

Exhibition of items and ornamental turning lathes by the late Peter Taylor BEM

A delightful variety of items were shown at the club meeting in November 2021. There were some interesting photographs and examples of Peter's ornamental turned work in various woods. Several club members are now guardians of Peter's own designed and hand built ornamental lathes and pattern jigs.

Peter was an extremely clever man who had an incredible ability to think in three dimensions, the machine on display was multi, multi axis and an incredible creation. It's a lasting testament to the ingenuity of Peter and his love of woodturning and Ornamental Lathes.



Peter and Sally Burnett at the AWGB Seminar in 2013



Peter is shown receiving his certificate from Nick Edwards of the Society of Ornamental Turners in 2007, as the winner of the Haythornthwaite Cup, a competition for ornamental turning by members of up to 5 years standing.





This photograph is from 2008, taken by Robin Baker, Peter is sitting with Carol Bundock (a presenter on BBC Look East). They are posing for publicity shots with Peter's Yew bowls for TOP CRAFTS 2008 in May 2008 at the Jubilee Hall, Aldeburgh. The event was to raise money in aid of the Multiple Sclerosis Society and was opened by Carol Bundock.

Peter worked tirelessly for charity and raised thousands of pounds as donations through sales of his work. This earned him recognition with the award of British Empire Medal (BEM)



Examples of Peter's Ornamental Turning

History of Ornamental Turning

Ornamental turning uses a wide variety of techniques to embellish repeated and accurate patterns on the surface of turned items, these patterns can be extremely complex and detailed.

It is a historic art and records show that it originated in ancient times but became popular around the early 18th Century following the publication of two French books. Russia's Peter the Great (1672-1725) was one of the first to have lathes made according to these early industrialised and detailed designs.

Later in the 19th Century John Jacob Holtzapffel, a French engineer moved to London to establish a tool making business. There he further developed ever finer Ornamental lathe capabilities and their operation. These techniques

and design where eagerly applied by the amateur craftsman but it was, and remains a very complex and challenging technology.

Modern equivalent are multi-axis computer controlled CNC machines, however these soulless machines cannot compare with the devotion to the use of a homemade and properly applied lathe such as that which Peter Taylor developed and used.

Operation in broad terms

Such a lathe can produce cuts within an indexed rotation on a stationary object or patterns on a rotating object, such as rose turning, oscillating or elliptical cuts. It requires that the machines accuracy allows for cutting through arcs, straight lines and plunging into the work.

Ornamental lathes are often able to set or move the rotating cutter through multi axis allowing cutting on the face, parallel axis or at any angle in between on the chuck mounted work. Cutting is usually achieved by a collet mounted router, the router remains stationary whilst the mounting is driven by wheels, pulleys or gears. Weights may be used to allow semi-automatic operation of rotation and advancement.

Very complex machines can auto index and advance the cutter automatically to form the pattern through complex gearing and power drive, however many are not fully automatic and require manual advancement, indexing and hand rotation. They also require precisely set cutters and many calculated distances applied to the machine's adjustments to maintain the correct pattern, this was the method used by Peter Taylor and his home developed machines but elements of the machine detailed in this article are semi-automatic and extremely clever.

Some examples of peters work

A very fine Laburnum and blackwood fluted pedestal bowl





Fine Yew wood
fluted pedestal
bowls

Lignum Vitae round box

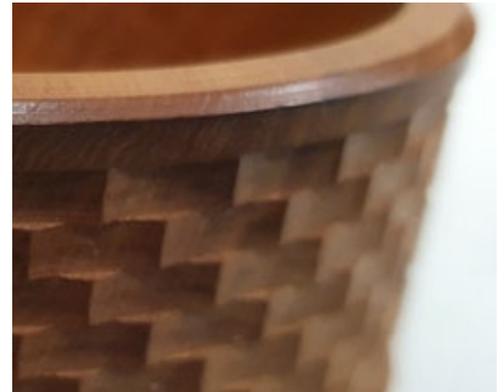
This was made from two lawn
bowling balls, its density and
stability allowed Peter to
perfectly cut the hobnail
pattern.





Very fine quality Yew box, fluted top and basket pattern body. The precision craftsmanship is outstanding.

Approximately 3 inches across the oval.



Peter was fortunate to have some wonderful timber to work with, he often worked with Yew and this large natural edged bowl is a triumph.





