

Woodturning

THE WORLD'S LEADING MAGAZINE FOR WOODTURNERS



**KURT
HERTZOG**
GUEST EDITOR

Introduces the issue
Shares his laser cut pen blank tips
Profiles Mike Mahoney

PROJECTS Blackwood bowl • Yew box • Wall clock
• Toy microphone • Fruit bowl • Spiral sheoak vessel
TECHNICAL Fir tree & fungi shapes • Morse tapers

**RECORD
POWER**
ESTABLISHED 1909®

THE NEW STANDARD FOR WOODTURNING

We are proud to offer our latest range of turning tools, made in the UK at our in-house production facility. Designed in consultation with and tested rigorously by professional woodturners, they represent a new standard in quality and value.

When you buy a Record Power turning tool you are investing in many years of manufacturing expertise and knowledge from a brand with a rich heritage of woodturning specialisation.



ONLY
£99.99



103720 3-Piece HSS Bowl Turning Tool Set

This set contains the three essential tools for bowl turning - 3/8" bowl gouge, 1/2" domed scraper and 3/16" parting tool.

£99.99



103710 3-Piece HSS Spindle Turning Tool Set

This set contains the three essential tools for spindle turning - 1" spindle roughing gouge, 3/8" spindle gouge and 1/8" parting tool.

£99.99

View our full range at
recordpower.co.uk

All prices include VAT. E&OE.

 **MADE IN
BRITAIN**®

 **MADE IN
SHEFFIELD**



Free online educational videos
available at
recordpower.co.uk/turningtools



Bowl Gouges | Spindle Gouges | Spindle Roughing Gouges | Skew Chisels | Scrapers | Parting Tools

Over
100
years
Experience • Knowledge
Support • Expertise

Incorporating some of the most famous
brands in woodworking, Record Power's
roots stretch back over 100 years.

RECORD POWER
ESTABLISHED 1909

 **CORONET**

STARTRITE

 **CamVac**

BURGESS

For more details visit
recordpower.co.uk or
contact your local stockist

RECORD POWER
ESTABLISHED 1909



An Original American Beauty, 2005



Robust Dealer, John Jordan. www.johnjordanwoodturning.com



Robust Dealer,
Lyle Jamieson.
www.lylejamieson.com



Robust Dealer,
Nick Agar.
www.nickagarstudios.com

THE HEART OF THE TURNER

Why do we turn? To many, it is as much about the process as the result. Some find a thrill throwing wet chips through the air. Others find reward in the meticulous arrangement of segments. The meditative qualities of sanding and finishing should not be ignored. Adding layers of color, carving and texturing further add to the creative experience. The results vary: perhaps an elegant utility piece to be enjoyed in the kitchen, or a shelf bound heirloom that passes through the generations. In all cases, the final result is a record of the turner's process.



Buy direct or from a list of official Robust dealers found at
www.turnrobust.com

Robust lathes and accessories are made in
Barneveld, Wisconsin, USA

Direct: 608-924-1133
www.turnrobust.com



Better by design. Enjoyed for a lifetime!

Guest editor's letter

Kurt Hertzog

What is woodturning to you?



If you are like me, sometimes you reflect on why you do certain things. Why go here or there; buy that brand; belong to that organisation; live where you do; and more? For discretionary items, thinking about 'why' can be interesting. An example might be, why are you currently involved with woodturning? Did you grow up in the craft or business or go into the trade after school or the service? Some are professionals or collectors, but most of us got involved with woodturning as a hobby or pastime. It was an enjoyable way to spend some available hours, like gardening, or sketching, or reading. Many of the baby boom generation got a woodturning tease in school in the era when wood shop, metal shop, and auto shop was part of the secondary education curriculum. After that tease, woodturning probably fell into an abyss as life took on more pressing issues for most all of us.

Like me, perhaps you had that 20 to 40-year gap from the exposure to woodturning in junior

or high school until you picked up a turning tool again. The biggest influx of new turners in my classes have always been recent retirees who now have some discretionary income and time to fill. It is the immediate gratification of woodturning that brings in those 'new' turners, who range from the just curious to the soon smitten. As they learn something and become more proficient, you can see the joy in their faces. It can now become a pleasurable pastime, a part-time craft business, and, for some a new full-time occupation.

When I reflect on it, I believe the learning aspects become the challenge with all the tools, equipment, materials, and techniques to master. As you get further in your proficiency, sharing your capabilities with the learning turners can then become an enjoyable challenge. Whether demonstrating at the local craft fair, working with school students, demonstrating at a woodturning event, or creating YouTube videos, the sharing becomes the satisfaction aspect of turning.

Of all the reasons I do woodturning, I think the social aspect is the most important. As I write this, I'm getting ready to fly out to the AAW Symposium in Chattanooga TN. It is the first face-to-face event in a couple of years. Have there been virtual events during the lockdown? Sure. Are they the same? Certainly not. Sitting in the demos amid the wood chips and personal interaction is far more satisfying than watching even the best demo on your computer. Being there in person with old friends from around the world, making new friends, experiencing the Instant Gallery up close, and walking through the trade show can't be replaced with a video, regardless of how good and realistic. As the world reawakens and symposia, club meetings, and face-to-face classes resume, take a moment to reflect on your woodturning and what is important to you. Regardless of the reason(s), take a few moments to savour the pleasures woodturning has brought to your life.

Kurt



Find us on Instagram and follow us on @woodturning__magazine and share your work with us using #woodturningmagazine or email us on WTEditorial@thegmcgroup.com

Contents

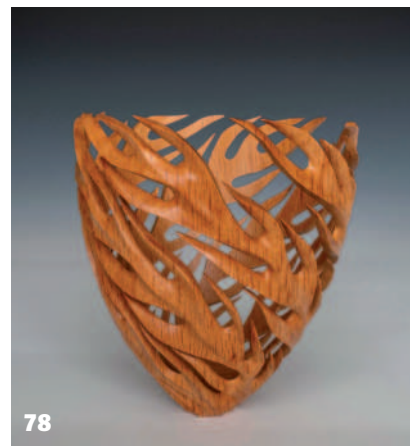
Issue 374



Cover image by Kurt Hertzog



62



78

Guest Editor

- 3 Guest Editor's letter**
Kurt Hertzog welcomes you to this issue of *Woodturning*
- 6 Tips and tricks to laser cut pen kits**
Kurt Hertzog shares his suggestions for improving the process
- 12 Force of nature**
Kurt Hertzog talks turning with world-renowned woodturner, Mike Mahoney

Community

- 41 Subscriptions**
Discover our latest offers for subscribers
- 84 Community news**
Take a look at what *Woodturning* readers have been making and find out about the latest turning news and events
- 103 Next issue**
A sneak peek at what's in store in the next issue

Features

- 96 Diary of a professional woodturner – part 15**
Richard Findley reminisces about a large contract, relives a drama at a demo and shares some exciting news about a woodturning course
- 104 To finish or not to finish**
Pete Moncrieff-Jury contemplates the many options for finishing your turnings



6



54



12

PHOTOGRAPH BY KURT HERTZOG



72



42

Techniques

34 Organic shapes – part 2

In the closing article of this two-part series, Les Symonds explores a range of shapes for another two organic forms

68 Kurt's clinic

Kurt Hertzog answers readers' questions



58

Projects

18 Making the most of imperfections

Andrew Potocnik encourages seeking out the beauty in timber flaws with a wormy blackwood bowl

26 Seed pod pot

In the second part of a two-part article, Andy Coates uses carving burrs to lift a simple pot above the ordinary

42 Lidded yew box

Pat Carroll makes a neat little cylindrical trinket holder



90

48 The magical Morse taper

Jim Duxbury demonstrates how to make this useful tool

54 Sing it loud

Kevin Alviti creates a simple toy microphone for a budding rock star

58 Candlestick

Matt Long steps up the difficulty with this turning, a shapely candlestick

62 Bird box

Alan Holtham hollows out and shapes an otherwise useless wet log to provide an elegant avian starter home

72 Fruit bowl

Sue Harker turns a dish with a raised base from one piece of timber

78 Spiral fire

Neil Turner creates a beautiful turned and carved piece in sheoak

90 Wall clock

Ian Woodford creates a simple timepiece with turned inset chapter ring markers

HEALTH & SAFETY

Woodturning is an inherently dangerous pursuit. Readers should not attempt the procedures described herein without seeking training and information on the safe use of tools and machines. All readers should observe current safety legislation when turning and wear appropriate personal protective equipment (PPE) and respiratory protective equipment (RPE).

Tips and tricks to laser cut pen kits

Kurt Hertzog shares his suggestions for improving the process

PDF NEWSPAPERS and MAGAZINES: WWW.XSAVA.XYZ



PHOTOGRAPHS BY KURT HERTZOG

I've only met a few woodturners who haven't turned a pen or two in their journey. Some turners turn only a couple of pens while learning then move on and many turners continue to do some pens as part of their expanded repertoire. And of course, there are those who turn exclusively pens and nothing else. Regardless of the category you might align with, if you haven't tried using laser cut pen kit blanks, you've really missed an interesting opportunity. Like any turning, knowing some of the tips and tricks can help you be more successful. Let me share a few of the things I've learned on my journey that I think should help you avoid some of the pitfalls.

Read the instructions

Not to sound derogatory, but if you are like me you read the instructions to find out why you screwed up. Notice the past tense. Reading to learn why you messed things up might be informational help for the future but usually does little to remedy the current mess. I've never seen instruction sheets, whether printed or online, that are more than two pages long. Often, they are one page and that has little printing and lots of pictures. It won't take but five minutes at most to learn the potential pitfalls and avoid them. Now you have that under your belt, let's launch into the mechanics of laser cut pen blank process tips.

Have a clean work area for blank assembly

Depending on your kit selection, there can be a few large components to be assembled or many small, intricate pieces. Your turning area or workshop in general probably is a poor place to do your kit blank assembly. Anything dropped into the debris or amid equipment will likely be lost or damaged. Since the kit assembly is a very clean process, I suggest you pick a desk or tabletop available in a well-lit, clean area where you can sit and work. Most kits can be completed in one sitting so you can work in an area and be out of the way should the table or desk be needed for dinner or homework. Plenty of light with a magnifier headset and a pair of tweezers will make your assembly much easier.



1 Your shop is probably the wrong place to assemble laser cut kits. Find a clean, well-lit area where you can lay out the pieces, sit, and work

Check your kit

It has been very rare that I have had missing or broken parts, but it is best to find out at the beginning rather than part-way through. The kit makers will provide missing parts or replace broken ones if you contact them. For years, laser cut blank kits came with the instruction sheet inside the package, although recently to save paper, weight, and waste, the instruction sheet is posted on the kit maker's website. Regardless of where you get the instruction sheet, time spent aligning the pieces to match the diagrams and reading the assembly process is well spent.



2 Just a few of the smaller parts needed for one kit. I find that sorting them out and sticking them to reverse-sided tape orients them and keeps them in place

Know the two absolute keys

There are many important points to being successful in creating these multi-piece pen blanks but there are two imperative ones for quality results. First, the successful turning ability and longevity of the finished pen will depend on the pen blank pieces to be flush and well-adhered to the kit brass tube. Without this, you be susceptible to having pieces break out when turning or have large chunks of the blank break free from the brass tube. The second key to creating a good-looking finished product is to equalise the spaces around the component pieces. The component pieces are slightly smaller than their respective openings to allow for fit, so centring them, equalising the gap around the piece, will make for a more pleasing finished piece.



3 A key to success is having the component parts flush to the inner diameter so they can be adhesively bonded to the brass tube when it is time. **4** With pieces of different species and needed clearances for assembly, there are spaces. Position the pieces visually, equalising spaces

Flush mounting the component pieces during assembly

To push the pieces to the proper depth to make good surface contact with the brass tube requires that you insert the brass tube into the blank during the assembly. The method I find works best for me is to wrap the brass tube with an adhesive protective layer, such as waxed paper to allow the tube to be removed after assembly. This allows the tube to be glued in with epoxy rather than the CA that will be used to tack the component pieces in place. An alternative assembly aid is a silicone assembly dowel available from the kit manufacturer. These properly sized non-stick mandrels allow the component pieces to be pressed to the correct depth while tacking them in place. Upon completion, the mandrel is removed for reuse and the brass tube is adhesively bonded in place. My reasoning for using this method of assembly and gluing in the tube later is for the best adherence of all the component surfaces with a gap-filling adhesive. If the tube is accidentally bonded into the blank using the thin CA used for component piece assembly, I don't think you get the best tube-to-blank bond possible.



5 Rather than use the raw brass tube as your depth control device, wrap it in waxed paper or use the available silicone assembly dowel

Assembling the component pieces

With either the protected brass tube or the silicone assembly dowel in place, tack the pieces in place per the instructions using thin CA. Use only enough CA to position each piece as desired, creating the best spacing of the pieces as they interact. You can use medium CA if you wish since you'll be using it sparingly to only hold the pieces in location. Earlier instructions suggested flooding the surface with thin CA to adhere the brass tube in place. I suggest you ignore these and use the method I've detailed. Fastening the tube in later with epoxy will provide a far superior method of maximising the bonding of the component pieces to the tube. This method has given me the most satisfactory results.



6 Lightly tack the pieces in place with CA as you go. Use the provided rubber bands to help position and hold the pieces as needed

7



8



9



10



Glue in the brass tube with epoxy

With all the component pieces tacked in place and the tube removed, it's time to permanently bond the tube in place and fill any gaps. Be certain that your brass tube is scuffed. If it isn't, take a few moments to do so. A scuffed brass tube will give the epoxy all the nooks and crannies, or 'tooth', for a good mechanical bond of the epoxy to the tube. I also take a moment to scuff the inside of the blank lightly with a rat-tail file to provide extra tooth in the wood. Sometimes the seepage of the thin CA will provide a slick surface on the inside of the blank that doesn't lend itself to a good bond. You can use any quality epoxy, whether five, 30, 60 minute or other. I use the five-minute bubble pack stuff from the discount store for two reasons. First, it is a quality brand with high turnover. The fresh stuff will always beat the stuff hanging around for years on the shelf. More important, I want the bond to set up quickly. The mixing, coating of the inside of the wooden blank, and then the brass tube only takes a couple of minutes at most. When I position the brass tube inside, I want it to set up and stay put. Longer-cure epoxy can let the tube migrate a bit and ruin your accurate positioning. My method is to have all ready, mix my epoxy and use a long wooden skewer, such as those used for shish kebabs, to coat the entire inside of the wooden blank with the epoxy. I then coat the outside of the brass tube lightly, mostly at the end being inserted, with sufficient adhesive to allow it to spread down the length of the brass tube as I insert it. Perhaps not required, but I insert the tube with a twisting motion, pushing it to my desired location with respect to the overall design. All laser cut pen blanks are long enough for a host of kit designs. There will be trimming of wood from both ends once the brass tube is positioned. Pushing the brass tube to the proper position can be done easily using the butt end, clean at this point, of the kebab skewer. I remove any epoxy that has found its way inside the brass tube with a cotton bud while it is still not cured. The blank is then set aside on the level to cure completely. Remember, five minutes is the open time, not the cure time. Nearly all epoxies require 24 hours to come to full strength. I always wait a day before I do any additional processing.

Filling the gaps

Gluing in the tube from the inside will provide a good bond between the inner wall of the laser cut component parts and the brass tube. It will also usually fill any gaps that might exist between the component parts themselves. Rather than count on the component parts having sufficient gap filling as I turn away the stock, I'd like to be certain. Once the brass tube has cured in place, I go over the outer surface of the blank with thin or medium viscosity CA adhesive. My goal is to flood any gaps with adhesive to fill them solid. I don't usually need or use accelerator. I simply take the blank and give it a generous coating of CA, focusing on the separations between the component parts. I don't care what the surface looks like since I'm going to turn all of that away. With everything bonded flush to the tube and any gaps between the pieces filled, everything should be solid in place as I remove stock during turning.

11



11 Fill the spaces between the pieces from the outside with medium CA glue. Don't worry about the outer level of the individual pieces

7 Be certain your brass tube is scuffed from the factory or do it yourself. The tooth on the surface lets the adhesive grip better. **8** Get everything ready prior to gluing: a disposable surface, fresh epoxy, pieces to be glued, and mixing/spreading stick.

9 Liberally coat the entire inside of the tube with your properly mixed epoxy. This will fill any of the gaps that may exist and bond the tube well to all the pieces.

10 Insert the tube twisting in place and position it to properly space it with respect to the outer design. Clean out excess glue from the tube ID with a cotton bud

Trimming is critical

The instructions will tell you never to use a barrel trimmer. I will tell you to never use a barrel trimmer. Do not use a barrel trimmer. Regardless of the type, how sharp it is, how gentle you are, or how skilled you think you are, you will ruin your blank if you try to remove the excess stock and true up the end of the blank with a barrel trimmer. Do you know how I know that you will fail? The best way to remove the excess stock and face the ends perpendicular to the centre line of the brass tube is to pilot on the inner diameter of the tube and sand the blank on a belt or disc sander. Some folks like to freehand the sanding process, but a better result will always be achieved using a fixture that pilots on the ID of the brass tube. Of course, your fixture needs to ride on the table and fence that have been accurately made perpendicular to the sanding face. Sand away all the excess wood until you reach the very edge of the brass tube. This is repeated from both ends. If you sand slowly, letting the abrasive do the work – remember speeds and feeds? – you shouldn't burn the wood and will wind up with a perpendicular face for your pen components to press to when you assemble the finished kit.



