October 2013 Meeting – Paul Howard

 \mathcal{P}_{aul} chose as his project an Inro box. An Inro box traditionally consists of several small boxes fitting together and held in place by a chord passing through them or along the sides. A toggle is fitted at one end of the cord so the box can be hung from a belt and held there with the toggle.

For this box he had made up a blank consisting of a piece of Ash 30mm thick, a piece of Mahogany 12 mm thick and another piece of Ash 30mm thick. These were glued together with paper sandwiched between the joins. The centre at each end of the sandwich was accurately marked with a stebcentre in the headstock and a ring centre in the tailstock the piece was mounted on the lathe. The end near the headstock was bound with adhesive tape to ensure everything stayed together and then the blank was roughed to a cylinder using light cuts to a diameter of 60– 65mm. Spigots to fit a 4-jaw chuck were turned on each end.

The position of the top and base sections were marked off using the Golden Mean (Paul used a set of homemade golden mean callipers that he made from plans on www.goldennumber.net). Alternatively you can use the 1/3//2/3rd dimensions. Obviously allowance must be made for the overlap of the top and base and the width of the parting tool. Both sections had the ends nearest the spigot taped to ensure the glue joints did not fail. The two sections were then parted off.



The base section was mounted in the 4 jaw chuck and with a ¹/₄" beading tool a spigot for the lid to fit over was formed, ensuring that the sides were parallel. Paul then squared off the face surface with a spindle gouge and hollowed out the box with a "Hope" carbide tipped hollowing tool. When he had hollowed to the required depth he cleaned up the sides with a box scraper, and then sanded the inside of the box. Where the bottom was to join the top he formed a small bead with a beading tool.

The base was replaced in the chuck by the lid piece, the face trued up and the width of the opening (taken from the base) marked. The lid was part hollowed using a hollowing tool and then the recess to fit over the spigot on the base was formed. The hollowing was then completed and the inside of the lid sanded. At this point the fit of the lid onto the base was fine-tuned and finally a bead formed on the edge of the lid to match the one on the base.



A chuck with wooden jaws was mounted on the lathe and the base portion held in it so that the original holding spigot could be turned away. The tailstock was brought up for added safety. With the base cleaned up a bead was formed on the edge and a second one nearer the centre of the base. Paul used a small texturing tool to add interest between the two beads. The base section was replaced by the lid section in the wooden jaws and the above procedure repeated.

The tape was removed from both top and bottom sections and the paper/glue joints broken. A cabinet scraper was used to remove the paper left attached to the walls of the four pieces of the box. Paul used a

slow setting cyanoacrylate adhesive to bond the matching halves together and lightly sanded along the joints to fill any gaps with matching dust. When the glue had set two holes were drilled in each of the ends of the box, the holes should be about 10mm apart.



For the toggle a square section piece was mounted between centres, roughed to round, shaped with a spindle gouge and a series of decorative beads formed along its length. The ends were rounded off and the toggle parted off. A hole was drilled through it.

The next part was to make some small beads to enable the box to remain closed when being carried hung from a belt. The pieces were assembled together on a length of leather cord.



This was a well thought out project and is one that is open to much creativity with shapes and finishes. The last photo shows one that Paul has turned in the round and decorated with iridescent acrylic paints.

