NORTH WARWICKSHIRE & HINCKLEY WOODTURNING CLUB

NEWSLETTER February 2024

www.hinckleywoodturners.org.uk

Notes from the Editor

Inside you will find my report on Nick Adams demonstration. He gave a well informed presentation on the history and making of English Longbows. With bows, arrows, tools and jigs on display, the presentation was well received by the large audience. I have also included a report on the ProKraft bowl sander kit. A cheap alternative to buying one.

You will also find my report on the demonstration by our own Bob Smith who made a three piece tealight holder. I've had a go since the meeting and it's not as easy as Bob made it look.

New club member Ian Pinfold also shows off a Pitch Pine vase.

On March 5th, we will have a Hands-On meeting. One member has asked for help with making fountain pens so I shall lead that project on one lathe. If you have any other suggestions for something you would like to see, please let us know and we will do our best to help.

I was pleased to see a very nice off-centre candlestick on the display table. It is always pleasing when members are inspired by a demonstration.

Rob Sheehan
Secretary, Newsletter Editor & Web Site Manager

History & Making of English Longbows

By Nick Adams 6/2/2024

Nick had brought along several longbows, arrows, tools and jigs that he had made.

Timber Selection

The bow seen in his left hand is made from Yew obtained from British Columbia. This mountainous region on the west side of Canada produces a slow growing, tight-grained timber suitable for bow making. Branches approx 9" diameter growing on the North side of the tree are used as these have the tightest grain.

Making A Longbow

The branch will be split in half with a froe (not sawn), and split further into three or four, 8' long, bow blanks containing both the paler sapwood and the darker heartwood. The heartwood is used on the belly (inside curve) of the bow as it resists compression. The sapwood is used on the back of the bow as it resists tension/stretching. The bow is shaped using hatchets, drawknives, spokeshaves, files and scrapers. It is not sanded. Nick used Tung Oil as a finish. In the USA, Osage Orange is used and Bamboo is another good choice for laminated bows on the back (outside) of the bow. Nick said that a bow has a lifespan related to the number of arrows it can shoot, not the age of the bow. Bows found on the Mary Rose wreck (1545) are still good to use. As bows are used, they suffer "string follow" where a once straight bow begins to stay bent and loses some of its power. Bows are made for the person. Nick's bow is about 6'6" long (Nick is 6'2" tall), has a pull weight of 65 lbs and a pull length of 31". It will shoot an arrow about 230ft. Military bow of the Agincourt era 1415 would have a draw weight of over 100lbs and could shoot 500+ft.

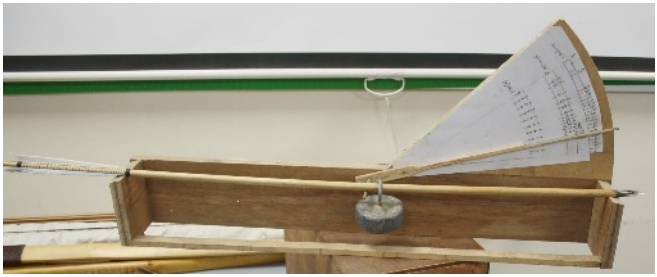
After rough shaping of the bow, a process called "tillering" thins the ends and refines the shape to give an even curve and the required maximum draw weight at the required maximum draw length. Modern bows use

Dacron or Kevlar for the strings. Medieval bows used linen. The tips of the bow are made from horn.

Other Bow Types
A **reflex bow** has curved arms, allowing a shorter bow to have the same draw length and power as a longbow.
A **crossbow** has a draw weight of 200+ lbs but has a shorter draw length so its range was less than a longbow.
Modern **composite** (laminated) bows use Bamboo, Ipe and Maple.

No licence is needed to own a longbow but it can only be used on private land with the land owner's prmission.

Medieval Arrows
A standard arrow is about 3/8" diameter and about 30" long.
A war arrow is 1/2" diameter and about 30" long.
Arrows are made to suit the person/bow. An arrow flexes as it leaves the bow. The amount of flex is adjusted to the power of the bow. This ensures maximum power is transmitted to the arrow and minimises the shock to the bow when shooting an arrow. An arrow tester (see left) measures the flex of an arrow.



Arrow feathers are only taken from the right wing of a goose. This ensures that all three feathers on a arrow will cause it to spin in the same direction giving it stability. One of the three feathers is a different colour (darker grey) then the other two. This is used by the archer to orient the arrow on the bow aligning the grain of the arrow shaft.

Long Bodkin: Long, shap point penetrates thick protective padding.

Short Bodkin: Armour piercing. Effective against thinner side armour.

Military arrow #16: Barbs made arrow removal difficult and damaging.

Swallow Tail: Hunting arrow. Wide tip for large blood loss.