12 NEVER use a barrel trimmer on these. A belt or disc sander works well provided you have trued up both the platen and mitre gauge. **13** I don't favour freehanding the facing operation. A gap-free, properly assembled kit requires perpendicularity to the brass tube inner diameter. **14** The only way I can assure perpendicularity to the tube ID is to pilot on that ID with a fixture and aligned sander

“

The instructions will tell you never to use a barrel trimmer. I will tell you to never use a barrel trimmer.

”

Cleaning the inner diameter and chamfering the ends of the brass tubes

There are times when you didn't clean out the epoxy that crept into the inner diameter of the brass tube. This will make inserting the bushings used for turning difficult and later have the potential to crack the wood when you do the hard press of the pen components. Clean any of the excess epoxy out of the brass tube inner diameter with a rat-tail file. You don't need to worry about anywhere except the $\frac{3}{8}$ in from the end of the tube. If that area is cleaned out properly on both ends, you'll be able to slide in the bushings and shouldn't have any issues later during the component assembly. With the ends sanded flush to the brass tube, you'll have a sharp corner on the inside edge of the tube. This makes assembly of the component parts more difficult than it needs to be. Take a chamfer tool and 'break' the sharp corner of both ends of the tube. This chamfered edge will allow for easier assembly of the pen parts later.



15 An inexpensive rat-tail file will clean out the ends of the brass tube of any excess dried adhesive. Any extra can cause splitting with the hard press of the pen parts.

16 All working well will yield a blank that has all of the components bonded flush to the tube, component gaps filled, face properly, and the ID cleaned of excess

Turning the laser cut blank

Whether turning between centres with bushings, on a pen mandrel, or by some other method, mount your blank and turn it as is. Leave the rubber bands used during assembly and any excess outer diameter glue. All of that will turn away in a flash. Since your work is small diameter and securely mounted, you can speed your lathe up to very fast. High speed, sharp tools, and light cuts works well for these pen blanks. I suggest you use only one tool to turn your pens, regardless of the material or style. I use a spindle roughing gouge. Properly sharpened, it is in essence a skew chisel that was bent around a forming mandrel. With the ability to rough the blank and provide a very smooth cut using the wing, you can rough and shape your blank quickly. The very smooth surface resulting from the cut using the wing lets you finish your blank with minimal sanding.



17 Use the pen mounting and turning hardware of your choice. A simple pen mandrel and appropriate kit bushings will work fine. **18** Don't worry about removing rubber bands, excess glue, or projecting pieces. Cut right through them all. Sharp tools, high speeds, light touch. **19** I favour a spindle roughing gouge because of its versatility. Lots of sharpened edge to use and a superb wing to use for turning and shaping

Finishing and assembly

There are no special tricks to finishing and assembly other than good practice. Slow speed rotation and let the sandpaper do the work. Work through the grits, cleaning the debris between grits. Once properly prepped, apply your chosen finish. I almost always use a CA finish but that technique explanation is for another day. Assembly, using a press, your lathe, a hand clamp, or other method holds no special problems.

Conclusion

Hopefully this short list of tips and tricks can help you be more successful with your laser cut pen blanks. Nothing listed here takes any 'extra' time. The process is fast and straightforward. I don't think it contains any fluff. If I didn't think it helped me be more successful and create better results, I wouldn't do it (or them). Give the suggestions a fair try and see if they can help you. I think you'll find them worthwhile additions to your process. ●



20 Sanding and finishing is your choice. My favourite finish for nearly all pens that will really be used is CA. Easily applied, good-looking and durably tough

NEW

PLANET *rotur*
specialist woodturning products

Deluxe Long Hole Boring Kit

Specially Designed for making lamp stands and boring through spindle work.

Includes:

1" Piloted Drive Centre
Hollow Rotating Centre and Centring Rod
5/16" x 24" Lip and Spur Boring Bit

Available in 1MT & 2MT

Made in the UK 

Tel: 023 8026 6444

sales@planetplusltd.com

www.planetplusltd.com

Planet Plus Limited, Unit 3 Speedwell Close, Chandler's Ford, Hampshire, SO53 4BT

Made in USA



STAINLESS BOTTLE STOPPERS



TURNING KITS, ACCESSORIES, AND MORE

Largest selection of Made in USA bottle stoppers and turning mandrels!

NEW!



Liquor Bottle Stoppers
PATENT PENDING



Patented Bottle Stoppers Grade 304 Stainless Steel Stoppers



Decorative End Loops

- Key chains
- Christmas ornaments
- Stainless steel or brass



Precision Wood Turning Mandrels

Over 15 styles to choose from

Honey Dippers
PATENTED



Grade 304 Stainless Steel

Brass Hammer & Mallet Kits



Stainless Steel Bottle Cap Openers
PATENTED

With Magnet



Stopper Starter Kits
Several to Choose From

www.stainlessbottlestoppers.com

Phone: (570) 253-0112 • Fax: (570) 253-9606 • sales@stainlessbottlestoppers.com

Force of nature

Guest Editor Kurt Hertzog talks with world-renowned woodturner Mike Mahoney



There are only a handful of truly famous bowl turners. If I were to say Mike Mahoney, many would agree he is one of that handful. I selected Mike to be my featured turner not only because of his excellence in bowl turning, but because of his teaching abilities. Mike is one of the most talented turning instructors there is. His skills at teaching and his willingness to share everything he knows with anyone willing to learn is incredible. I treasure him as a friend and use this opportunity to showcase his work.





Main image 'This is my fire pit. Having a lot of forest to keep clear requires me to burn debris all winter. I burn from early November to early May. This stays hot at all times in the winter unless it is raining' **1** Eight-piece nested bowl set. Boxelder burl, 12 x 9in **2** Mormon poplar set, 23 x 8in



Tell us about your background and training

I learned to turn in college while pursuing a teacher's credential. I was making work to sell at local art/craft shows. I attended my first Utah Symposium in the '80s and met Dale Nish, Richard Raffan, Vic Wood, Allen Batty, Ray Key and others to give me inspiration and techniques. Eventually, the shows I attended were the elites of the Craft Business. I then ventured into a wholesale craft market called The Buyer's Market for American Craft. I attended this show for three years, which provided me with over a hundred buyers (galleries, catalogue companies and gift shops) that consistently bought my work for 25 years.

What led you to woodturning?

After getting my teacher's credential, I was far along with sales so I decided self-employment was best for me.

How do you like to work, what are your favourite tools and why?

In the early days I would work seven days a week to keep up with sales. Eventually, I made myself work a regular five-days a week schedule. I work with production in mind, doing many multiples of things and rarely a one-off object

3 Six-piece madrone burl set, 8 x 7 in **4** A double human urn. Redwood burl with African blackwood threaded lid **5** Mormon poplar end-grain kitchen set



Describe your workshop – what is the set-up and how long have you been there?

Twelve years. I currently work outdoors since I live in a very mild climate. That way I can let the dust blow in the wind. I use three lathes – a bowl production lathe, a vacuum lathe for removing tenons and a spindle lathe for smaller work.

How does your design process work?

I work with proportion foremost. Since I am wanting my buyers to use my work, I want the pieces to be easy to pick up and clean. For bowls I work in a 1/3rd, 2/3rds idea. 12in bowls would have 4in sides and bases. For hollow work I would design from cubes 12 x 12 x 12in, for instance.

Which woods do you most like working with and why?

I have always worked with trees that I can readily get from a local source. Since I live in Northern California, I use claro and English walnut, white oak, bay laurel, and my favourite coastal redwood. I buy boxwood and African blackwood for contrast woods to make threaded lids on my urns.

6 24in white oak burl bowl **Background** 'Cedar barn built by timber on the farm also where I work'



What sort of finishes do you prefer and why?

For utility bowls, plates, and platters I would always use a penetrating oil (high acid crude walnut oil). This allows my customers to replenish the piece when warranted. For art work and urns I would use a polymerising oil (a blend of polyurethane, BLO, and mineral spirits). This is allowed to dry for a couple of days and then I spray a single coat of lacquer. Then the piece is scrubbed with #0000 steel wool and paste wax and buffed with a paper towel.

What inspires you and where do you get your ideas from?

Simplicity. I have always been attracted to figured wood. I think you must keep the form simple when working with figured wood. When I have wood that is relatively plain, I would make larger objects with it.

What is your favourite piece you have worked on and why?

I was asked to make a piece for a Smithsonian show that was themed The Great Barrier Reef. I made a nested set of bowls with madrone burl that resembled a giant clam.

7 Mike pauses during his AAW demo to offer some key points on the McNaughton coring tools **8** Bringing in logs to be cut **9** Three types of bowl blanks ready to core – bastone, English, and California walnut **10** Living on opposite coasts of the US, Mike and Kurt usually only see each other at the major turning events **11** Mike's demos at the Chattanooga AAW Symposium were professionally recorded for online viewing **12** Prepping a white oak bowl



What is the most challenging piece you have worked on, and why?

During a period in my career, I was pushing the limits with nesting bowls – not working bigger but smaller. I made a 12-piece nested set from a piece of jarrah burl that was 11 x 7in.

How have the Covid-19 pandemic and lockdowns affected your work, and do you think any of the impact will be long term?

I kept extremely busy during this time roughing bowls and doing remote demonstrations for clubs around the world. Sometimes twice a day I would do these remote demos. I think remote teaching will continue since it allows for a broader audience.

What are your aspirations for the future?

Less physical work and more recreation.

What do you do when you're not woodturning?

My farm requires a lot of my time – roughly four to five hours a day. I try to play tennis twice a week and play monthly in tournaments.

13 Commission burial urns – 'I typically like to have many on hand to give my buyers a choice. These will all be fitted with African blackwood lids'

14 Five-piece maple set, 22 x 9in **Background** 'Burn pile behind my barn burning forest scrap'



Making the most of imperfections

Andrew Potocnik encourages seeking out the beauty in timber flaws with a wormy blackwood bowl



PHOTOGRAPHS BY ANDREW POTOCNIK

Introduction

Something that sets woodturners apart from our woodworking siblings is that we are, most often, scavengers who enjoy nothing more than salvaging 'treasures' from wood our 'fine woodworkers' view as little more than firewood. But the reality is that we can see treasures that can be extracted from some of the humblest offerings nature provides us with.

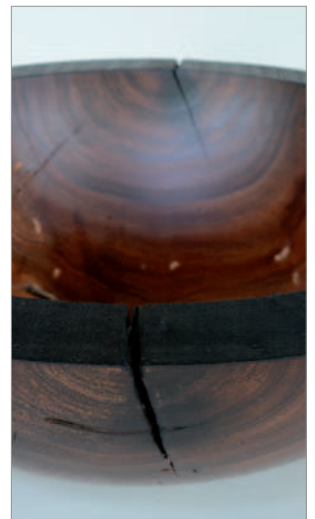
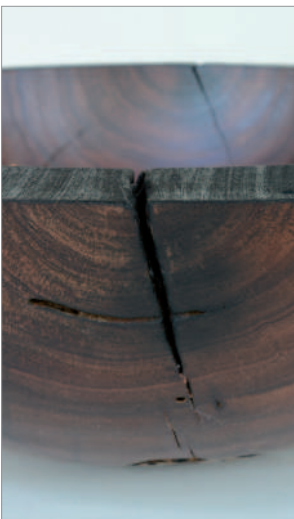
We know that with a sympathetic cut or an adjustment to the angle of the blank once mounted on the lathe, we can reveal a treasure not obvious to the untrained eye, and we can make the most of any morsel too small to make a cabinet or chair.

However, there are times when blanks include imperfections that could render the material unusable even for us. The wood may have cracks

due to incorrect drying, imperfections due to the tree's natural growth pattern, gum veins, insect infestation, or a range of other issues.

I love to get my timber from the best source – when it's free. This will include some treasures, but also some wood that needs a bit of lateral thinking rather than simply eliminating the problem and potentially wasting something that gives your work character. The trick lies in how to incorporate this into your design and kill two birds with the one stone, so to speak.

If you look back to the work of the late Dale Nish, you'll find pieces described as 'wormy ash', which were riddled with holes made by insects tunnelling their way through the wood, munching their way through their dinners. I've also seen items of contemporary furniture with holes drilled to create a similar effect.





Process of making a bowl from wormy blackwood

My parents owned a bush property which was allowed to regenerate naturally, leading to several species growing at their own pace, including a blackwood tree that had eventually passed its use-by date. I'd long dreamed of the wood contained in the trunk, however I procrastinated in cutting it down and processing the wood to use, as much as I wanted to.

Unfortunately, by the time I'd made it to cutting the wood into usable pieces, nature had beaten me and I was left with timber riddled with a variety of cracks and worm holes, thanks to the critters that thrive on sustenance available in sapwood. This brief illustration of the process, considerations, and decisions taken to realise a completed bowl from such material may help you to assess problem material you are considering turning.

1 With the blank mounted between centres I was able to turn it down to over 300mm diameter of workable timber that contained cracks and worm holes, both of which I could work with.

2 Some areas of weakened timber were hardened with cyanoacrylate glue and allowed to dry, but there were also areas where residue left behind by the insects filled some of the holes. I could have run glue into these, but chose to turn them into a feature by picking out the dust.

3 I then burnt edges of these holes with a butane gas torch, which, in turn, created new cracks that were also burnt, along with existing cracks. Burning 'softens' the edges of cracks and exposes the grain once it is wire brushed. By doing this before sanding, you can control how much of the wood's surface remains blackened.

4 The sanded surface has a gradual blending of colour from the rich brown of the blackwood to the strong black inside the cracks. Dust left in the cracks is easily removed with a toothbrush.





5 Reversed and mounted in a scroll chuck, the inner portion of the bowl was partly hollowed before the rim was burnt and wire brushed. I generally keep the tailstock in position as long as possible to provide sufficient support, especially when taking hefty cuts with a gouge.



6 Here you can see the texture of the exposed grain and the 'softened' cracks. Pin holes blend into the rim, which acts as a border or frame that visually highlights the timber within the bowl itself. Burning and wire brushing before a final cut inside the bowl is made ensures a crisp edge and no blackening of the inner surface of the bowl.



7 Once sanding was completed, the bowl was reversed and pressed up against a carrier which has rubber pads that prevent the completed rim from being damaged.

8 The tenon was removed, followed by sanding and the remaining stub of wood carved away, then a few coats of oil were applied. The rich colours of blackwood can vary from a deep chocolate brown to a reddish brown, or even a tan hue, depending on where the tree grew. I think my treatment of this piece worked, and prevented a blank filled with character from going to waste. ●



8

Highlighting imperfections

Over my years of turning I have found a variety of textural methods to not just disguise, but highlight aspects of the wood we love and celebrate imperfections as key features of the simplest forms we turn – bowls. But there isn't one magic method that works in all situations. I chop and change according to design and 'flaw', and so should you according to your wood. Following are some examples of techniques I use.

Sugar gum

A piece of sugar gum was too good to reduce from its 350mm diameter just to eliminate a gum void so I captured the imperfection within a border, cutting a half-bead that runs down into the bowl section itself. This creates a physical border, and by cutting a V-line where the rim and half-bead meet, I created a shadow line that catches the eye, not making the void the first thing you see. Another shadow line was made on the underside of the bowl using a carbide-tipped scraper, again capturing the void and making a visual 'break' in the bowl's outer surface.



Red gum

Red gum often has black gum veins, which become crystal-like once dry. Leaving one of these in a thin-walled bowl runs the risk of the walls being brittle. For this bowl I kept a fairly wide rim, which added stability to the vein, and added a series of thin V-lines to both the rim and top section of the underside.

A diamond pointed scraper left a clean surface, but you will notice that the final line on the underside is significantly deeper than the others, creating a shadow line that divides the sanded surface from the textured area.



Tiger stripe red gum

This small bowl of about 220mm diameter features tiger stripe markings. It's not often you find this pattern in red gum, so I wasn't going to let insect holes detract from what is really quite a simple shape. Hand carved V-lines radiating out along the rim of the bowl capture attention, followed by the tiger stripe, then the holes. Again, I cut a border on both the top and bottom textured surfaces to create a clear line of definition between the smoothly sanded surfaces and the tactile border. A couple of extra coves were added on the underside to enhance the break between surfaces.



Cherry ballart

The native cherry this vase is made of was a saved core from a larger bowl turned from the root ball of a tree that had fallen over in a storm. It had not been processed quickly enough so it had developed some large cracks, which I wanted to use as a feature. The unfortunate aspect of this piece was not visual but purely structural – it could very easily have exploded on the lathe. My solution was to wrap the outside with tape during the hollowing stage, burn the inside rather than sanding, and then turn and fit a collar to hold the pieces securely. The outside was burnt and sanded just as described in the following section of text.



