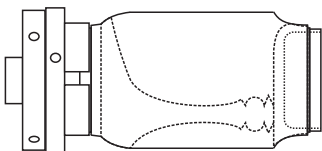
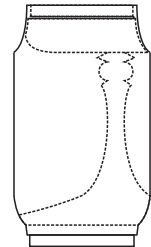


Mount the wood in a chuck and bring up the tailstock. Round the wood down to 60mm diameter. Cut the curve of the outside of the foot of the box. Sand this area.

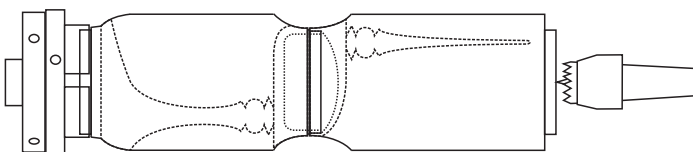
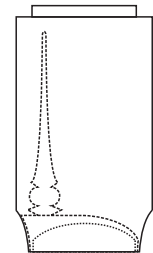
Cut a curve at the centre down to 51mm dia. This is not the finished size. Part the two halves of the box. Set the lower half aside.



Hollow the top. The cavity to accept the lip on the bottom part should be 45mm dia and 3mm deep at the edges. Then extend a curved hollow to complete the inside to 10mm deep at the centre. Sand and finish all the underside of the top. Set this part aside.

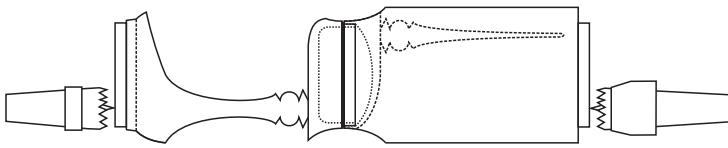


Mount the bottom part in the chuck. Cut the upper lip to fit the top part perfectly. Hollow the bottom part of the box to 13mm deep. Sand and finish all this area.

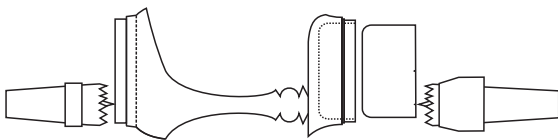


Fit the top to the bottom. Bring up the tailstock. Cut the curve into the centre. This should now be 48mm dia, and make it extend about 2mm each side beyond the depths inside the top and bottom parts. Sand and finish the curved cut and a little of the surface on each side. Rotate the top on the bottom to get the offset marks perfectly aligned. Tape the join area to stop rotation.

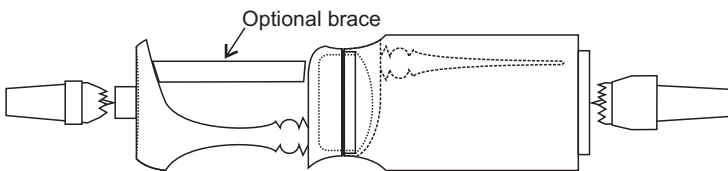
## Spire Box P2



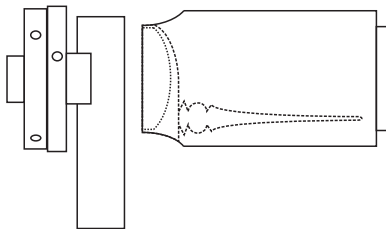
Mount the work between centres on the offset marks for the lower shaft. Turn, sand and finish that shaft, the underside of the box and upper side of the foot.



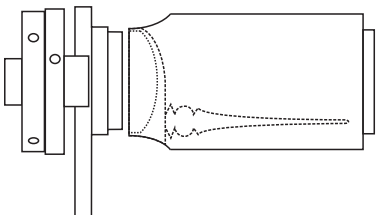
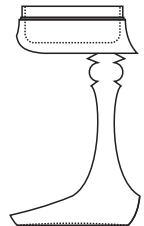
Or make a jam block that will fit neatly into the box. Mark this with the centre and the 13mm offset for the lower stem. Rotate the jam block to align the off-centre marks. Mount the work between centres. Using this block reduces the off-centre weight.



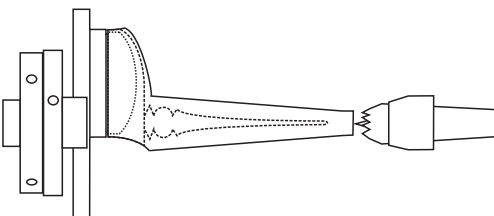
Return the box to the central mount between centres. Use the jam block or box top part. If you consider the stem to be fragile, put in a brace held with hot melt glue. Cut away the spigot and spare wood at the foot as much as possible and to a slight concave. Take the wood off the lathe. Separate the box top (or jam piece) and bottom. Hand finish the bottom.



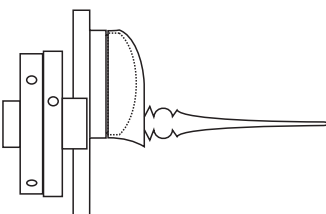
Make a jam chuck. Take a piece of sound scrap wood that is a bit more than the width and more than the depth of the hollow in the box top, and at least twice as long as it is wide. Remove two jaws from a chuck and grip this wood off-centre in the chuck.



Cut the scrap wood away to make a spigot which will fit neatly into the hollow of the box top. Cut a second step in the scrap wood to make it the same diameter as the outside of the join area of the box top so the box top can be taped to the jam chuck. Measure the depth of the hollow and mark it plus your allowed thickness of the top, using a soft pencil, on the outside of the top.



Slide the jam chuck and box top off centre in the chuck jaws. Rotate the box top and slide the jam chuck to bring the offset mark for the finial perfectly on centre. Bring up the tailstock to hold the wood in position. Tape the box lid to the jam chuck. Cut the bulk of the wood away on the top of the box. Keep the lathe speed up to make this hit-and-miss cutting easier.



Take away the tailstock and finish cutting the finial. Totally sand and finish the top and finial. Take off the tape and remove the box lid from the chuck.