Lignum Vitae pot lid showing fine tapered and arced flutes



Covered urn believed to be in a large piece of Laburnum

Various precise techniques and cut types have been applied to this piece, any one of which are testament to Peters understanding of his home developed machine and it's capabilities.

This is a very advanced example of combined Ornamental Turning.

Peter's portable fluting and spiralling ornamental lathe



Devised and made by Peter, this remarkable lathe offers multi axis ornamental turning and is a remarkable machine.

Ornamental lathes use routers to carve patterns or decoration according to three things:

- Indexed work rotation,
- Setup angle
- Cutter movement, often sweeping.

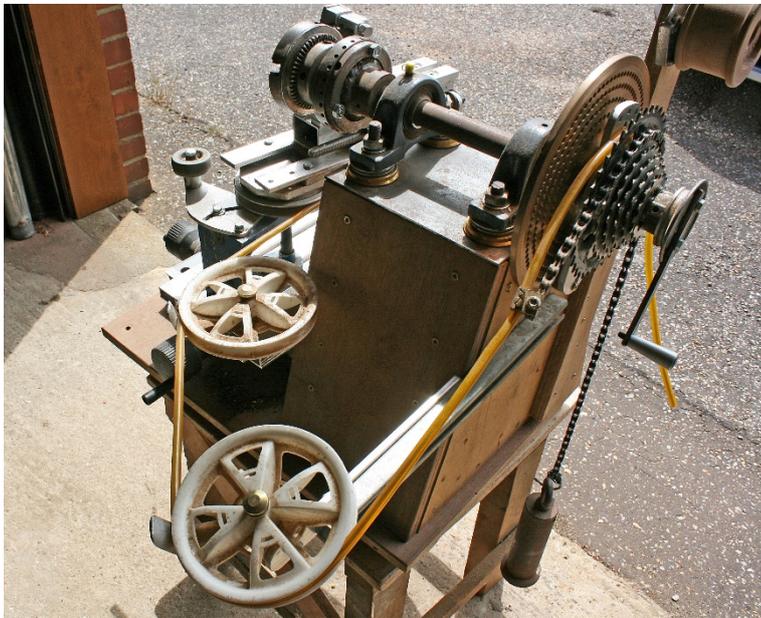
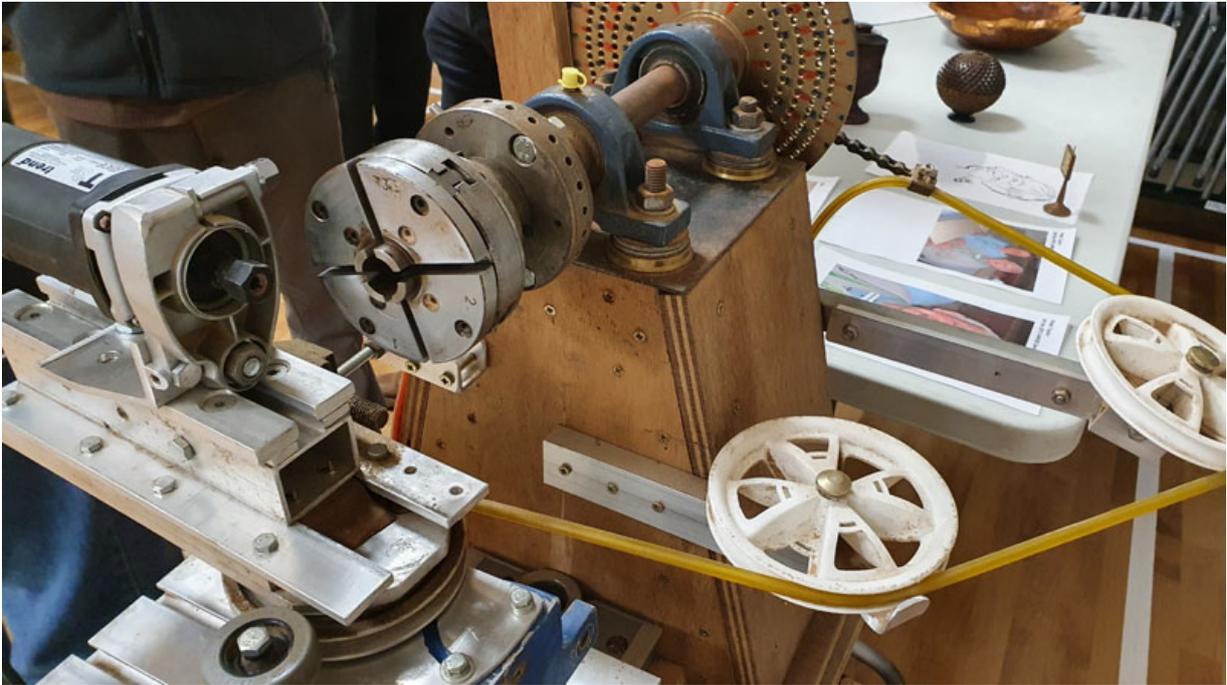
What follows is an attempt to explain, in broad terms its operation, however it may not be absolutely correct.