Pin oak

A series of bowls made a few years ago were heavy in both weight and texture. This one made of pin oak was burnt heavily with a propane gas torch to enlarge cracks that had developed and to emphasise the growth rings which showed up clearly once burnt residue had been removed with a brass wire brush. The top section was textured with a stiff wire brush to wear away any soft sapwood, leaving the lined, undulating surface. The interior of the bowl was also burnt to blend with the outside.



Stormwood

A similar problem was encountered with this bowl, however the cracks did not penetrate as far and the interior could be sanded smooth. The exterior had been power carved

before the inside was turned, cracks filled with wood filler and two layers of milk paint applied. Once dry I lightly sanded through some areas of the top layer to expose the

first colour, and in other areas I sanded through to the wood. Wax was then applied to enhance the depth of paint and wood.



Almond

Cracks in this almond bowl had penetrated deeper into the wood than I had expected and were visible on the inside of the bowl. I had originally intended to mechanically carve and burn the exterior, but was left wondering what to do with the interior. After much thought I bit the

bullet, took the wood's personality away and covered the inside with joss paper. Sheets were torn into small irregular pieces and pasted randomly, overlapping until all of the interior was covered. Really, all that remained of the timber's personality was grain exposed during the burning process.



nova[®]

OFFERS
AVAILABLE WHILE
STOCKS LAST!

OUT OF THIS WORLD OFFERS

SATURN DVR™ LATHE

The Saturn DVR™ is the most versatile lathe on the market, combining proven technology from its predecessor NOVA DVR™ XP with some great new features.



Steel Box Section Stand 30kg
This is a UK manufactured stand

Saturn DVR Lathe (Bench)

£1,439.00 RRP WAS £1,599.00

Saturn DVR Lathe & Stand

£1,664.00 RRP WAS £1,848.99

COMET II DR LATHE



Includes **PRO-TEK G3 CHUCK** designed specifically for the NOVA Comet II

The NOVA Comet II DR Lathe is perfect for a wide range of woodturning projects. Portable and space saving, this lathe punches way above its weight delivering the capacity and rugged stability of much larger machines.

Comet II Lathe inc. G3 Chuck

£585.00 RRP WAS £649.99



Scan here to find
participating
stockists

Delivery charges may
apply. Please contact your
nearest stockist for more
details

For UK & Ireland, find your nearest stockist online
www.craft-supplies.co.uk



@craftsuppliesservice



service@craft-supplies.co.uk

Craft Supplies
BE INSPIRED, BE CREATIVE

G3 BUNDLE

Includes:

- PRO-TEK G3 Chuck
- 50mm PRO-TEK jaws
- 100mm jaws
- Pin jaws
- Adjustable T-Bar G3 Chuck Key
- 6-point T-Handle Wrench and jaw fastener
- Woodworm screw, fastenings and cleaning cloth



G3 Bundle Insert Required

£127.99 RRP WAS £159.99

G3 Bundle M33 Direct Thread

£119.99 RRP WAS £149.99

G3 CHUCK



PRO-TEK G3 Chuck

G3 - Insert Required

£111.99 RRP WAS £139.99

G3 - M33 Direct

£103.99 RRP WAS £129.99

SN2 BUNDLE

Includes:

- PRO-TEK SuperNOVA2 Chuck
- 50mm PRO-TEK jaws
- 100mm jaws
- 130mm jaws
- Tilt-away T-Bar Chuck Key
- 6-point T-Handle Wrench and jaw fastener
- Woodworm screw, fastenings and cleaning cloth



SN2 Bundle Insert Required

£147.99 RRP WAS £184.99

SN2 Bundle M33 Direct Thread

£143.99 RRP WAS £179.99

SN2 CHUCK



PRO-TEK SuperNOVA2 Chuck

SN2 - Insert Required

£123.99 RRP WAS £154.99

SN2 - M33 Direct

£115.99 RRP WAS £144.99

G3 COMPANION CHUCK

This powerful lightweight chuck is ideal for mini, midi lathes 10" - 14" swing. 16" swing lathes: use only for light work.

Includes:

- PRO-TEK G3 Chuck
- Adjustable T-Bar G3 Chuck Key
- 6-point T-Handle Wrench and jaw fastener
- Fastenings and cleaning cloth



PRO-TEK
S E R I E S

G3 Companion Insert Required

£89.99 RRP WAS £112.99

G3 Companion M33 Direct Thread

£87.99 RRP WAS £109.99



SN2 COMPANION CHUCK

This powerful and solid chuck is perfect for lathes from 16" to 20" swing and larger turning work.

Includes:

- PRO-TEK SuperNOVA2 Chuck
- Tilt-away T-Bar Chuck Key
- 6-point T-Handle Wrench and jaw fastener
- Fastenings and cleaning cloth



PRO-TEK
S E R I E S

SN2 Companion Insert Required

£99.99 RRP WAS £124.99

SN2 Companion M33 Direct Thread

£95.99 RRP WAS £119.99



Seed pod pot

In the second part of a two-part article, Andy Coates uses carving burrs to lift a simple pot above the ordinary

In the first part of this series I covered the turning, marking out the pot, and carving the leaf features. If you began the making of it then you have no doubt already begun to realise that the design, pattern, and application can be altered in many way to achieve a completely different outcome – and that is exactly as it should be; treat everything as a primer and see where it takes you.



PHOTOGRAPHS BY ANDY COATES

During the process of making these I had one of the those moments. The basic shape of this pot is very classical, and was certainly a ceramics shape before it was a woodturning shape, but employing the cutaways to form the pointed ends to the leaves led me down another path when I realised that those leaf ends would be attractive feet. But more of that later...

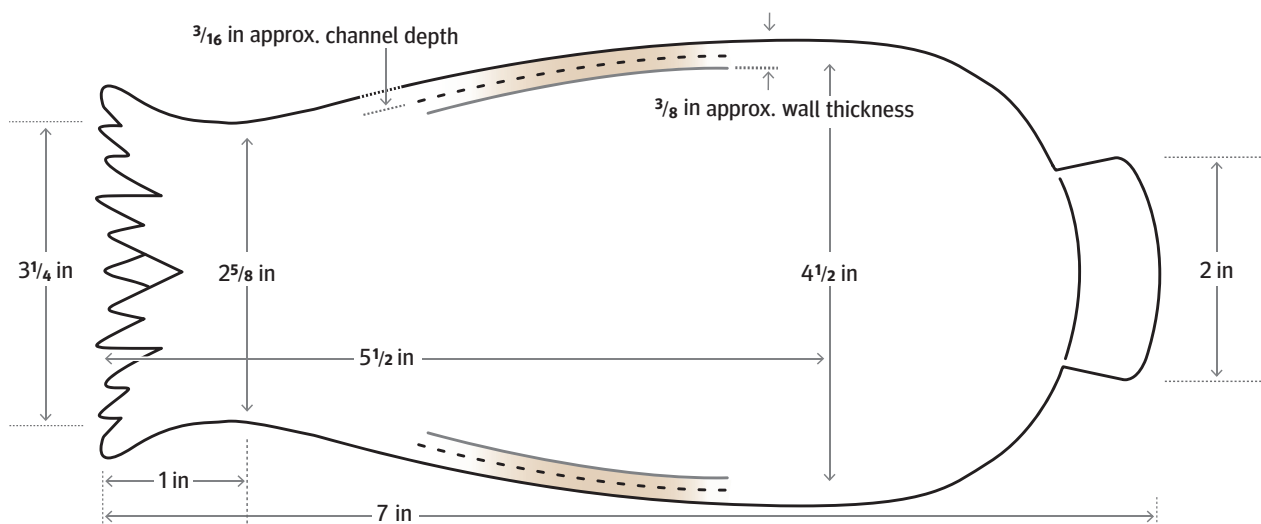
We left the pot at the stage of the shape having been turned, and the pot marked out and carved. We will now cover the hollowing process and then move on to the decoration and finishing. There is a question which can be asked at the point we have marked out the pot: Do we hollow now or later?

I have made these pots in both ways; turn, mark out, carve, and then hollow, and turn, mark out, hollow and then carve, and my preference is for the former approach. Carving is somewhat easier when the interior is solid as there is little vibration and you need not worry about carving through the wall. The downside to this approach is that you will then have the concern of hollowing through the carved channels, but I think on balance it is a lesser concern, especially if you have some figure eight callipers and some deep hollowing experience. There is also the concern that the pot will not run true when remounted, but good general woodturning habits will remove that concern. So that is the approach I take: carve before hollowing.

Plans & equipment

Tools & equipment

- PPE & RPE as appropriate
- Jacobs chuck and twist bit or Morse taper twist bit
- Small carbide hollowing tool
- Crown deep hollowing system with handle extensions
- Sorby Stewart System with scraper tips
- Figure eight callipers
- 10mm spindle gouge
- Pyrography machine and ball and skew tips
- Rotary tool – Dremel, pendant or micromotor
- Assorted Kutzall and Saburrtooth burs
- Shop-made abrading tools
- Carbon fume extractor and dust extractor



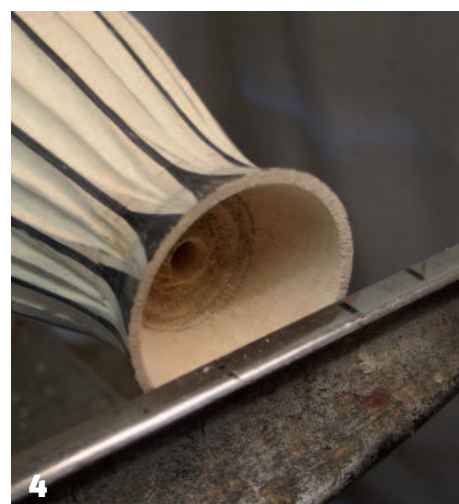
Hollowing the pot

1 We left the pot as the carving was just about finished. The last bit of carving was refining the tips of the channels where they almost come together at the rim. It is important to ensure this is done prior to hollowing because carving a thin rim wall later would be troublesome.

2 Once the carving is completed the pot can be remounted on the lathe. If you marked the position of the pot relative to the chuck, then it should run true. If not, try turning the pot in the chuck a little, tightening the jaws, and seeing if that helps. You should be able to get it running true.

3 The first job is to true the end with a 10mm spindle gouge, and mark the centre. Using the gouge as a drill, form a central hole by pushing the tip of the gouge in and slightly angling the handle. Withdraw to remove swarf, and do not touch the gouge tip – it will be hot.

4 Before the actual hollowing I prefer to set the wall thickness at the rim. The thickness depends somewhat on the depth you carved the channels to, but here I make the wall as fine as I can. It is important to make the depth at least as deep as the cutaways will be, maybe a fraction deeper. Note in image 4 that the depth slightly exceeds the depth of the black triangle, which will be cut out later.



◀ **5** Now we need to bore the central wood out – because it runs slower and is more difficult to cut with a deep hollowing tool (DHT) – using a large twist drill. I used a 13mm Morse taper bit, but you could use a Jacobs chuck and a standard 13mm drill bit. Withdraw and remove the swarf regularly to avoid binding and overheating.

6 The initial hollowing is achieved using a small carbide-tipped tool. Cut the waste away from the edge of the bored hole towards the wall of the pot, working in methodical steps, taking light cuts. Heavy, impatient cuts will lead to a catch and possibly knocking the pot out of true. The small carbide tool means it is almost impossible to take too aggressive a cut while removing waste efficiently.

7 Keeping the interior shavings-free is always important. Shavings gather in the widest portion of the interior and interfere with the cutting tip of the tool, and can cause catches and bouncing of the tool. A workshop vacuum is the ideal solution as this also reduces airborne dust. Stop the lathe for shavings removal.

8 As you get closer to the wall it is vital that you stop the lathe frequently to check on the thickness. Figure eight callipers are used to check the wall thickness. Because the depth of each carved leaf segment will vary, I check all of them first, and mark the deepest, then use this segment for checking the wall thickness throughout the hollowing process. On this pot I aimed for a $\frac{3}{16}$ in wall thickness. The average depth of the carved channels was around $\frac{3}{16}$ in.

9 When the hollowing gets deeper it can be far more difficult to control the DHT. The Crown DHT system has a number of handle extensions that can be used to add length, and weight, to the tool, which is a distinct advantage. The extra length and weight make it far easier to control where the cutting edge is, and how it cuts. Continue hollowing, following the exterior curve, gauging the wall thickness, and removing the shavings, until the base naturally curves inward and forms an internal rounded base.

10 Once the hollowing is completed the interior can be cleaned up with a scraping tool. The Stewart System tool is fitted with a teardrop scraper, freshly honed, and used to clean the tool marks. The scraper is brought to the wall at around 45° of rake, and drawn up from the base towards the rim. These are gentle cuts, flattening the peaks left during deep hollowing.

11 Hollow vessels should never be abraded with the abrasive held in the fingers. I used a cylinder sanding arbor in a battery drill. The lathe can be run very slowly and the rotary drum will quickly bring the interior walls to a satisfactory finish. Have dust extraction running.

12 Once the interior is completed the toolrest can be sited alongside the pot and the base can be completed and refined with a 10m spindle gouge. The shape of the foot can be straight-sided, flared, or whatever you prefer.

Burrs – If you want to go large and make much bigger pots of this type, then Kutzall, Saburrtooth and other manufacturers have just what you need... big cutters. These cutters are probably best used in a die grinder handpiece, but you can run them on a flexidrive fitted to a corded drill. Keep in mind that these are potentially dangerous attachments for a power tool, and all sensible precautions and care should be taken when using them.



13 Turn a scrapwood jam chuck to fit the inside of the rim and mount the pot between it and a revolving centre. Using a 10mm spindle gouge, clean the base up as far as possible – I prefer to dish the base out to remove weight – and remove the central stub off the lathe using a saw or, while you have them to hand, a burr in a rotary tool.

Decoration

14 The pyrography machine you use needs to be relatively powerful. The marks I am making are formed with a ball tip, and on a low-powered machine this would either be impossible, or would take so long it would become extremely tedious. A powerful machine allows for repeated marks to be made with no waiting time for the tip to reheat between marks.

A fume extractor becomes even more obviously required when using a high-powered machine because the volume of smoke produced is significant. Smoke from burning wood is a health hazard, so do not take its extraction lightly.

15 If you are new to pyrography, or have no experience of working on curved surfaces, or even on the wood species you have made your pot from, it is wise to have a play on a scrap piece of wood or dummy pot. Experiment with power setting, direction of movement, depth of burn, style of marks made, and see how the tip burns on your surfaces.

16 Before jumping straight into decorating the pot, some last-minute fettling of the carvings is usually in order. The pyrography machine can hide a multitude of issues, but a good surface foundation for making your marks on makes things a lot easier. Using a range of shop-made abrasive sticks, the carved surfaces are made as even as possible prior to pyrography.

17 In image 17 you can see the raw carved surface on the right-hand leaf/petal, and the abraded surface on the left-hand leaf/petal. A uniform surface helps keep the pyrographed marks more even.



HEALTH & SAFETY

Carving with burrs is a relatively safe occupation, but there are some commonsense precautions to take.

- Dust extraction is a must – fine dust is produced in large volumes and needs to be controlled as close to source as possible
- An out-of-control burr can tear into skin without any problem, so a heavy work glove or safety glove might be an advantage if you are unused to working with powered burrs
- Repetitive Strain Injury (RSI) is a very real issue, and you will feel the physical effects of using small handpieces for a prolonged period – take regular rest periods, stand up and move around, grab a coffee and relax
- If you are new to using burrs, take some time to try them out on scrap wood first and learn how they behave. You will reap the benefits when it comes to working on your carefully turned pot
- When using a pyrography machine it is important to use fume extraction. Fumes from burning wood are a potential health hazard, and they should not be inhaled, especially for prolonged periods while working

◀ **18** Pyrographing so many individual marks is laborious, there is no escaping this fact. So having a method or process to follow can help make the stage less frustrating. I fill the area of the tip with matching marks first, and do the same at the base of each leaf/petal.

19 Outline each pair of channels, keeping the marks as in line and regular as possible. The central spine comes almost to an apex, like a roof, and I aim to keep the marks as close to this as possible, equally on either side. After that it is a matter of filling in the interior in a manner that suits you; randomly or with some effort at being regular.

20 Working methodically, begin to fill the leaf/petal with marks. The tip will start to burn less efficiently during this process, and this is due to carbon deposits forming on the ball tip. Have a piece of abrasive handy to rub the tip on to remove the deposit. Take care on the next mark because the tip will burn quicker and deeper when it is clean. It is worth noting that this will eventually wear the tip away to the point that it breaks – so it is handy to have a spare of the same tip for working on a large piece.

The cutaway

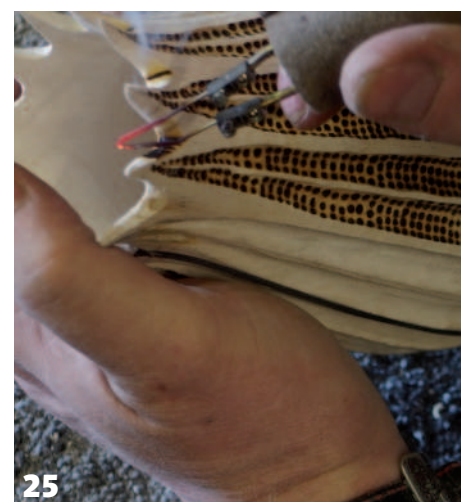
21 Although the image here is of another piece, the process for taking the cutaways is the same. A cutting disc on a rotary tool is used to cut the triangular sections away. The black areas marked out earlier are not precise, but serve as the basic cutaway. The rotary cutter can be a little prone to catching if used without care, but with good control and an appropriate tool speed, the triangles can be cut cleanly away.

