



Rose Engines Rock

At the February meeting we welcomed Arthur Kingdon, president of the Society of Ornamental Turners. In a departure from the 'plain turning' that members engage in, Arthur was presenting the practices of ornamental turning and demonstrating on a rose engine which he had built himself. The main difference between the two types of turning is that in plain turning the workpiece rotates and the tool is presented to the spinning work whilst in ornamental turning the workpiece which has previously been plain turned is stationary and the rotating cutting tools are presented to the work on slides.

After the notices and apologies, Arthur introduced himself with a little about his background. He began in furniture restoration which involved some turning, then worked with the Historical Trades Society where he discovered ornamental lathes namely the Holtzappfel lathe. It was not until some years later that he used one leading on to his current involvement as president of the SOC.

Arthur gave a slide presentation with a brief outline of the history of these lathes which have been in existence in some form for hundreds of years with an example of Anne of Cleves using one in 1539. In 1794 John Jacob Holtzappfel founded his company building specialised ornamental lathes as well as high quality tools and books. The company developed through the 19th century finally selling its last lathe in 1928 as the hobby declined.

Other manufacturers included William Hartley, the Evans family and Goyen.

The lathes were intricate machines, some housed in wonderful wooden cabinets which included storage for all the necessary chucks, other components and tools. They were extraordinarily expensive and only affordable to the wealthy including nobility and monarchs for whom they provided a status symbol and an exclusive hobby.

To give us an idea of the sort of designs possible on these lathes, Arthur began by fixing his rose engine so that it did not rock. The workpiece was mounted in the chuck with an indexer in position.

Arthur then explained how the cutters were powered by small inexpensive motors purchased online. They were held in frames mounted on slides and cross slides. The slide table was anchored by strong magnets. His indexer had a maximum of 96 positions.

The first design was a basket weave on the side of the work piece using a 10mm square end cutter. It is important to maintain a regular depth of cut and concentration is of the essence as mistakes cannot be rectified and will be glaringly obvious.



Using the cross slide to advance the cutter to the required depth then withdrawing it and rotating the workpiece using the positions selected on the indexer, Arthur made a series of cuts. The cutter was powered by a small motor and drive belts mounted behind. See picture above.

The slide was then traversed to the next position along the workpiece and the process repeated. The third stage was to cut again between the first two lines with the indexed positions set midway between the first two lines. This offsetting is known as phasing.



This can be seen in the photo left where the middle line of cutting has not completed the circumference of the work.

Arthur moved on to demonstrate a beading cutter. Modern cutters are made of high speed steel but the Holtzappfel ones were made of high grade carbon steel. The cutters need sharpening precisely. A huge selection of cutters is available all creating different effects.

After the coffee break, Arthur showed us some more techniques using different motors and cutters. The pictures below show a selection of them.



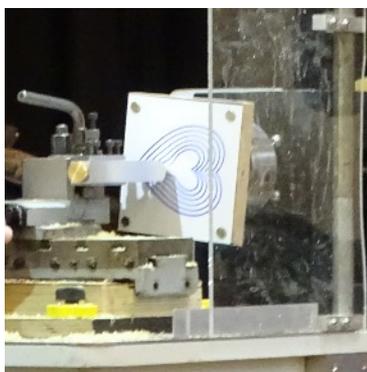
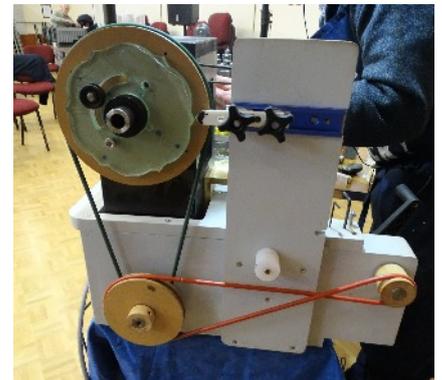
After lunch Arthur began with a presentation about the background of the rose engine. He covered the history and well known turners using these techniques.

Arthur then set up his rose engine to rock in its intended way for engine turning.

The patterns cut are dictated by rosettes which work like cams as they turn and the engine rocks. The rosettes are made from 10mm thick acrylic cut on laser cutters to specific designs.

Arthur demonstrated cutting a design on the side of the workpiece. By hand cranking the engine, one has more control. The rosettes can also be phased and the combination of different rosettes can produce a variety of designs.

Arthur set up a flat chuck with magnets to hold paper and used a sharpie pen instead of a cutter to clearly illustrate the design possibilities. He used a heart rosette and moving the pen across on the slide, showed how the design changed shape as the size decreased.



Above right, The pulley arrangement showing the rosette and cam follower. Left, Scribing the heart shaped design with a sharpie pen onto paper.

After a short tea break, Arthur mounted a blank made from veneers of coloured woods glued together. Using a suitable rosette, he cut a design through the layers to reveal the contrasts. These are good designs for ornaments and jewellery. See below.



Right, Arthur's demonstration pieces showing both indexing and rose engine work including the traditional barleycorn design.



Finally there was just time for Arthur to discuss the use of Chinese ball cutters. A suitable ball size would be 65mm and the ball would be held in a collet chuck. The deepest cutter would be used first.



Left, Chinese ball.
Right, Chinese ball cutters.
Far Right, Chinese ball split to show the internal workings.



Arthur's demonstration gave us a good insight into the principles of ornamental turning and rose engine work. These are complex processes which demand a high level of accuracy and intricate equipment. Thanks go to Arthur for his time and effort in bringing this demonstration to us. It was both enlightening and enjoyable. Thank you Arthur.



A small selection of Arthur's work.

Your Way Project



A variety of candle holders were entered in February.

The subject for March is a pinch pot (a small container or condiment set for taking a pinch of the contents)

The Richard Hasleden Cup, Monthly Entries

Once again we saw a good number of entries for this competition. Here is a selection of them including some more candle holders.



Reindeer candle holder by Anne Smith.



Lego clock by John Packer



Laminated candlestick by Keith Youngs.



New member, Cameron Gold, turned this bowl.

More Monthly Entries



Bowl by Keith Pierce.



Lidded pot turned from burr oak by Jacob McCarthy.



Ostrich egg piece turned by Gareth Garner.



Adam Baker turned this goblet with captive rings.



Oak offset bowl with turned acorn decoration by Sandra Day.



Howard Baldock turned this piece from Eltham Palace yew.



A bowl turned by Lilly James.

March Meeting

March 22nd 10.00 - 16.00

Gary Rance

Professional demonstrator

Gary is a professional turner specialising in production turning and creative work.

<https://www.garyrance.co.uk/>



Mike Moon turned this Moon web in ash.

Chairman	Maggie Wright
Vice Chairman	Mike Pollard
Competition Secretary	John Packer
Secretary	Anne Smith
Treasurer	John Turner
Events organiser	Mike Pollard
Librarian	Gareth Garner
Newsletter editor	Sandra Day
A-V co-ordinator	Brian Rowson
Hands On	Pete Hawes
Webmaster	Rick Thompson
www.wealdenwoodturners.org.uk	

April Meeting

April 12th 10.00-16.00

Hands on with Gareth Garner.

Gareth will be showing us how to turn a seed pot former.

Please bring your tools as usual and a blank 2.5" x 2.5" x 8"