

## September 2019 - John Blake

We were pleased to welcome John back to our club and we were looking forward to an informative and entertaining evening demo. John did not disappoint, demonstrating the turning of a solitaire board and a lidded box, both of which incorporating techniques to produce the end result with minimum wastage.

### Solitaire Board

Unlike some high end solitaire boards which incorporate wooden balls in a variety of woods, and are therefore very expensive, John uses marbles of appropriate size purchased from House of Marbles at Bovey Tracey. and therefore is able to make a solitaire board which he can sell at a very reasonable price.

- A 12" diameter, 1.75" thick, 20% moisture content board of sycamore was mounted against the half open chuck jaws and supported by a live ring centre in the tailstock. Using this method negates the need for "wasting" the thickness of a spigot.

**Top Tip 1** - use a ring centre rather than a point centre to ensure a secure support.

**Top Tip 2** - on a square section of wood, mark with saw cuts the compression and expansion widths for the chuck to enable easy setting of the the dividers. In this way one piece of wood can hold the widths for up to 4 chucks.

- Mark the expansion width and use a parting tool to create a spigot with a width of the width of the chuck jaws
- Remount on the spigot and support with the tailstock
- Flatten off the face with push/pull cuts using a bowl gouge
- Turn the edge to get the blank in balance and then taper the under edge so that the solitaire board can be picked up easily
- Finish the bottom with bowl gouge and oval skew leaving a large expansion spigot in the centre, hollowed out to insert the woodturners decoration name/logo etc

**Top Tip 3** - if when sanding there is an roughness issue where the edge meets the spigot then put a couple of fine lines in that area to take the eye away for the issue.

- The bottom was then covered with Treatex diluted 10% followed by Mylands friction polish rubbed in before the lathe is turned on to polish



The next step was to measure out, drill, and finish the 33 holes for the marbles.

- Remount on the expansion spigot and flatten off the front face
- Make a groove using a .5" round nosed scraper leaving a reasonable lip at the edge of the board - this is where the marbles will be placed during the playing of the game
- Leave a similar lip on the inside and then cut out the middle where the marbles will be positioned

**Top Tip 4** - make sure that the centre of the blank is marked with a pencil BEFORE proceeding to mark out the hole positions

- Using a 1" wide stick, draw 3 long lines and 3 short lines followed by the same at right angles to the first to create the matrix for drilling
- Mark the intersection points with bradawl, drill each to exactly the required depth and then open out using a "snail" drill
- Finally sand and apply the desired finish





## Lidded Box

Whilst on the face of it the making of a simple lidded box is straight forward, John's method highlighted some interesting techniques which significantly minimises wood wastage relative to other traditional methods.

- Using a round block of wood, presumably either as a spindle or cut from a board use a hot glue gun to attach to a sacrifice piece which acts a spindle.

**Top Tip 5** - Attach by gluing around the outside edge of the contact point rather than across the contact surfaces of both pieces to ensure a more secure hold.



- When the glue bond has set mount on the spigot and flatten off the top surface using a bowl gouge. A .5" skew, point first, then needed to be used as the end surface was a bit rough, but with only partial success
- A spigot was then cut and the blank turned to round.
- A thin parting tool was then used to separate the lid from the base
- The base was hollowed out using a parting tool, bowl gouge and near the bottom an English grind bowl gouge
- The bottom was flattened using a double edged flat skew
- Remove the top outer lip using a parting tool to the depth that the lid will sit
- Finally, polish/oil the inside of the base and then remove from the glued spigot using a parting tool
- Remount on the outside of the chuck jaws and finish off the bottom

**Top Tip 6** - if a spigot is turned as part of the design of the bottom then the base can always be remounted.

- Remount the lid and mark the width for the attachment of the base (slightly under on the width to allow for final adjustment)
- Turn the inside and keep adjusting until it fits the base
- Turn a spigot within the lid so that it can be remounted to finish the top and the polish/oil the inside
- Remount on the internal spigot and finish the top

John brought several examples of boxes made using this method including traditional fit as described above, tapered overlapping lid which could be used as a loose fit or tight fit if pushed on more firmly, and swivel lid.



Thanks to John for another informative and enjoyable evening.

David Langan