22 After cutting all the waste away the base of each cutaway can be made uniform with a flame bit in the rotary tool. Work slowly and aim to make each feature look like the ones to either side. The edges of each spike can be gently cleaned, aiming for the angle of the edge surfaces to also be uniform.

23 After this an abrasive drum is fitted to the rotary tool and the inside edges and surfaces abraded to a clean finish. You may wish to work through several grades of drum abrasive to get a good finished surface.

24 The edges of the cutaway sections that form the spikes need to be pyrographed. A skew-edged pyrography tip is used for this. Make a single central mark at the bottom of the cutaway. Dragging this mark down a little, but uniformly, on each leaf/petal adds a pleasing end point rather than a rounded bottom to the cutaway.

25 Then work up towards each tip, making one mark on the tip to take off the very sharp end. This will help prevent the tips becoming a potential for injury. Work around the pot rim until complete. Sometimes you will add irregularity as you work around, so check everything looks right when you finish, and address any errors before moving on.



26 Once all the pyrography is completed the black markings and the central spines need addressing. I use a rotary burr for the first pass, as the black marker ink can be quite deep. Work the marked areas until the ink has been removed, making long, sweeping passes to avoid introducing faceted areas to the surface. The narrow central spines get a quick pass to make the surface just flat. It wants to be much narrower than the area between each leaf/petal.

27 Now work over all the areas you have just cleaned up. A drum arbor is used with three grades of abrasive until all the surfaces are clean, tidy, and free from ink marks.

28 The pyrography has left carbon deposits on the surface, and these need to be removed. A piece of nylon abrasive is best used to remove the deposits. If you can site the head of a vacuum hose close by, and work quickly, the carbon will be drawn away, rather than becoming engrained in the clean surfaces you have just created. Vacuum the whole surface afterwards to ensure it is all removed.

29 The seed pod pot is completed. The pot can be sealed with cellulose sealer and allowed to dry, and an oil finish is preferable to a wax finish because the wax will fill the detail in and look dirty. Alternatively, an anti-UV spray lacquer is even better, because scorched marks will fade in sunlight, so this protects the pyrography.



Top tips

Pyrography machines are now available in a wide range of prices and power options, and not all are suitable for every style of pyrography. I began pyrographing with the most popular machine (in the UK) at that time, and it was a great machine, but it was seriously limited.

My style of pyrography is more akin to branding than drawing/painting, so I needed a machine powerful enough that it did not need to sit and reheat the tip

after each heavy burn. I now have three machines that I use regularly, two very high powered, and one that would have been considered high power 10 years ago, but now is mainly used for shading on carved figures. The other two machines usually have different tips on them to save time swapping out handpieces and tips. The improvement in workflow is enormous compared with lesser machines, and they will still do what the lesser

machines will do. So, look for machines that offer the highest power if you can. And buy a fume extractor at the same time – new lungs are more expensive than an extractor.

Conclusions

As I mentioned in the introduction, often during a process you will find your mind wandering, and wondering about the shapes you turn. With this pot I kept thinking that it would look just as good, perhaps even better, if it was inverted; the pointed tips becoming the feet rather than the rim. The shape could be identical, just the orientation changed. So, long story short, I made another. As is also usually the case, this led to further problems and developments. First, what had been the foot was now the rim, and it didn't look right, it was too large. The obvious option was to change it, but then it wouldn't be the same object inverted. So a lid was called for. But the lid had to match the base, and that meant the shape, style,

decoration, everything. I decided that if the lid were not to end up a big project in its own right then all the turning and marking out had to be achieved in one chuck mounting. So that is what I did. Interior tenon turned, upswept rim, marking out, finial ball turned, and parted off in one quick session. And then the carving and decoration. But I think it was worth it. I must have done... because I carried on to make a second one, and then a smaller, slightly differently shaped one, and I have five more at various stages and of slightly different designs. One of them is winging its way to a collector in the US now. So keep your mind open to possibilities; they're everywhere. ●

Right: Inverted seed pod pot with added lid



The Solano

Turning and images by Brad Herrington & Alan Morrison



Our brand new pen kit



Available to buy right now



- ◆ Single tube ◆ Finial twist
- ◆ Parker style refill ◆ 11/32 drill

www.beaufortink.co.uk



hamlet
CRAFT TOOLS

Find your local stockist at: www.hamletcrafttools.co.uk/stockists

email: sales@hamletcrafttools.co.uk | tel: 0114 232 1338 | web: www.hamletcrafttools.co.uk

The Forge Peacock Estate, Livesey Street, Sheffield, S6 2BL

HENRY TAYLOR
(TOOLS) LIMITED
EST. 1851

Legendary quality, at your lathe.



Hand Polished Flutes



Lifetime Guarantee



Sharp & Strong Edge



We've worked with **M42 high speed steel** for decades; it's uniquely suited for woodturning. You'll grind less - cobalt bumps M42's red hardness off the charts for wear resistance. And the steel produces a sharper edge for clean cuts.

Rigorous and detailed sums up **our manufacturing**. Every vibration-demolishing round tang is so precise, you'll hear a 'pop' when you remove it from the handle. Flutes are meticulously polished for the industry's sharpest edge. Every tool is backed by a lifetime guarantee.



7/8" & 1-1/4" spindle roughing gouge

Four decades of manufacturing expertise and a passion for delivering quality to your lathe drives the design and build of every tool. Shop the full line today at carterandson.com.



Available worldwide at
carterandson.com and in Germany
at Dictum GmbH—More Than Tools &
Drehselzentrum Erzgebirge-steinert.



Organic shapes – part 2

In the closing article of this two-part series, Les Symonds explores a range of shapes for another two organic forms

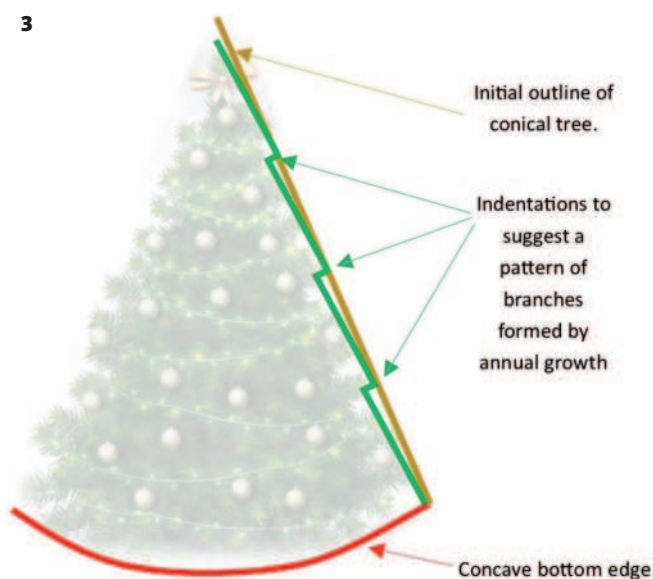
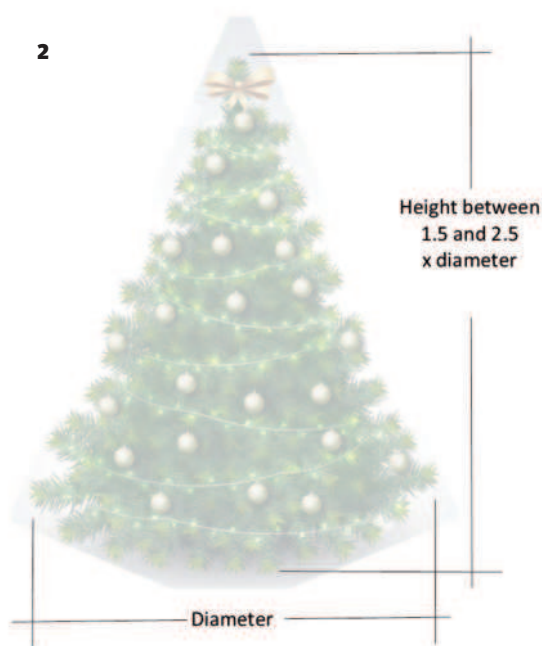
We opened this pair of articles by looking at how we could measure and make precise, realistic copies of the shapes of three natural items that prove popular among amateur and professional turners alike; namely apples, pears and eggs. In this article, we are going to concentrate on two further items – fungi and trees – each of which requires a different approach.

First, we'll look at trees, by far the most popular of which, as far as woodturners are concerned, is the Christmas tree; although I prefer to refer to them as fir trees as I make and sell them all year round. The reason this particular species of tree lends itself to being turned from wood is primarily that when any such tree is viewed in its natural, upright stance, no matter how you move around (or revolve it), it will tend to appear symmetrical and uniform, and that's a great bonus to a woodturner. Conversely, most deciduous trees tend to be highly irregular in their form, which could make them rather more difficult to turn, especially if a realistic shape is required.

Fungi pose a different challenge, in that there are hundreds of species and many of them have little or no symmetrical aspect as a starting point. However, the mushrooms and toadstools that we find on the greengrocer's shelves or in children's fairy tale books, tend to be symmetrical and uniform, so it is these that we will concentrate on and we will be looking at the six examples most commonly found in nature.



PHOTOGRAPHS BY LES SYMONDS



Designing your fir tree

First, consider what you're up against when choosing a shape and setting the proportions of base diameter to height. The Christmas tree is a powerful and immensely popular image, so any major aspect that you alter may well create a shape which looks incorrect. Our images show a typical tree and you will note that its height is approximately one-and-a-half-times the diameter at its lowest branch, although this is purely a guide and you will find that a ratio of anywhere between 1:1.5 and 1:2.5 will look natural. One of the major diversions we sometimes see to these proportions is of trees made of, for example, 50 x 50mm timber stock, which would realistically give a tree of between 75mm and 125mm height (plus extra if the maker has chosen to represent a trunk and the ground on which it stands). Of course, it can be very tempting to make the tree much taller, especially if it is going to be sold, as a larger item might fetch a higher price, but if you want to achieve a natural, realistic profile, then I would suggest staying within the proportions suggested.

Furthermore, look closely at the profile; what we see is basically a simple cone with its bottom surface adjusted such that the cone's straight edge becomes a convex curve. It is important to note that this is the one and only convex curve that you will normally see on any fir tree. Indeed, a realistic profile will be comprised of mainly concave curves to represent the downward and outward sweep of each branch.

Next, consider the complexity of the outline of the tree. Clearly, we cannot reproduce every little detail, rather we aim to turn what is effectively a caricature of the profile, settling for a few essential details which our eye sees and which our brain interprets as being typically representative of the subject. That is going to be a great help to us as turners.

1 A powerful image (courtesy of Freepik)
2 Checking the proportions 3 Setting the profile

◀ Turning the tree

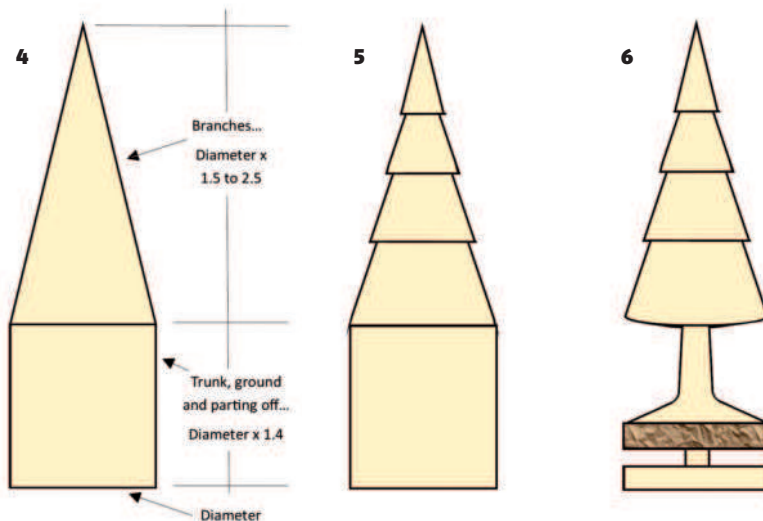
The turning of the tree can be broken down into three simple steps, given that your timber workpiece has been prepared with a chuck tenon.

Photo 4 If you want your tree to have a trunk and an area of ground on which it stands, start with a workpiece which is about three to four times as long as the measurement of its diameter (plus allowance for a chuck tenon). Then reduce the upper branch section to a taper.

Photo 5 Subdivide the branch section into the number of branches you choose to have. For small trees of 100mm or less, keep this to three branches (three indentations) and for trees of about 200mm this can increase to about five branches (four indentations), with a pro-rata increase as you make trees even taller than this. The method of cutting the indentations is up to you, but these trees make an excellent practice piece for skew chisel work, while, for novice turners, the spindle gouge, or even a skew chisel held flat on the toolrest and used as a scraper, can yield acceptable results.

Photo 6 Finally, commence hollowing-out the trunk area, cutting the convex curve on the underside of the branches, then shape-up the trunk and the upper surface of the ground. Note that the trunk will look best if it tapers downwards, increasing very slightly in girth, just as the ground will benefit from rising upwards as it approaches the trunk, and finally, a convex joint between the trunk and the ground will give the best visual effect.

If you are using branch wood for your trees, retaining a ring of bark on the ground will give a very pleasing effect and where irregularly shaped branch wood is used, the bark inclusions can also be seen on the lowest branch.



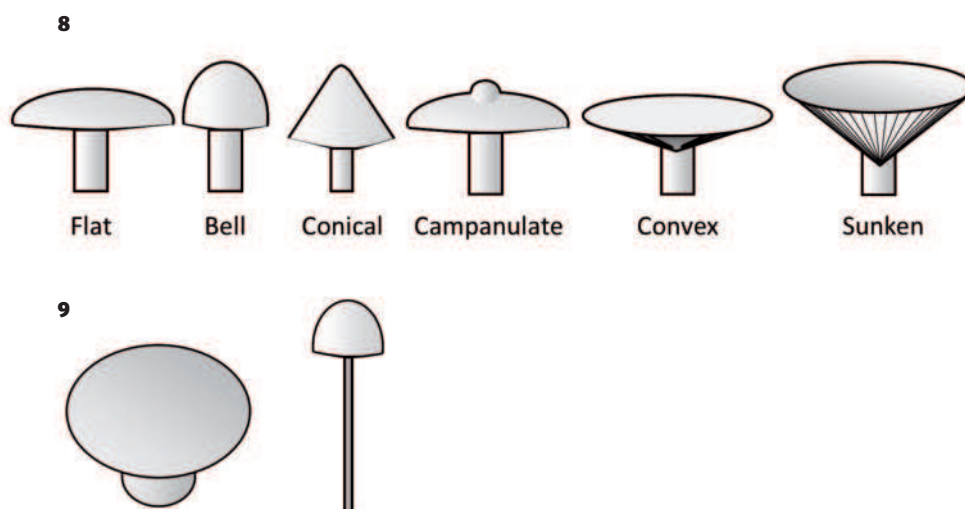
4 Step 1 5 Step 2 6 Step 3 7 Cutting the indentations



A few extra points to note. When forming the shape of the branches, the upright surface of each indentation can be flat, or slightly concave, but these shouldn't be convex if they are to reflect nature's shape, and, when parting-off, remember to make your final parting cuts such that the base of your finished tree has a slightly hollow surface to prevent the tree from rocking.

Designing your fungi

An internet search for the shape of fungi will reveal myriad possibilities, but refining that search to 'mushrooms and toadstools' will help by reducing the range to several basic shapes. There is no exact number, as these can overlap somewhat, with one shape beginning to resemble another. However, mycologists generally settle on about six main shapes, namely flat, bell, conical, campanulate, convex and sunken, although we must bear in mind that each of these basic classifications can vary widely. Perhaps the best approach is to select one shape and practise making a few variations, then stick with the proportions and sizes that you prefer before progressing to other shapes.

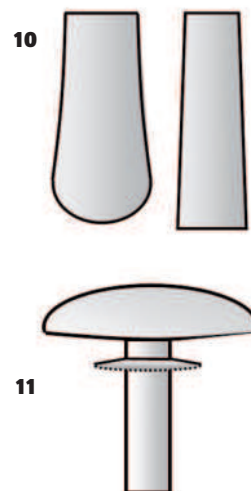


8 The basic shapes 9 A range of proportions

Unlike the profile of the trees, mushrooms and toadstools offer much more freedom, especially in the ratio of height to diameter. To illustrate this, consider the popular button mushroom we will all be familiar with, to the species parasola, the former being short and stubby with very little stalk in evidence, the latter being tall and slender. A crucial point to bear in mind is that these two extremes do not exist in isolation, indeed, many species and variations of mushrooms and toadstools share this basic shape, but have proportions (especially in the ratio of stalk length to overall diameter) that fall between the two, making an almost seamless range to choose from. This is good news for us as turners because it gives us quite a bit of freedom to make shapes that we like and that make the most of the timber that we have available.