Rope Cutter: Hunting arrow. Wide tip for large blood loss but limited penetration so as not to damage the meat and make retrieval easier.

Bollock Dagger

The archer's hand weapon. Used when out of arrows or when finishing off an armoured opponent, as the narrow point can go through the narrow armour cracks.

Historical Names
Archer, Fletcher, Bowyer, Stringfellow. These surnames come from the various trades used to make the bows and arrows.

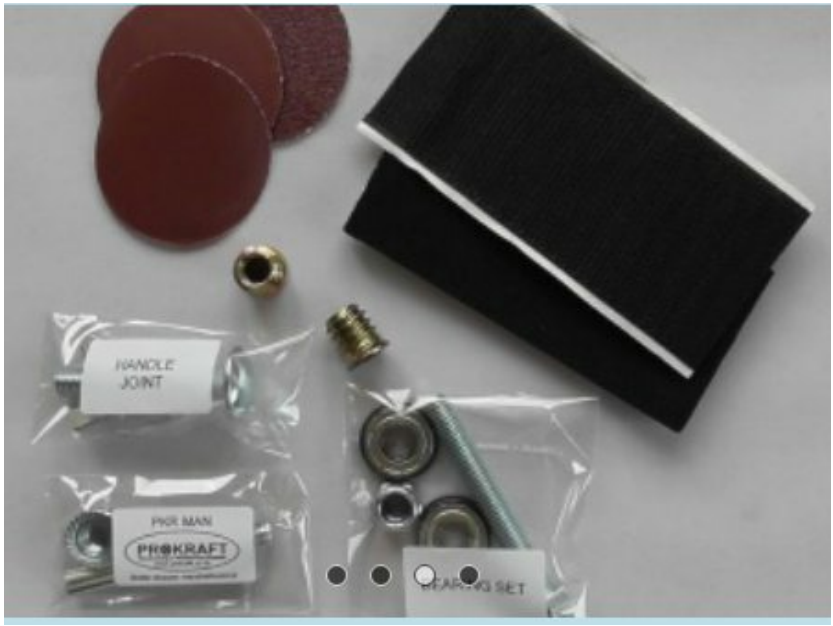
Battle of Agincourt 1415
King Henry V of England fighting King Charles VI of France during the 100 years war. The disease-weakened English/Welsh army under Henry (approx 9000 men of which 80% were archers) were trying to retreat to English held Calais when they were confronted by a superior French army (approx 15000 well-equipped men). Various factors contributed to Henry's unexpected win but the fast and very effective English longbow was a major contributing factor. Approximately 2 million arrows were shot during the war. This required 3 years preparation to manufacture that number of arrows.

The Battle of Agincourt
15th-century miniature, Enguerrand de Monstrelet

ProKraft Bowl Sanding Kit

By Rob Sheehan

I recently decided that we needed at Bowl Sander at the Bulkington workshop. Looking at Bowl Sander prices, I couldn't justify buying one but then I saw the ProKraft Bowl Sander kit. For £13 + p&p, I thought it worth a try. The included instructions are poor but there is an online video. The sanding heads and handle are turned on the lathe. The adjustable head was cut to shape on the band saw. There are fittings for two 2" diameter sanding heads. You will need to buy a lot more abrasive discs.

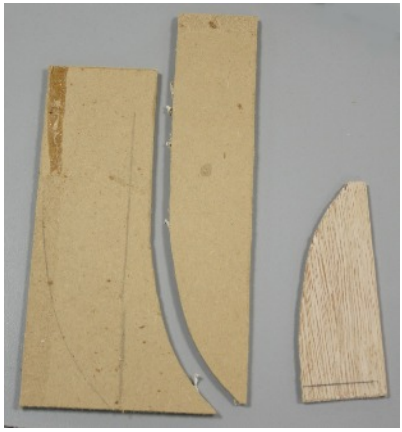


Hanging Tealight Holder

By Bob Smith

Bob had already drawn out his design on paper and had made wooden templates from the design. The design has matching convex and concave curves. Templates help to get these curves right when turning. With complete beginners in the audience, Bob also gave a quick talk on safety.

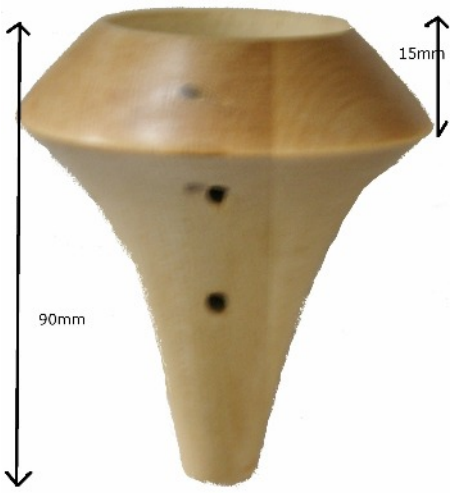
Bob had already drilled the three pieces of this project while the timber was still square. This makes it easier to align and mark the matching holes. The holes in the base go all the way through the blank. The holes in the tealight holders only go halfway through the blank. Bob was using welding rod (available in 2.5mm or 3.2mm diameters), so drill the appropriate size holes.