The piece to be decorated would be mounted in the chuck as normal close to the router.

The router can be seen attached in its collar above what is a multi-axis milling table with precision adjusters, however it is more complex than that as the router can also be adjusted to multiple angles and sweep through a wide arc of cut as required, again with precision adjusters and threaded stops.

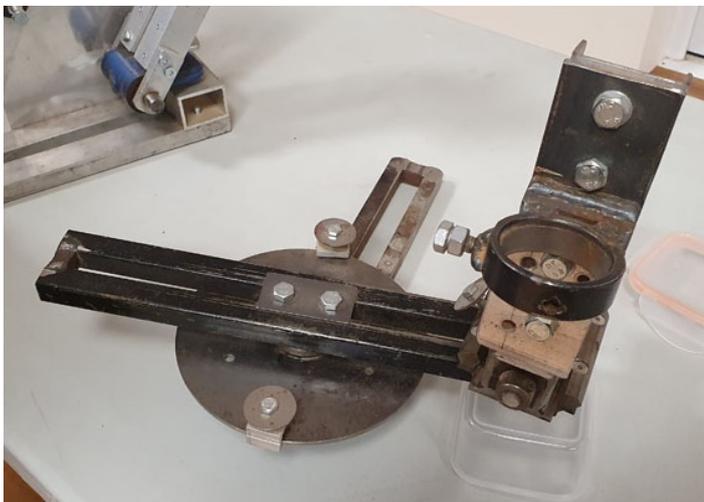
A perfectly calculated and precisely made index wheel allows the work to be very accurately indexed. It allows the work to be set to any of a very large number of combinations. Pegs hold the position for each machining position.

Coupled to this is a bicycle sprocket, with several gear selections to an attached chain ending in a weight to apply geared speed adjustment. The action of routing a horizontal curve rotates the chuck by a few degrees dependent upon which bicycle gear is used, thus creating a 3-Dimensional curved, curved flute. The chain is connected to the router via a drive belt and two horizontally mounted pulleys that were originally pram wheels. This drives the router in a sweep.



The sprockets are from a bicycle and the pulleys are old pram wheels.

Some of Peter's standard lathe jigs



This Jig was made by Peter and allows multi axis router cutting on a standard lathe.

Its clever design allows it to be easily attached to the Lathe Bed when needed.

The router attached to the collet.