Let's give a little more attention to the stalk. Essentially, there are just two shapes that we are likely to turn, one being fairly stubby with a bulbous bottom where it is attached to its root system, the other being thinner and sometimes quite cylindrical, hardly varying in diameter from its emergence from the ground right up to its connection with the cap. Also, as they begin to grow, many of the fungi we are considering have their cap fully attached to the stalk around its underside, breaking away from the cap as it develops and grows.

This can leave what is generally referred to as a veil, which we see as a ring (sometimes rather ragged-edged) around the upper end of the stalk. As with a few other features, this gives us some scope; novice turners can ignore the veil whereas more experienced turners can experiment with it. If you attempt to cut a veil and it doesn't work for you, at least you can always turn it away and try again on a different workpiece.



10 Stalk shapes 11 The veil cap 12 Forming a veil cap

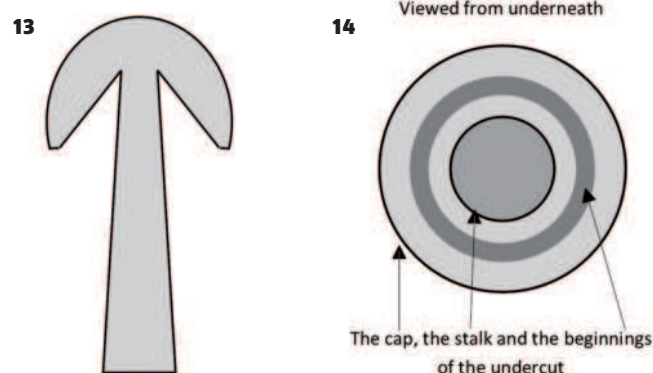


Undercutting the cap and texturing the gills

As mentioned when I was discussing the shape of fir trees, we are essentially making a caricature of the subjects we choose, so full detail is unnecessary and would be likely to take us away from woodturning and into the realms of carving and colouring, which is absolutely fine if you wish to progress that way.

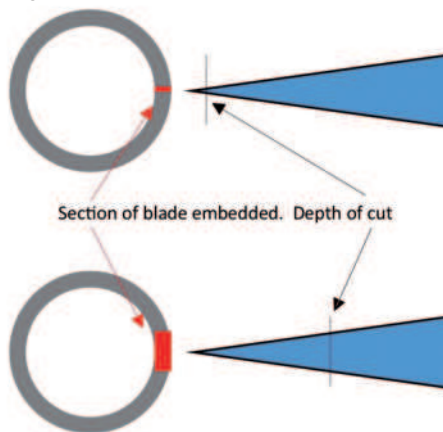
As a starting point, here are a couple of suggestions of features that you might choose to incorporate – the undercut cap and gills.

Cutting an undercut top can be quite complex and there is one essential point that novice turners might not be familiar with – the tendency of a parting tool to suddenly bind in the cut when cutting what will effectively start off as a groove in the underside of the cap. Refer to the drawings for this section and you will see that we commence the undercut as a simple groove, which can be cut with a parting tool, or with a point tool. However, if a parting tool is being used, note that at the commencement of the cut, when the groove is still quite shallow, it will begin to cut a circular groove between the stalk and the cap, but as the parting tool cuts deeper and deeper, its increasing cross-section no longer fits well into the groove you are trying to cut.



13 Cross section of the undercut 14 Start a groove where shown 15 Forming the undercut

16



The result will be that the groove will start to distort and the parting tool will eventually bind in the cut, which can be quite alarming and might well shatter the cap or shear it off. If you are using a parting tool, to avoid any risk of this, make your first cut quite shallow, then move the tip of the tool to the left or right and make a second similar cut (called a relieving cut), then progress by slowly making shallow cuts and joining them up until the undercut is fully formed.

If you choose to texture the gills, one good

method would be to use a shape such as a flat-top, or even the convex variety, and deliberately turn a slight upturn on the underside of the cap, just to make the gills more easily visible. The gill area can then have numerous shallow lines carved into it to represent the gills, radiating outwards from the stalk. The remainder of the cap and the stalk should be roughed out, but not finished, allowing the gill area to be lightly scorched and scoured clean (and given a coat of ebonising lacquer if you so wish), before finishing the adjoining surfaces.

16 The possible danger! **17** Forming the gills **18** Texturing the gills



Mounting the fungi

As a minimum, to allow your fungi to be freestanding, make a very heavy, bulbous base to the stem, but if you wish to put a little more work in, there are many things that you can do to add interest to them.

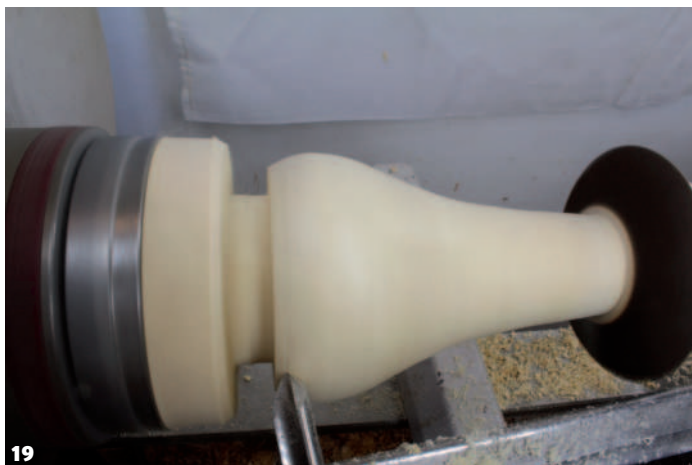
For single, freestanding fungi, cut a base in very much the same way as I have described for the trees, but with one important difference. Whereas the ground rises up over the tree roots and towards the trunk, with fungi the ground remains flat, so make the junction between ground and stem quite square. This can look really effective with the bulbous-bottomed stems.

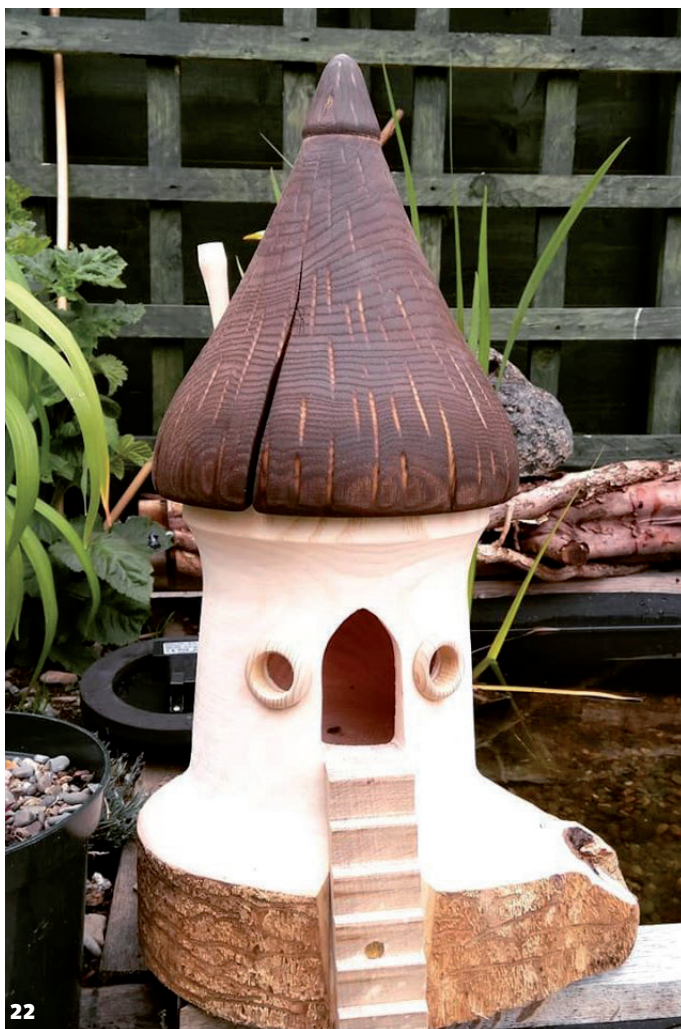
The above method works well for single examples, but what can look very much more interesting is to form a group of tall, slender fungi, such as the parasola variety mentioned. These can look especially fine if grouped in such a way that they appear to be growing up out of an uneven ground surface, by setting them into a small piece of the natural surface of a burr. To achieve this, turn a few examples, making each of them slightly different in diameter and quite different in length, but on each turn a tenon on the very base of the stem, the diameter of which will match the stem diameter, then simply drill a suitable pattern of holes in the burr and glue the fungi into place.

21



19 A broad-based stem **20** Following the example of the trees **21** A fungal arrangement





22

Flights of fancy

With the fruit, the eggs and the trees, there isn't a great deal of scope for indulging in flights of fancy, but with fungi the world is your oyster. Fungi are found in children's books, in fairy tales, in children's television programmes and in toys, so why not use some of these basic designs and develop them for the children in your family, or perhaps just for sale?

Short lengths of seasoned logs are ideal for making pixie houses, even if there are small splits and cracks in them. They can be simple, solid pieces with details pyrographed on to the outside, or they can be complex, hollowed out with pierced windows, scorched and scoured roofs to resemble thatch and just about any other fantasy detail that you can imagine.

Conclusion

You should find the making of fungi and trees much less prescriptive than that of making the fruit and eggs, thanks mainly to the huge range of shapes for the fungi, and the simplistic, caricature approach of the trees. Whatever you choose to make, these items can make interesting little ornamental pieces, especially for Christmas with the trees, but they will also prove to be good sellers at craft fairs and craft shops, if you sell your work. Check out internet-based auction sites and craftware sites; you will see a huge range of such pieces and you will get a feel for their retail value. If you wish, experiment with colour, especially for making the famous fly agaric of fairy tale fame, or try lightly texturing the upper surface of the caps with rotary burrs. As you will see, individual fungi can be turned out in just a few minutes, or can become simple little works of art demanding much more of your time.



23

HEALTH & SAFETY

There are few issues of health and safety when turning items as small and as uniform as these.

The issues identified in forming an undercut top need to be addressed if you are going to attempt to form this feature. Beyond this, simply remember the basic rule when working in chucks without tailstock support – work from the tailstock end, back towards the headstock. Take care and enjoy making this simple range of organic shapes

22 A pixie house **23** Stick houses for the garden

The 17th International Woodturning Seminar will take place at
Yarnfield Park Training & Conference Centre
Stone Staffordshire ST15 0NL

7-9 October 2022



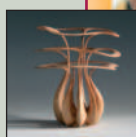
The event will run from Friday lunchtime to Sunday afternoon.

This maybe the last chance you will get to see 10 top international turners that you can watch, question and learn from, all in the same place, over 3 days.

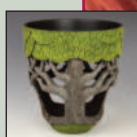
The Seminar aims to offer something for turners at all levels from beginner to expert. The seminar programme is guaranteed to inspire, educate and entertain!



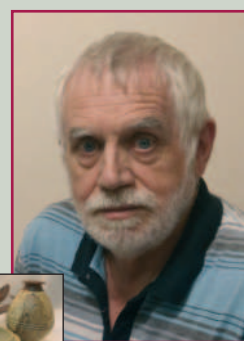
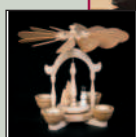
Alain Mailland
France



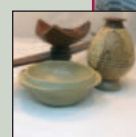
Bob Rotche
USA



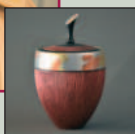
Colwin Way
UK



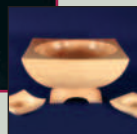
Eugene Grimley
Ireland



Gary Lowe
UK



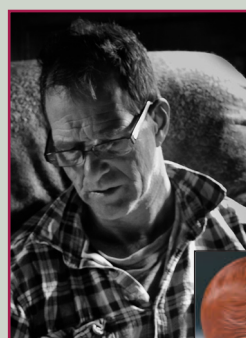
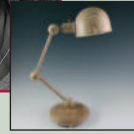
Joe Laird
Ireland



Joey Richardson
UK



Nathalie
Groeneweg
Ireland



Neil Turner
Australia



Throughout the event we have trade stands, a raffle and of course the instant gallery where we encourage everyone to bring up to 3 pieces of their best work to display.

***Make this a date in your diary,
you won't regret it!***

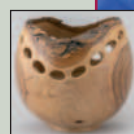
The seminar is open to AWGB members and non-members alike.

We look forward to seeing you there!

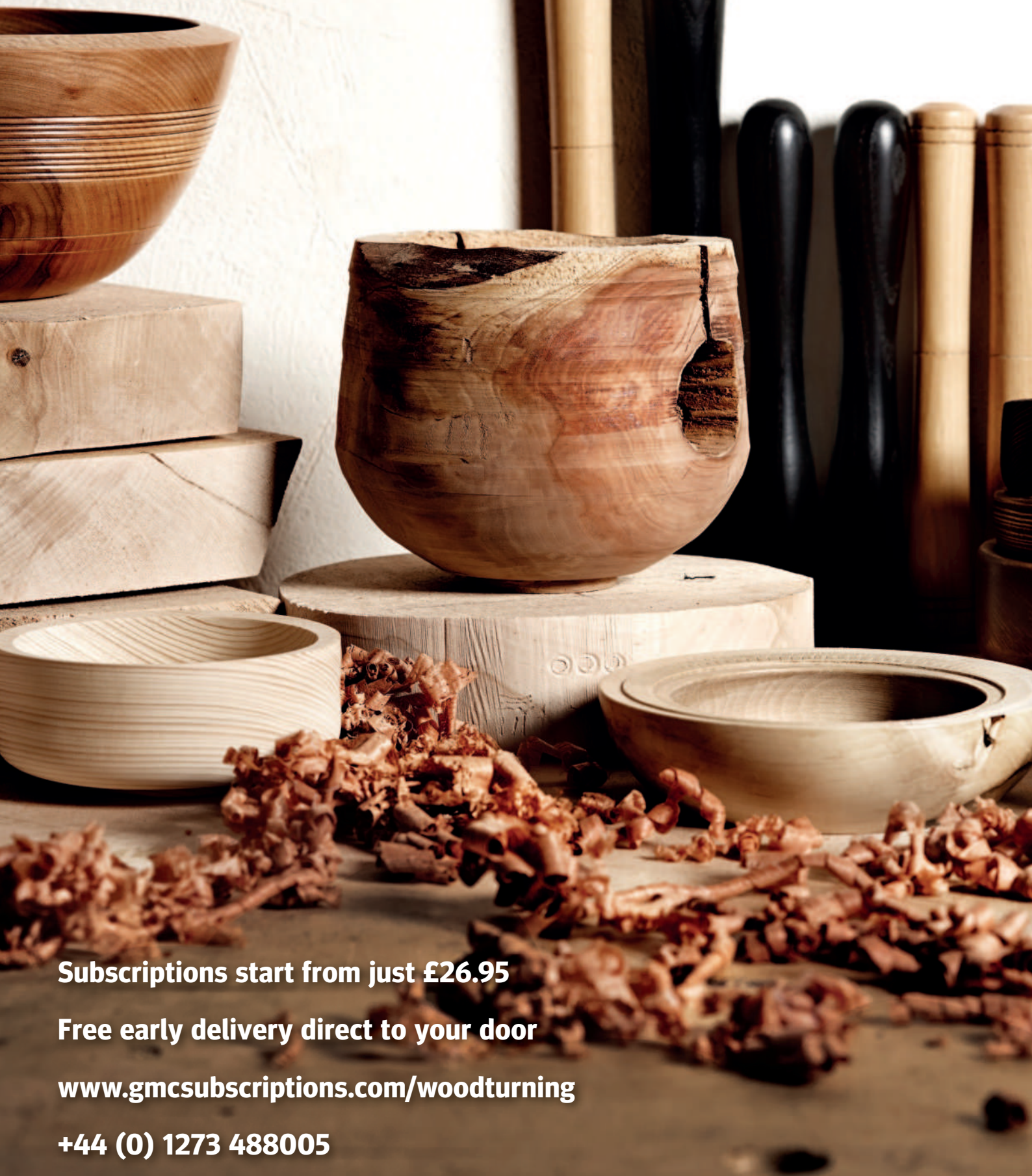
You can book on the website at **awgbwoodturningseminar.co.uk**



Nikos Siragas
Greece



SUBSCRIBE TO Woodturning



Subscriptions start from just £26.95

Free early delivery direct to your door

www.gmcsubscriptions.com/woodturning

+44 (0) 1273 488005

Lidded yew box

Pat Carroll makes a neat little cylindrical trinket holder

Boxes are always fun projects. They are useful and can be very decorative, whether as a trinket box or for a keepsake. Small pieces of timber can be used, and there are infinite designs achievable. Yew is a beautiful wood to work with and looks good too.

