



Cheam Woodturners Association

Associated with the Association of Woodturners of Great Britain

Twinned with Central Oklahoma Woodturners Association

April 2016



On April 20th

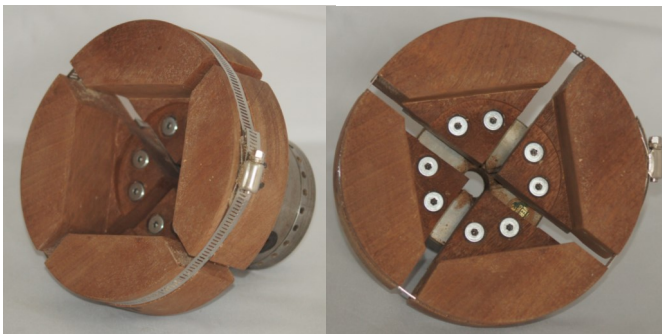
Paul Howard will demonstrate his ball making jig and other things.

www.paulhowardwoodturner.co.uk

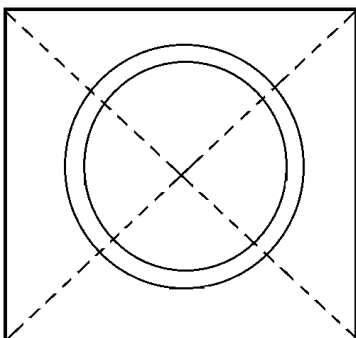
Derek Dowle reports on the evenings demonstration.

Members were treated to a magic evening with Chris demonstrating how to turn a sphere within a cube. What soon became very evident was the extent of preparation and planning which Chris had done before turning his first ball in a box.

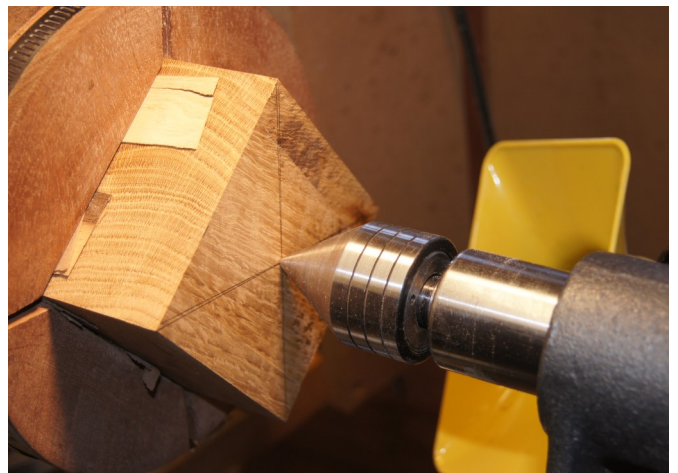
The main challenge was to work out how to hold the blank safely on the lathe during the various phases of the task. For the initial phase Chris has developed chuck jaws made in timber to hold the cube.



Chris was using a cube of close grained wood with 90mm long edges. Each Face was prepared and the centre point accurately marked.



Placing the cube into his square timber jaws Chris utilised the tailstock centre to ensure that the cube was accurately located in the centre. Some packing may be required to some faces of the cube to ensure that it is held centrally and does not move when the jaws are tightened.



A bead with an internal diameter of 55mm was first cut into the face.



1

1. The 55mm hole in the centre of the bead was then turned to a depth of 10mm.



2

2. A pencil line was then drawn around the side, at the bottom of the hole, to act as a datum to act as a guide for the minimum thickness for the sides of the cube.



3

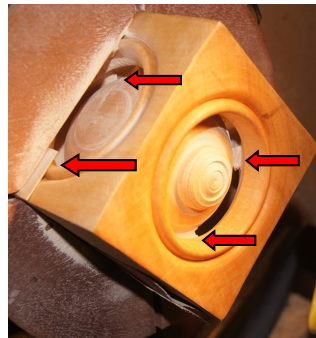
3. Initially using a gouge and then one of the home-made profile chisels Chris started the process of forming the sphere and working either side of the 55mm diameter opening. Before moving onto the next face Chris sanded it and applied sander sealer.

The process is repeated on the remaining three side grain sides of the cube.



The process for the two end grain faces is very similar but with the exception that a spigot is retained in the centre of the 10mm deep recess. The home made profile chisels are then used to make a cut for forming the sphere.

Once work is completed on all six faces the sphere is still attached to the inside of the cube. The sphere is release by using a Dremel with small cutting tool and sanding tool.

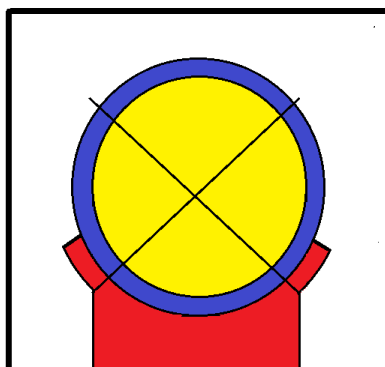
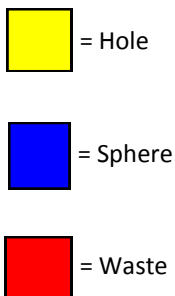


Four of the eight triangular shaped waste pieces of wood can be clearly seen holding the sphere in place.

These cannot be removed totally when the cube is spinning otherwise the sphere becomes free.



Flat Chisels cut and ground down to cut away the waste around the sphere, which rest firmly on a flat tool post. Stopping any twisting with the rotation of the work.