It rotates, slides and allows for any angle positioning of the cutter

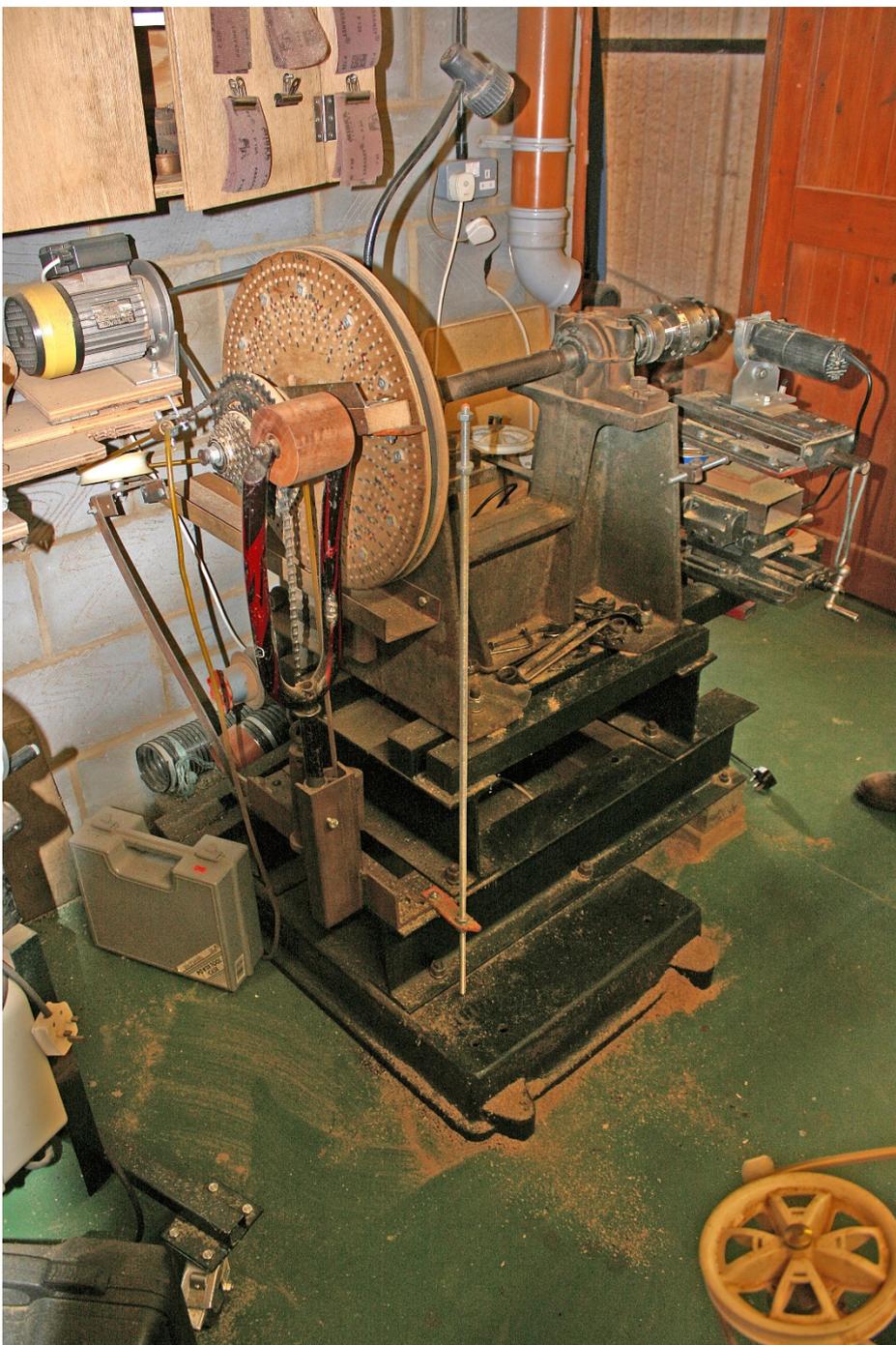
Another example made by Peter. This is designed to be used with a Makita router.

It too attaches to a standard lathe bed and allows the user to cut precise arc patterns but only in a single axis.

An adjustable stop allows it to be set to distance of sweep and the angle in relation to the lathe mounted work can be set via the bed attachment.



Peter's larger fluting and spiralling lathe.



This large machine is shown as it was when installed in Peter's workshop

Note the heavy constructions and bearings to reduce vibration.

Given the large multi diameter index wheel together with all axis setting and milling table meant this machine has virtually unlimited cutting combinations.

The router is a Trend T4 hand held router and demonstrates the scale of the machine.

And finally..

Peter was a romantic at heart and often made little valentines for the ladies.

The little 'antique' ladies fire screen was given to our Treasurer and stands around 2 ½ inches tall.

Peter was a remarkable and generous man who loved woodturning, he offered well received quality advice and explained techniques coupled with encouragement for beginners and long-term experienced turners alike.

This quiet man worked tirelessly for charity right up until he had to stop turning, just a short time before his passing. Peter sold and donated hundreds, if not thousands of turned items without personal gain to raise money for deserving organisations. He was deservedly recognised for this by the honour of his British Empire Medal BEM.

His generosity to the West Suffolk Woodturning Club was immense, his numerous tombola donations helped us raise large sums of money and his unmeasurable woodturning wisdom and encouragement will be sorely missed.