Among the things I focus on with a cylinder-type box are disguising the joint and grain alignment. It is inevitable there will be some loss of wood from the parting tool and the tenon. Using a bead at the joint helps to alleviate both issues. The bead is decorative and adding further beads to the top and bottom of the box helps create a theme to the design. With the bead breaking the sight line of the grain, the disruption to the pattern is less noticeable. The inside of this box has a clean, crisp corner in the bottom and can be tricky to achieve. Rounding over the bottom is more than acceptable and will look equally as good. The reality is, only a woodturner would really note the difference and ask what tool was used to get the clean corner and not have tear-out on either surface.



PHOTOGRAPHS BY PAT CARROLL

Plans and equipment

Tools & equipment

- PPE & RPE as appropriate
- 10mm bowl gouge
- 12.5mm spindle gouge
- Scraper
- 4mm parting tool
- 3mm beading tool
- Dividers
- Rule
- Pencil
- Sandpaper
- Ebonising lacquer
- Clear lacquer

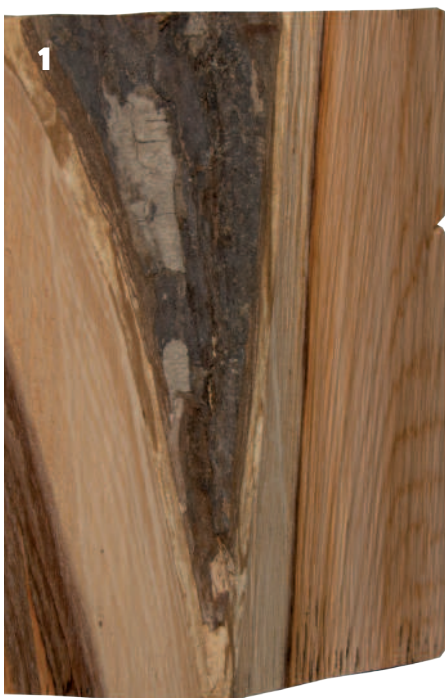
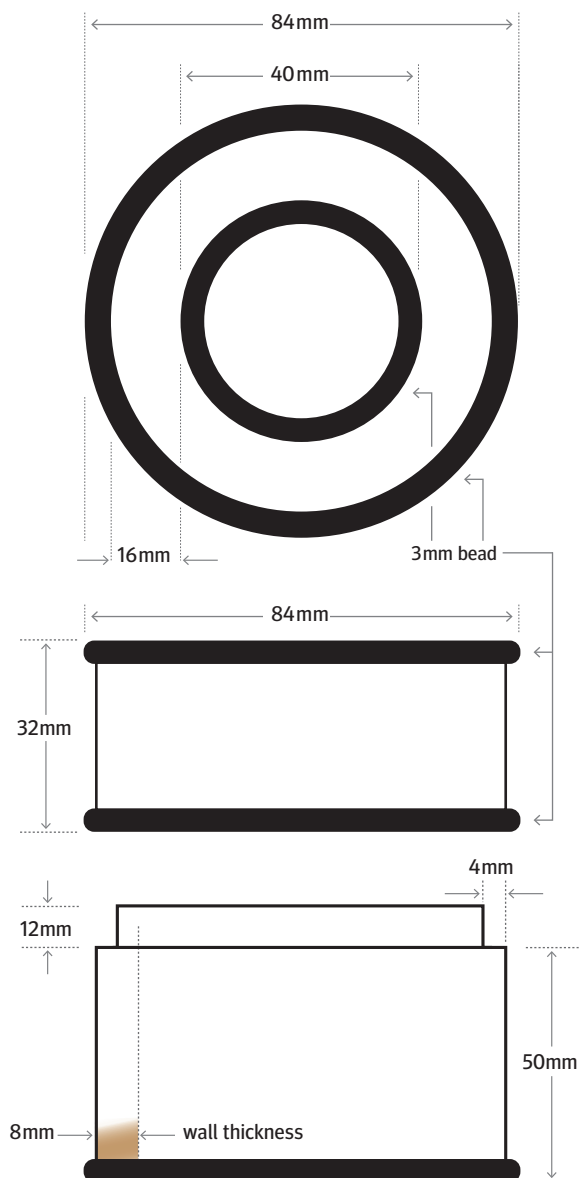
Materials

- Yew

The making

1 The piece of yew chosen for the project. This wood has air dried for a number of years and the moisture content should be very low. I normally rough out the wood for anything with a lid, even kiln-dried timber, as the timber can still distort when the interior is removed. For this article I made it straight from start to finish and a good fit has still been maintained.

2 With PPE in place, the lathe checked and all tools sharp, the turning can begin. The spindle roughing gouge is the preferred tool of many turners and is easier to use when creating a cylinder, but I often prefer to use a 10mm bowl gouge for roughing out a piece.



◀ **3** The lower wing of the 10mm bowl gouge can cut aggressively if the flute is open too far and can also be dangerous. But if this technique is carried out correctly, streams of shavings can be achieved.

4 Once the body of the piece was trued up, I used the same 10mm bowl gouge to true up the base in preparation for the tenon.

5 I marked out the piece for my 50mm straight serrated chuck jaws.

6 Forming the tenon, the bulk of the wood was removed with the same 10mm bowl gouge. A spindle gouge or parting tool will also do this task.

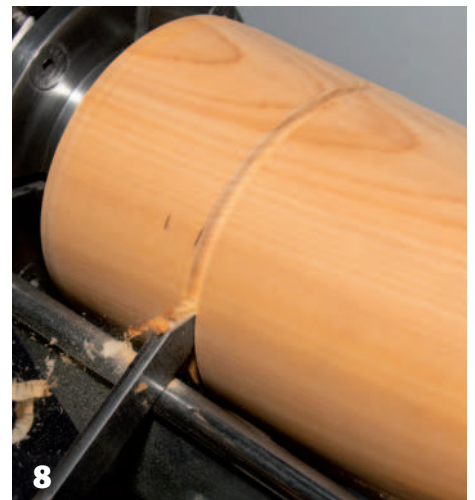


7 To ensure I had 90° in the corner for a good chucking point, I used my scraper to create the crisp corner. I completed the tenon on both ends of the work piece.

8 What will be the lid was held in the chuck first. I then marked out where I thought the lid should be. This proportion can vary with designs and, of course, personal choice. The one-third/two-thirds guide often works well on this type of design. Using a 4mm parting tool, I took light cuts so as not to tear out the surface too much.

9 I used the 4mm parting tool in stages, widening the kerf as I got deeper so as not to let the wood bind on the tool. Once I established the size of the tenon, I left a reference mark on the lid which represents the tenon. This helps greatly when sizing the recess in the lid to accept the tenon of the base of the box.

10 For safety, the remaining piece in the middle was cut with a saw.



HEALTH & SAFETY – TOXIC!

Yew wood is toxic and can cause a mild to severe reaction in some people, so should never be used by anybody without care. Respiratory protection should be used at all times when turning, and especially abrading. Yew is a sensitiser, so intolerance can build up over time, even if you are not initially troubled by it. If you experience any of the following symptoms, stop working it and remove it and any shaving or dust created from the workshop.

Type of reaction; irritant, direct toxin, nausea

Affected area; skin, eyes, cardiac

Frequency and strength of reaction; common

Source; dust, wood, leaves, aril (but not the fleshy part)

So what are the signs we need to look for that might indicate potential problems?

- Sneezing and an itchy, runny or blocked nose (allergic rhinitis)
- Itchy, red, watering eyes (conjunctivitis)
- Wheezing, tightness in the chest, shortness of breath, coughing
- A raised, itchy, red rash (hives)
- Swollen lips, tongue, eyes or face
- Stomach pain, feeling sick, vomiting, diarrhoea
- Dry, red and cracked skin

For a more complete understanding of the potential dangers, please see the article *Is Wood Dangerous* in *Woodturning* issue 357

11 The surface was then cleaned up with the 12.5mm spindle gouge. Whenever we cut straight across end grain, it is important that tools are as sharp as possible.

12 I used the tip of the 12.5mm spindle gouge with the flute at approximately 45° to remove the bulk of the waste from the lid. Gently pulling the tool outwards creates ribbons of shavings. As there is no bevel contact at the tip of the tool, this can cause tear-out of the underside of the lid.

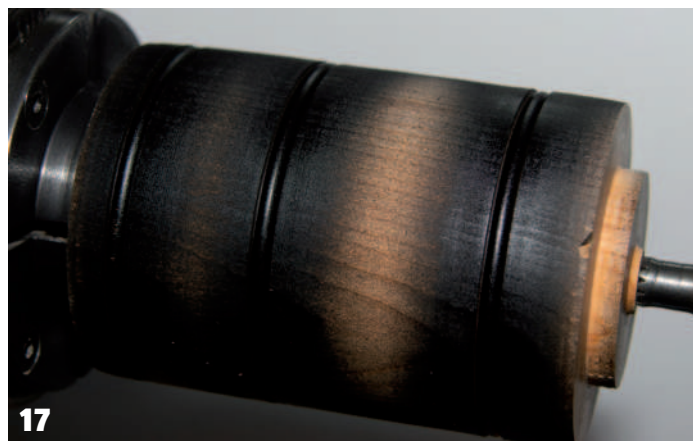
13 Using a scraper, I cleaned up the area which the tenon fitted into. Small passes to remove minimal amounts of wood helped achieve the required fit.



14 With the two pieces fitting together, the tailstock was brought back in to support the base. Light passes with the 10mm bowl gouge ensured a straight surface.

15 To create the first bead, a 3mm beading tool was used. The speed was increased as much as possible while still adhering to safety. Particular attention was paid to positioning the beading tool just shy of the joint. This allows for refinement and sanding of the bead where it meets the base of the box.

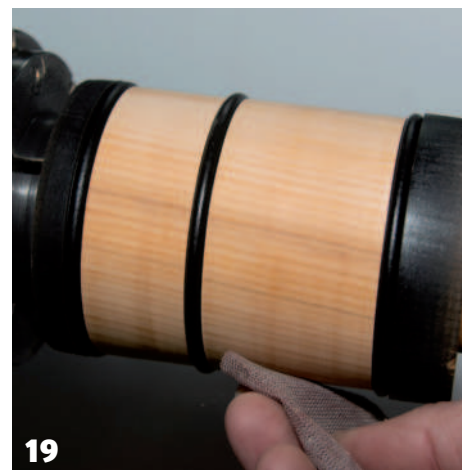
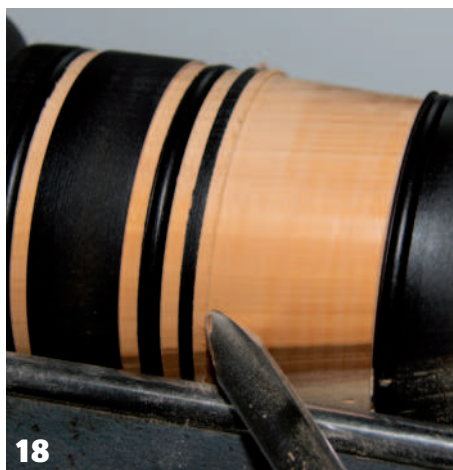




16 When the bead on the joint was successfully completed, the additional beads were marked out and, when I was happy with proportions, the other two beads were completed.

17 Once the beads were sanded, ebonising lacquer was used to colour them black. Multiple light coats and leaving time for each coat to dry is key to success in these scenarios.

18 Using the 4mm parting tool, the area beside the beads was reduced to below the bead surface. This also removed the black and exposed the natural wood.



19 Once the wood was removed and the surface refined, the piece was sanded through grits 120, 180, 240, 320, and 400.

20 Once the base was removed, the bead was trued up and sanded. Using aerosols would now put paint on the finished surface of the wood. So to avoid this, coloured pens were used to fill in the required black.

21 To clean the surface and side of the inside of the lid I used a 12.5mm spindle gouge to remove the bulk of the wood. Then a scraper with an angle slightly less than 90°. This means that when the side is straight it will not scrape the bottom and when cleaning the bottom it will not scrape the side. This minimises tear-out and helps achieve a clean, crisp corner. Sanding from 120 to 400 grit was carried out on the inside.



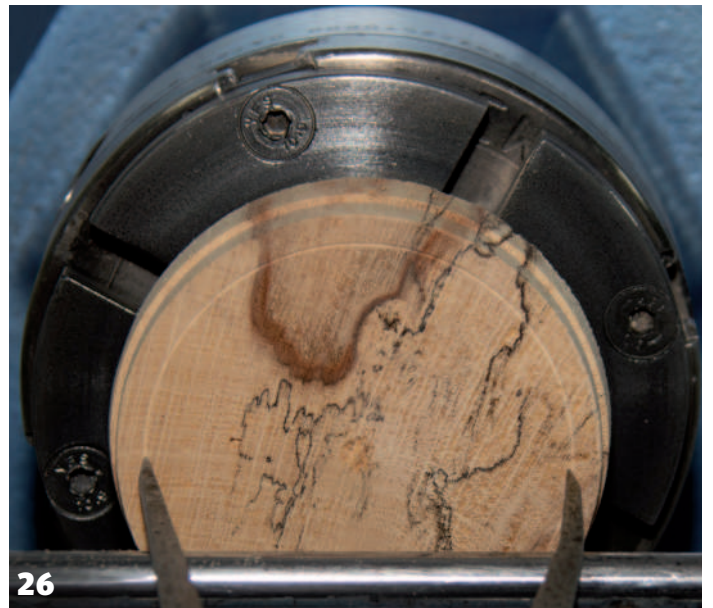
22 The top was then removed and the bottom secured in the chuck. A layer of tissue on the joint helped ensure a good secure fit. The tailstock was also kept in place to ensure safety.

23 Once the waste wood was removed, the beading tool was used to refine the top of the bead. Careful attention was paid to align the beading tool correctly with the bead.

24 Once both beads were completed, sanding and colouring was finished with the coloured pens. The tailstock was left in place for as long as possible. As the piece was secure on the joint, sanding was easily completed without tailstock support.

25 To hollow the base, a hole was drilled with the spindle gouge. By putting the tip of the tool exactly on centre and raising and lowering the tool in small increments, the hole can be created by pushing forward and also the flute is approximately 45° to the bed of the lathe. Hollowing of the base was carried out with the 12.5mm spindle gouge and scraper.

26 A scrap piece of wood was secured in the chuck and the inside measurements of the base of the box were transferred to make a tenon to secure the base on the jam chuck.



27 The base was then completed by removing the waste wood and refining the bead. As this is the base it was important that the bottom of the box was slightly concave so it would sit level on a surface.

28 Once the bead and base were sanded, the colouring was completed. Several light coats of lacquer completed the box. ●



The magical Morse taper

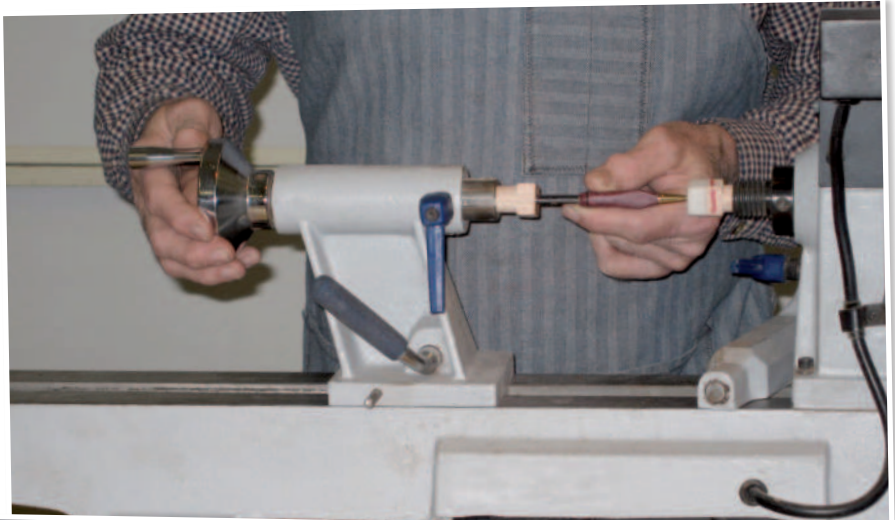
Jim Duxbury demonstrates how to make this useful tool

Stephen A Morse invented the Morse taper in 1864. It was like magic. The Morse taper is a tapered spindle used on lathes and pillar drills to quickly and reliably mount tooling and other devices on the spindle centre. The principle of a Morse taper is that of a long, precision tapered cone inside a matching tapered cone socket. Tools made with this cone-shaped taper on the shank can simply be slipped into a cone-shaped socket and the pressure of the tool against the workpiece drives the tapered shank tightly into the tapered socket. The friction across the entire surface area of the taper interface provides a large amount of torque transmission, so that splines, clamps or keys are not required.

Easy and economical

Morse tapers are usually made of steel but I discovered many years ago that wooden tapers work very well for light duty. These tapers are quick and easy to make, very economical, and the drive ends can be customised to perform a specific operation, then saved and reshaped for other uses. Many of my Morse tapers have been used, reshaped and used over again numerous times.

The taper itself has to be accurately turned so that it will wedge into a similarly tapered socket with the maximum contact area. Over the years I have seen many methods of how to turn Morse tapers. These methods seem to be complicated and this is probably the main reason most turners do not make them. I have used the following method and the simple little jig to make dozens of Morse tapers. I think you will like the simplicity of the jig and develop many uses for these tapers.