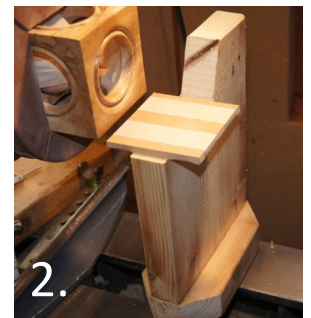
This process is repeated for the remaining three side grain faces. Chris noted how care should be taken on subsequent faces as the cut neared and breaks through to the hollows in the faces already turned.

With the sphere released, work can commence on refining its shape. The challenge is not to make the sphere too small so that it falls out of the cube, but just larger than the 55mm diameter side holes to make people wonder how Chris managed to get the ball inside the box!

The chuck is now replaced by a drive centre and the sphere is supported via the two spigot ends between centres. (picture 1.) The cube is supported on a purpose made rest which stands on the bed of the lathe (picture 2.)



1.



2.

Using a spindle gouge and skew chisel as a scraper and a circumference template Chris then perfected the shape of the sphere working through the hole in the side grain of the cube. Chris noted that he used these tools as he was comfortable with using them and suited his needs. Others may prefer to use other tools to form the sphere. Once completed the assembly is removed from the lathe and the spigots sawn off.

Sphere in a cube demo continued :-

The cube can be moved around on the platform to allow access for the spindle gouge and skew chisels to cut.



Using purpose made concave jam chucks, to suit the diameter of the sphere, the assembly goes back onto the lathe, between centres to enable the sphere to be sanded and finished. The inside face of the cube is finished by initially removing high points with the Dremel and then sanding by hand. The sphere can be taped to the back of the cube,



returned to the chuck and the inside of the cube can be sanded, then finished with sanding sealer and wax.

Chris showed two ways of displaying a sphere in a cube. The first is where the sphere sits on a pedestal and the cube rests on the sphere. Chris posed a conundrum for members for the second. If the cube is to stand on a vertex, what does the angle of the inverted cone in the pedestal need to be to support it? The answer is 110 degrees. Follow this link if you enjoy geometry: <http://www.cut-the-knot.org/Curriculum/Geometry/CentralAnglesInCube.shtml>

April 2016

New for 2016 on the SHOW TABLE

There was good response for the March show table. It was judged and the best item on show was chosen.

The winner for the Month of March is
ROGER POULTON



With his off centre candlestick.

On the March show table

April 2016

Thankyou to Alex Bellringer for taking all the photos this month.



Three pens by Richard Crook finished in wax



Ash, oak, cherry and sapele T light holder
By Derek Dowle with finishing oil.



Gordon Cookson brought in this Oak cube
With a cross inside produced using nine
different centres.



Ebonised ash bowl with gold gilt
By Trevor Etherington.



Example of segments used in the
construction of this small vase



A 108 segment walnut and beech
vase Constructed from reclaimed
floor boards. By Brian Ash



Wood and acrylic pens made by James Cassidy.



Laburnum and walnut wands by Robert Sciberras

The CWA at the 2014 Belmont Festival

The **Belmont Festival** is a biennial event at which funds are raised in aid of The Royal Marsden Hospital. It is to be held on Sunday 3rd July 2016 in the grounds of St John's Church and surrounding streets in Belmont Village. Please contact Derek Dowle by email to derek.j.dowle@btinternet.com to participate and/or find out what the club will be doing on the day. More information about the event can be found at - <http://www.belmont-festival.co.uk/index.html>



Cheam Woodturners smocks



Gil Kenwood of Surrey and Sussex Hardwoods attended with this impressive display of blanks for sale.

There is still time

for members to add their names to the Club's order for wood-turners' smocks with the club's logo embroidered on it. There is a choice of colours; Natural, Blue, Green and Biscuit.

They come in the following sizes; 38", 40", 42", 44", 46", 48", 50", 54" and 58"

The cost is £28.50 without logo, £33.50 with logo plus a £1 contribution towards postage and packing. Your name will be embroidered on the smock, free of charge, if you choose to have the logo.

If you are interested then please give your order to Derek Dowle at the April meeting, together with your payment.

Lovell Workwear who make the smocks, have other items which can also be ordered. For full details please look at Lovell's website:

<http://www.lovellworkwear.com>

Turners' Company 2016 Competitions

These Competitions will take place in October and be held in conjunction with this year's Wizardry in Wood exhibition.

Whether you feel competent to compete in one of these competitions or would like to visit the exhibition to admire the skills of others you can find out more by following the link:

<https://www.eventbrite.co.uk/e/turners-company-2016-competitions-tickets-20942012122>

Admission to the exhibition is free and tickets can be obtained by following the same link.

2016 Programme

- April 20th** :- Paul Howard Jigs and other clever things.
- May 18th** :- B.J. Norman.
- June 15th** :- Club Night Hands on night
Francois and Alex
- July 13th** :- Mark Baker and the American guests.
- August 17th** :- Club Night Teaching Turning
- September 21st:-** Chris Grace
- October 19th** :- Mark Hancock
- November 16th:-** John Plater.
- December 21st :-** Club Social Evening and Frank Clarke competition.

Sad news.

"It is with great sadness the we have to report the passing of David Ferrier. David had been a member for only a relatively short time but he was an enthusiastic supporter of the Club and did not let his illness prevent him attending Club meetings, indeed in the company of one of his daughters he attended our meeting in February this year. Our thoughts are with his wife and family at this sad time.

Rest peacefully David, you will be missed."

It is with the greatest regret that we have learned of the sudden death on Saturday March 26th of David Buskell's wife Alison. We are sure that every member would want David to know that their thoughts are with him and his family at this tragic time.

Deadline for the May issue of the e-newsletter

Apr 30th

If you have any article or information you would like included in the e-news.

Contact: Chris Taylor

Chris.r.taylor@hotmail.com