Bob started by turning one of the two "hanging" tealight holders. Using a Beech blank 3" x 6" (made up of two pieces of Beech worktop glued together), he turned it to round and turned a chuck tenon at the tailstock end. Holding it in a chuck, Bob marked the length as 90mm and a line 15mm from the top. He then drilled a 40mm diameter hole in the top for the tealight. The depth matched the depth of the tealight. He used a sawtooth bit as it drills end grain better than a forstner bit. Using the 15mm line, Bob chamfered the top down to the tealight hole, leaving a 2mm wall thickness. He then cut a cove from the chamfer down to the bottom of the tealight holder, ending with a 10mm diameter at the base. All the time while turning, Bob checked the curve against the template. Bob sanded from 120 grit to 400 grit. He then applied sanding sealer (thinned down 50/50 sanding sealer/thinners) followed by Friction Polish. After parting off, Bob used another chuck with smaller jaws to hold the tealight holder by the tealight recess. This allowed him to finish the base of the tealight holder with a convex curve.

A little more sanding/sealing/friction polish finished off the base.

Bob then turned the second tealight holder to match the first. Rather than rely on his drawing, he measured the first tealight holder in case the dimensions were slightly different to the drawing.



Bob then turned the central base using the third piece of Beech worktop 4" square by 8" long. Two pieces of worktop glued together gives the necessary thickness. Mounting the piece between a Steb centre and a ring centre, Bob turned it to round and added a chucking tenon at the base (tailstock end). After mounting it in a chuck, Bob marked the height as 120mm and roughed it to shape using a spindle roughing gouge. He then switched to a bowl gouge to turn a gentle curve from the base to a point at the top. Bob kept checking the shape against the template and against the two tealight holders. The convex curve of the base should match closely to the concave curves of the tealight holders. Once the shape was close, Bob inserted the supporting bars and checked the shapes looked right. A few

tweaks later, he was satisfied with the shapes. As decoration, Bob added three lines using the corner of the skew chisel. He then burned the lines using a piece of formica worktop. Bob then sanded, sealed and applied friction polish to the base. As there was more timber than needed at the top of the base, Bob turned a little finial at the top that mirrored the shape of the tealight holders but in miniature. He then parted off the base with a slight undercut, before sanding and sealing it. Bob inserted the pre-cut support rods through the base and mounted the two tealight holders on the ends. Note that the two rods are different lengths due to the curvature of the piece. He used super glue to fix the rods in place.

As winner of the John Bradbury trophy last year, Bob gets to choose this year's project. No surprise, he has chosen a "Hanging Vessel". His hanging tealight holder counts but there are also many other designs that could be chosen instead. You have nine months to decide on your design and turn it ready for the Christmas party.

Bob's design for a Hanging Tealight Holder
(sorry about the picture quality)

Some of Bob's work

Pitch Pine Vase

By Ian Pinfold

Hi Rob,

Many thanks for the February news letter and the details from Nick's talk. I thought it was an absolutely fascinating talk and I do think many of us were enthralled. Well done & thanks to Paddy for organising it & many thanks to Nick for coming along & sharing his knowledge & passion. I must admit I quite fancy having a go at a bit of archery now!!

I'm currently trying to turn a vase from a very old piece of pitch pine. Its actually an off cut of some 4 x 4 I've used to lift the lathe a bit to try & stop my back ache!
Ian.

NORTH WARWICKSHIRE & HINCKLEY WOODTURNING CLUB EVENTS 2024

January	2nd	No Meeting	
	16th	Demo	Rob Sheehan
February	6th	Demo	Nick Adams
	20th	Demo	Bob Smith
March	5th	Hands-On	
	19th	Demo	Peter Denning
April	2nd	Hands-On	Sharpening
	16th	Demo	Wolfgang Schulz-Zachau
May	7th	Demo	Bill Bennett
	10-11	Woodworks@Daventry	
	21st	Demo	Giles Headley (pottery)
June	4th	Demo	Robert Till
	18th	Hands-On	
August	6th	Demo	Paul Hannaby
	20th	TBD	

Events at Other Clubs

Please contact the club to check times/dates/locations before attending

Coombe Abbey (Shilton Village Hall 6:30pm)
Friday February 16th Ian Ethel