PHOTOGRAPHS BY JIM DUXBURY

Materials, tools and equipment

Tools & equipment

- PPE & RPE as appropriate
- $\frac{3}{4}$ in spindle roughing gouge
- $\frac{3}{8}$ in spindle gouge
- $\frac{1}{8}$ in parting tool
- Callipers
- Steel rule

Materials

- A piece of $\frac{3}{4}$ in plywood, 4 x 5.5in
- Two pieces $\frac{3}{4}$ in plywood, 1 x 4in
- A piece of hardwood, 1 x 1 x 4in
- 80 grit sandpaper
- Yellow wood glue

HEALTH & SAFETY

Morse tapers are only to be used with pressure against them forcing the taper into the socket.

The making

1 Select two pieces of 1 x 4in (25 x 102mm) and one piece 4 x 5.5in (102mm x 140mm) of a good grade of plywood. Cut the two corners off as shown and lightly sand the edges.

2 Glue and clamp one piece of the 1 x 4in to the square side of the 4 x 5.5in piece. Yellow wood glue will be used for this project.

3 Now we need to select a suitable Morse taper to attain the location of the next 1 x 4in. Note: Study the examples shown in the next three photos. If you notice, this cup-shaped drive centre sits almost into the lathe's No.2 Morse taper socket. That is just too close.

4 The four-pronged spur drive sticks out over $\frac{3}{4}$ in (19mm). For what we are making that is a little too far.

5 This drive centre sticks out about $\frac{1}{4}$ in (6mm) and should work fine to make the template.

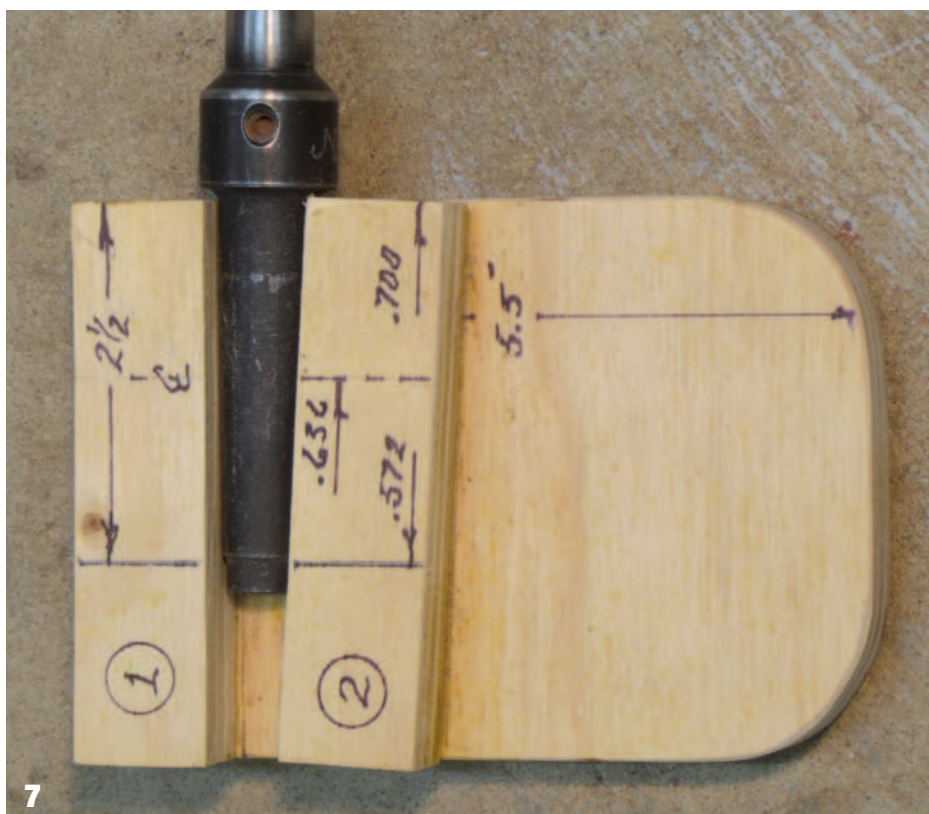
6 Place the Morse taper against the glued-up 1 x 4in so that the large end of the taper is at the side of the jig. Then glue and clamp the second 1 x 4in piece next to the Morse taper, being sure to press it tightly to the taper.



7 After the glue has cured remove the clamps. Mark the small end of the taper, in this case $2\frac{1}{2}$ in (64mm) from the side. Next mark the centreline at $1\frac{1}{4}$ in (32mm) as shown. Now write in the diameter dimensions of the taper at each one of these lines.

Doing the maths

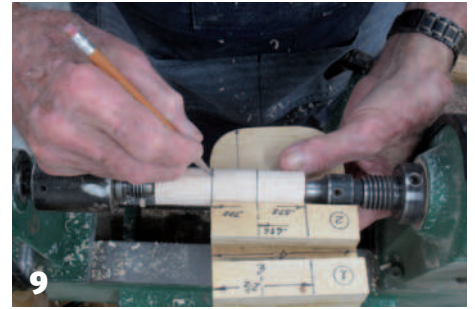
The actual dimensions for a No.2 Morse taper are a taper $2\frac{1}{2}$ in (64mm) long with 0.700in (17.8mm) for the large end diameter and 0.572in (14.5mm) for the small end diameter. For our use it is nice to have a centreline dimension also. The centreline dimension is obtained by averaging the large and small dimensions. $0.572\text{in} + 0.700\text{in} = 1.272\text{in} / 2 = 0.636\text{in}$ (16.2mm)



◀ **8** Now it is time to make a taper. Start with a straight-grained piece of hardwood 1in (25mm) square x 4in (102mm) long mounted between centres. With a 1in spindle roughing gouge, turn the piece into a cylinder.



9 Turn off the lathe. Hold the jig up under the cylinder and mark the three reference lines. Turn the lathe by hand and continue the lines all the way around the cylinder.



10 Set the callipers to 0.572in (14.5mm). Turn on the lathe and set the speed to about 1200rpm. Then with the use of a 1/8in (3mm) parting tool, turn the first line down to a 0.572in diameter.

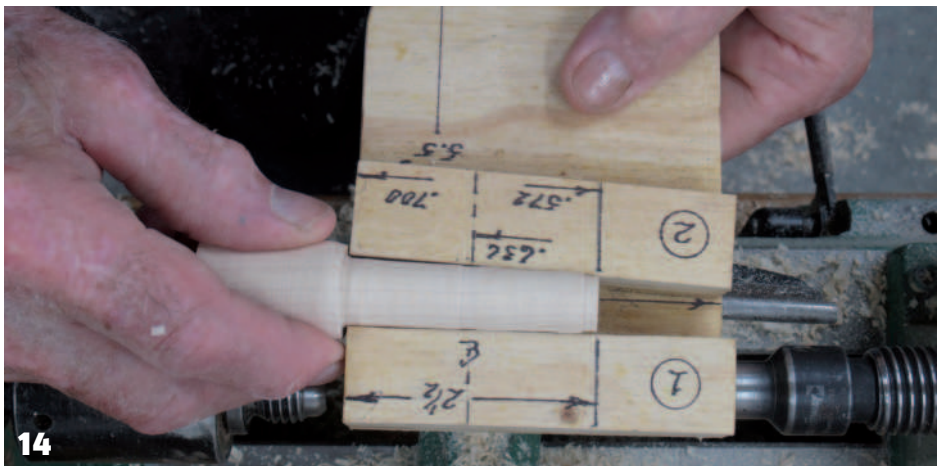
11 Now set the callipers to 0.636in (16.2mm) and turn the centreline down to this dimension. Take your time and do not push in too hard on the callipers as that will cause an oversized cylinder.

12 Similarly set the callipers to 0.700in (17.8mm) and cut the last line to that dimension.

13 We now have the defining surfaces to make the taper. Reset the toolrest at an angle to be parallel to the three cut surfaces and with the 1in (25mm) spindle roughing gouge connect the surfaces. Note: Do not be too aggressive as it is easier to make the taper smaller than it is to make it larger.

14 Once the taper surface looks right, remove it and try the taper in the jig. Look closely at where material should be removed. Put the piece back on the lathe and make the final cut.

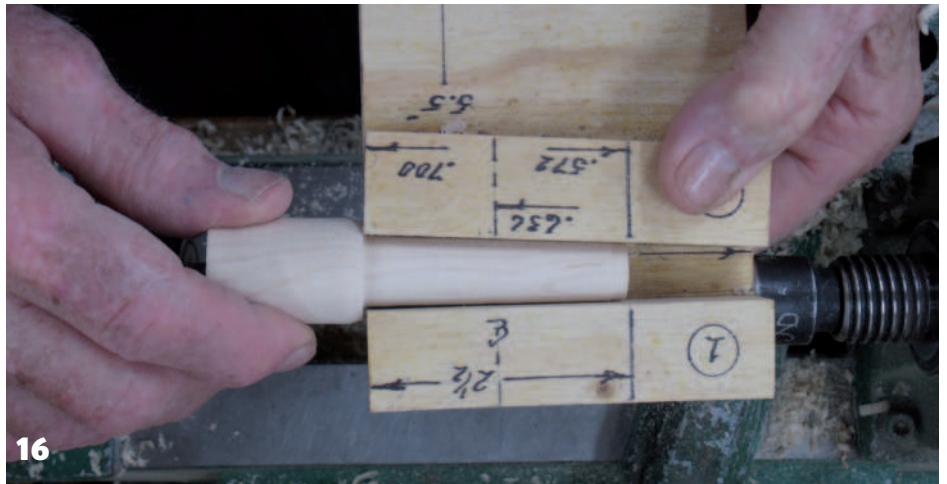
15 A useful technique when the taper is getting close to fitting in the jig would be to hold a piece of 120 grit sandpaper on a 1 1/2in (38mm) wide flat board and sand the taper to the final dimension.



Moment of truth

16 Take your time and check often. Soon the taper will fit perfectly, and you can try it in the lathe.

17 The taper should fit firmly with no sideways movement. Once you are satisfied that the taper fits snugly, bring up the tailstock and add a small amount of pressure. (Note: Remember a Morse taper can and will come out of the socket if pressure is not continually applied inward.) Now it's time to configure the blank end of this taper to perform a specific task. In this case, we will make a long point with a $\frac{3}{8}$ in (10mm) spindle gouge.



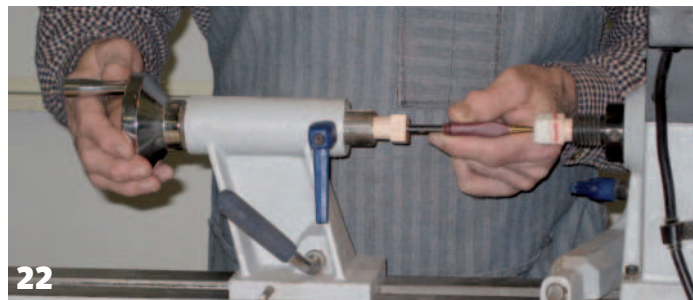
18 Once the point has almost been completed, slow the lathe down and trim the last of the point off. Remove the tailstock, make any final very light cuts.

19 This surface can now be sanded, however it is a tool and not a piece of art. Over time this smooth, pointed surface will get worn, have rings, chips, and gouges cut into it. Slippage will cause burn rings when not enough pressure is used. All sorts of things can happen, but this point can easily be recut and shaped good as new in just a few minutes.



20 Shown are some examples of Morse tapers. Some are many years old and well used. From left to right, the first two are cup-shaped, used for holding spherical surfaces. The next one was specially made to go down into a small hollow form. Then there is a dome-shaped taper made for a similar-shaped recess. With any of these four tapers a rubber, cloth or leather pad could be used between the taper and the piece to prevent damage to the contact surface. The last four tapers are straight tenon type of various diameters used to turn drilled turning blanks.





21 In use, this taper with a $\frac{5}{8}$ in straight tenon, is made to easily secure a bud vase with a $\frac{5}{8}$ in drilled hole in it. This piece can now be turned and sanded, ready for the final finish.

22 By turning two Morse tapers with flat ends your lathe can become an excellent press to assemble pens and other such objects. (Note: It is wise to unplug the lathe when doing this sort of non-turning operation.) If you do a lot of pressing, the flat wooden surfaces will wear and the end grain may puncture. To remedy this problem, glue a small $\frac{3}{4}$ in (19mm) square piece of $\frac{1}{2}$ in (13mm) thick corian, as shown on the headstock end, to the pressing surface. Medium CA glue works well for this.

23 This Morse taper has about a 2in (51mm) flat disc end covered with a piece of inner tube. It could be used in the headstock to drive but I use it almost exclusively in the tailstock where it will not rotate. The pad can then be pressured against the turned piece, securing it for carving or drilling.

24 You can see from the wear on this buffing wheel that I really like it and it has been well used over the years. This is a Morse taper with a $\frac{5}{8}$ in (17mm) tenon about $1\frac{1}{4}$ in (32mm) long. It has a wooden cap about 2in (51mm) long with a $\frac{5}{8}$ in oversized hole to slip over the $\frac{5}{8}$ in tenon. The buffing wheel is an 8in (203mm) diameter cloth wheel with a $\frac{5}{8}$ in arbor hole in it.

The taper in use

25 To use this buffing wheel, put the Morse taper in the headstock, slip the buffing wheel onto the tenon, slide the wooden cap over the tenon, add pressure with the tailstock, set the lathe speed to about 120rpm, and buff away. Always wear a face shield when buffing.

26 This buffing wheel is easy to make, with minimal expense, and is quick to install. Without the threaded arbor, buffing wheels can be switched in seconds, will work on any lathe with a No.2 Morse taper, is lightweight and efficient to use.

These are just a few of the examples and uses I could show for the Morse taper. Many of my tapers have been used, reshaped, used, and reshaped again, right down to a nib. You will see even nibs can come in handy at times. Be creative. Use your imagination. You will be amazed at the results of these magical Morse tapers. ●



NEW FULL RANGE OF TOOLS AVAILABLE

- Hardened to 66/69 HRC, massively out performing standard HSS tool
- Cryogenically treated giving a huge increase in performance over standard M42
- Beautifully balanced 'Copper black handles'
- Triple tempered for Ultra high performance
- Hand Honed to a Razor Edge
- Hand crafted in Sheffield, England



Tel. 0114 261 2300

Fax. 0114 261 2305

Web. www.crownhandtools.ltd.uk

Email. Info@crownhandtools.ltd.uk

Available from

www.axminster.co.uk

www.marksanger.co.uk



Two Technologies Giving Unequalled Performance

We don't just do world class pen kits

We do world class other things too!



Versachuck chuck system:
Unquestionably the most
versatile wood lathe chuck
on the market



Beall I-X expanding collets:
Absolute accuracy
and reliable grip.
Ideal for pepper mills



Starbond Superglue
market leading CA:
all types stocked including
flexible, coloured & odourless

Visit our website for more things you didn't know we sold

www.beaufortink.co.uk



Sing it loud

Kevin Alviti creates a simple toy microphone for a budding rock star

I'm not sure if every eight-year-old thinks they're going to be a rock star or if it's just mine. But at least it's rock music and not pop. In fact, I've been (not so) subtly guiding my children's music tastes since they were born. Each morning I pick a different band to have on in the background as we eat. Some are certainly heavier than others. Sometimes we all have to rock out and I inflict my terrible dad dancing/moshing upon them. Sometimes I have to tell them to tell their mother we only listen to radio edits...

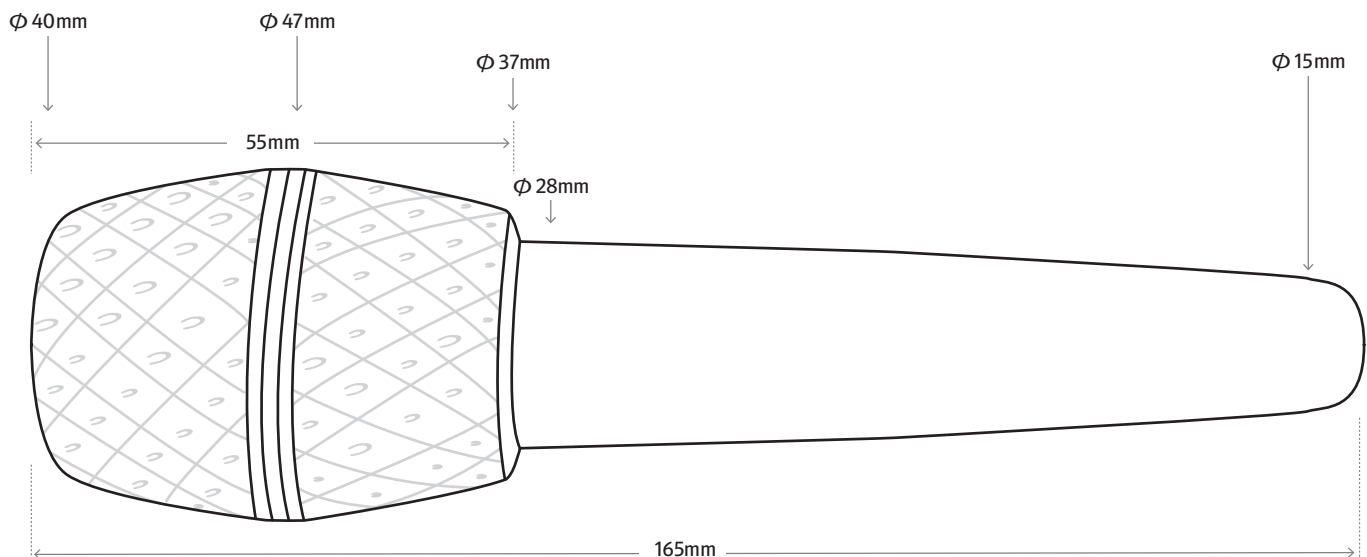
Although I don't have a musical bone in my body (I can just about use a handsaw in time but that's it) we have tried to encourage our children to pursue this interest should it take them. My middle child, Melissa, has taken up guitar and loves it, she has always behaved like a rock star so it seems very natural for her. The lessons are going well and we can now make out the tunes she is playing. However, when she asked for a microphone, I'm not going to say my heart didn't sink a little bit. I don't mind a bit of noise, but a microphone can mean a lot of noise.

Instead, I suggested I'd make her a wooden microphone she could sing into to her heart's content – unamplified – in her room. Maybe when I'm not in the house...

I also thought it would make a brilliant short project for other woodturners out there with future rock or pop stars in their family or friends.



Plans & equipment



Tools & equipment

- PPE & RPE as appropriate
- Lathe
- 18mm spindle roughing gouge
- 32mm skew chisel
- 12mm skew chisel
- 12mm spindle gouge
- 6mm parting tool
- 3mm parting tool
- Sandpaper
- Pyrography pen with a fairly fine tip

Materials

For this I used some sycamore as it turns easily and has a light enough grain that is quite fine to burn the pyrography patterns comfortably. It's also a non-toxic wood and, when coupled with a food-safe finish, is fine for children to play with. When sanded and finished properly it is unlikely to splinter or break and the one-piece construction is too big to be a choking hazard.

The making

1 I started with a 50 x 50mm blank and roughed this down to a 47mm cylinder using my 18mm spindle roughing gouge. For this project, I used my four-prong drive centre and a standard rotating tailstock drive.

2 When I had it as a cylinder, I then marked up the lowest point I would need to reduce it down to. I also marked the high point of the speaker part at this stage.

3 With a strong grip on a parting tool in one hand and a gauge in the other I reduced down the two end points and the low point, where there will be the transition between the end of the microphone and the handle.

4 To shape the microphone, I used a combination of my spindle roughing gouge to remove the bulk of the wood, especially on the handle, then a skew chisel to finish it off. You might find it necessary to support the workpiece slightly with one hand as you make the final cuts. Make sure you always work with the grain so your tool cuts from a wider diameter to a narrower one.

5 Using a small spindle gouge, round over all the corners and edges to give it a smoother feel. Lift and roll with the cuts to make it one smooth motion.





6 Here I used a small skew chisel on edge. Approach the workpiece at a 60° angle, let the point of the tool just mark the wood then lift it slightly to engage. Do this twice about 4mm apart. This cuts smoothly in, then mirror this and approach from the other side, making it so the cuts connect and a small shaving comes out, leaving two clean groves.

7 Sand the workpiece. Start at around 120 grit and work your way up to 400 or 600. Stop with each grit and sand it with the grain at each grit. You won't be able to remove scratches left behind by coarser sandpaper so make sure at each step any scratches are removed.

Using a thin parting tool, remove it from the lathe, taking care not to go too near the end of the workpiece otherwise it might tear out some end grain. I prefer to take it down as far as I dare, remove it from the lathe and finish the last bit with a tenon saw.

8 With the microphone off the lathe, it's time to start on burning in some details. First roughly draw the lines of the lattice on to use as a guide, then I use a pyrography pen, set on quite a high temperature, to burn the details. It's one of those moments where it looks rubbish until there is quite an area done, so the key thing is to persevere.

I have a fan running when doing this as, although part of me loves the smell of burning wood, I know it's not good for me.

9 Add in more detail once the lattice is complete. I burnt simple dots in the middle of each square. I often find when adding detail to something small like this I like to stand and almost cradle the workpiece with one hand, while using the pen in the other.

10 Apply a non-toxic finish. As the sycamore was so light, I used some Osmo tints to colour it darker then gave it several coats of Osmo Top Oil, which is rated safe for children's toys. ●



HOPE
woodturning

**Want to see the biggest display
of lathes in the UK?**

Give us a call or email to visit!

01206 233334

hopewoodturning@gmail.com



TWISTER
STRATOS

LAGUNA

ONEWAY
MANUFACTURING
Superior Design, Legendary Quality

VICMARC
WOODTURNING LATHES CHUCKS AND ACCESSORIES

**HOPE woodturning
show room is open to
the public.**

**Open Monday to Friday: 10-4pm
Weekends by appointment.**

Candlestick

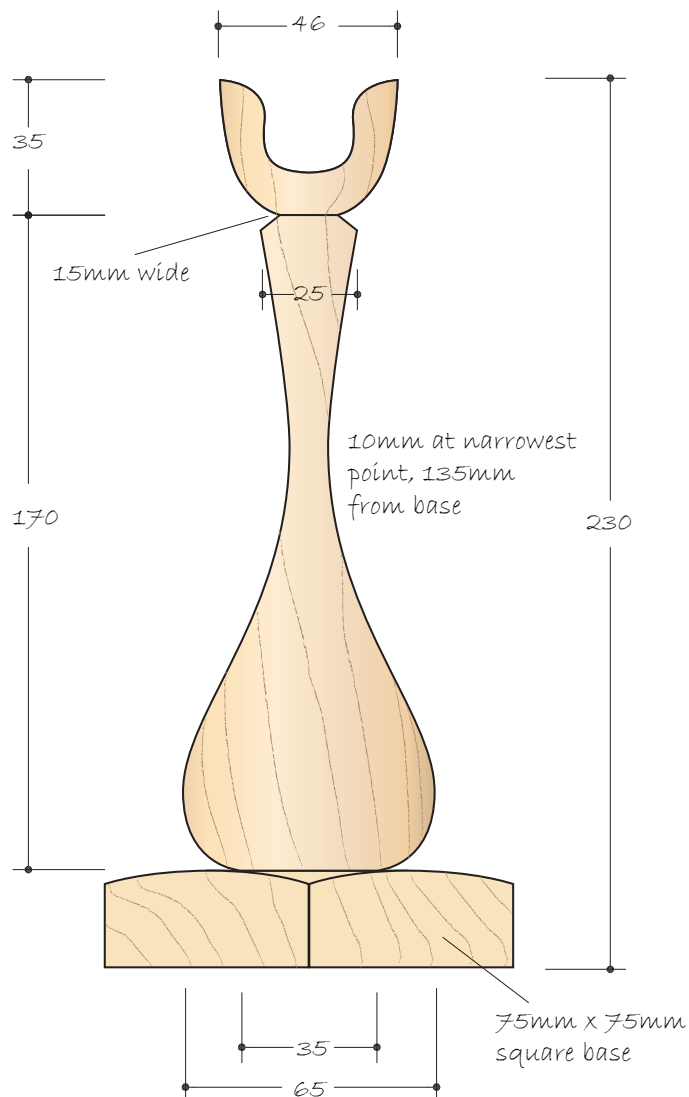
Matt Long steps up the difficulty with his next turning, a shapely candlestick

In this article for my beginners' series, I've stepped things up a little to show you how to make this candlestick. For the chucking, I've used a four-jaw scroll chuck with a four-prong drive insert, and a live conical centre at the tailstock end. To make this project, I'm using two more of the tools covered earlier in the series, namely the 12mm parting tool, and the oval skew chisel. The skew scares a lot of people and, perhaps, rightly so... it can be difficult to control. But here I use its simplest cut, so it's a nice introduction to this very useful tool.

Plans & equipment

Tools & equipment

- PPE & RPE as appropriate
- 20mm spindle roughing gouge
- 10mm spindle gouge
- 10mm beading/parting tool
- 25mm oval skew chisel



PHOTOGRAPHS BY GMC/ANTHONY BAILEY

The making

1 For the candlestick, you need a crack-free blank, 75mm by 75mm and 300mm long. Mark your centres and drill a 24mm hole in one end to a depth of 40mm. This will become the recess for the candlestick insert and mount point for the tailstock live centre. Mount your blank with a four-prong drive in the scroll chuck, bring up the toolrest to just below centreline, and check for catching.

2 Turn a 35mm tenon to be gripped by your scroll chuck with your beading/parting tool. A bevel-rubbing cut is best, so gently push the tool's bevel until you get the click, click sound as it touches the blank, then lift the handle and push the tool into the workpiece.

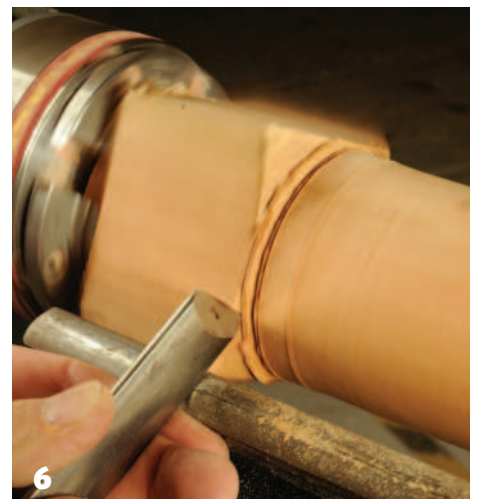
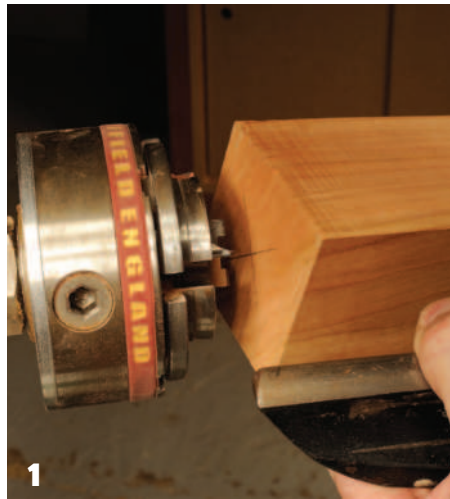
3 Stop the lathe, remount the blank with the tenon in the chuck, and make sure this is secured safely. Next, make a long pencil mark on your blank about 50mm from the chuck. Start the lathe up and reinforce the mark you've made on the blank with the skew. To do this, hold the skew on the toolrest with the toe down and then push the skew in 3-4mm. This marks the base position.

4 The next job is to turn the rest of the blank into a cylinder just over 65mm in diameter. Start near the skew cut, bevel rub the spindle roughing gouge, lift the handle until it cuts, and then turn the flute towards the tailstock and move in this direction. Do this in stages, creating a taper.

5 To create a uniform cylinder, you need to define the diameter just above the pommel with the beading tool. Then return to the spindle roughing gouge and finish off your cylinder. This time start in the blank's middle and push towards the headstock end.

6 Next, start shaping your pommel top. Use the skew toe down, and arc the cutting tip in, just removing a millimetre or so of material at a time. In effect, you are making an end-grain cut.

7-8 To finish, make the same cut, but this time coming into the blank from the cylinder side, creating a curve here too. In effect, you are cutting one side of a large bead here. When you have finished, you should end up with these two curved end-grain faces.



Top tip

Before starting any new project, give all the tools you'll use a quick sharpen. Using sharp tools produces much better results, much more easily

◀ **9** Next, at the other end, use the beading/parting tool to cut into the cylinder, close to, but not touching, the live centre. This cleans up the end and forms the top line of the candlestick.

10 Next, refine the curved top of the candlestick where the candle insert will sit. It's basically a half-bead cut using the spindle gouge. Remember your bevel rubbing and start with the flute pointing to about 2pm, then make a curved cut while rotating the gouge, so the bevel finishes at about 3pm.

11 Check the blank is held firmly in the scroll chuck, remove the tailstock and use your spindle gouge to finish off the top of the stick. Position the toolrest below centre height and square on to the end-grain face. You are now making a true end-grain cut. Remember, it is a bevel rubbing cut, and remove the tenon a few millimetres at a time. The end result should be a smooth curve along the end-grain face, going into the hole.

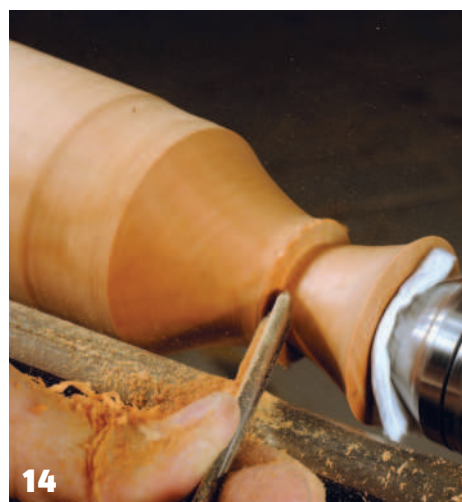
12 Sand this top through the grits, as this is the finished surface.

13 Bring the live centre back into the blank, but this time put some kitchen towel in the hole to keep the sanded surface mark-free. With the workpiece fully supported, you can return to the spindle roughing gouge. Create a wide cove at the top end to allow you to cut the candlestick top.

14 Then, with your spindle gouge, shape the top. You are cutting the top part of the upturned bell shape here. Start just below the top lip of the bell section with the flute pointing to 10pm and cut towards the headstock, and downhill, with bevel rubbing.

15 Go back to the spindle roughing gouge and shape the long curve of the stem – from the widest part, just above the half bead you cut with the skew, to just below the previous cut.

16 Now you've cleared enough of the stem out of the way, you can cut the final curve of the bell-shaped top with the spindle gouge. The top, an upturned bell, basically has a flowing ogee shape, which finishes just where it meets the main stem's top half bead, just below the stem's bell.



17 Reverse your cut direction, and make your final cuts to the top half bead of the stem.

18 Now you've finished cutting the bell and stem top sections, get your roughing gouge back out and shape the gentle cove of the main stem, cutting downhill from both ends.

19 Keep cutting until you blend both of these curves in to form your whole stem section. Remember, if you cant the gouge over so the cutting edge is at 45° to the lathe axis, you create a cleaner shearing cut.

20 Next, go back to the spindle gouge and finish the bottom half-bead of the stem, blending this in nicely to the previous stem cut.

21 You will need to use the toe end of the skew chisel to cut this half-bead right into the V.

22 Now for the sanding, covered more thoroughly in issue *WT370*. Work through the grits, all the while shaping your pad of sandpaper to fit the feature. Remember to sand in the bottom quadrant. Do not over-sand the delicate edges. Keep your abrasive moving at all times to prevent ridges and, after each grit, either reverse the lathe for a very light sanding, or sand along the grain with the lathe still. Don't forget to sand the flat sides of the pommel, and remove the arris.

23 To finish, first of all spray on an even coat of sanding sealer. Then give this a de-nibbing with 320 grit, once the sealer has dried. Apply a few coats of finishing oil. Leave plenty of time for each coat to dry, and lightly de-nib. Once the final coat of oil is dry, turn the lathe speed up, and move a dry pad of kitchen paper along the candlestick to burnish the oil to a high lustre. Don't forget to finish the pommel, but with the lathe stationary.

24 The final job is to part off the candlestick. Use the beading/parting tool to create a tenon 15-20mm diameter, and then cut this off with a flush saw. Your candlestick will fall away from the live centre, so hold on to the stem while cutting. ●



Bird box

PDF NEWSPAPERS and
MAGAZINES:
WWW.XSAVA.XYZ

Alan Holtham hollows out and shapes an otherwise useless wet log to provide an elegant avian starter home

Woodturners often find large, wet logs difficult to deal with, because they are not really big enough to cut into planks but are usually too big to dry and use in the round. They are, however, perfect for a project like this bird box, where the moisture content is not important, and any cracking or warping just adds to the rustic charm of the finished project. Bird boxes are quick and fun to make and provide hours of entertainment as you watch the comings and goings of the various tenants.

Wet timber turns easily, pouring off the gouge in long streamers. However, it is important to ensure that you dry your tools and the lathe thoroughly when you have finished, or they will quickly rust. Oak and chestnut are particularly bad for this: the tannin in the wet sap is highly corrosive and will blacken the tools within minutes. I used oak for this one and, although it is a durable timber, the sapwood soon rots away and it is only the heartwood that will withstand being outside. Consequently, you will initially need quite large-diameter logs and to turn them down to remove as much sapwood as possible, using only the inner core of heartwood.

I did not sand or finish the timber in any way. Most hardwood timbers that are exposed to the weather soon turn an attractive grey colour and will withstand the elements without further treatment, for several years anyway. However, if you do decide on some form of preservative treatment, make sure it is non-toxic and bird friendly.

I have made several of these boxes over the years and have always found that it takes some time for them to find tenants. I think they need to acquire a weathered appearance before the birds feel comfortable. Try to place your bird box in a relatively sheltered spot to minimise the amount it swings about, then just sit back, wait and watch.

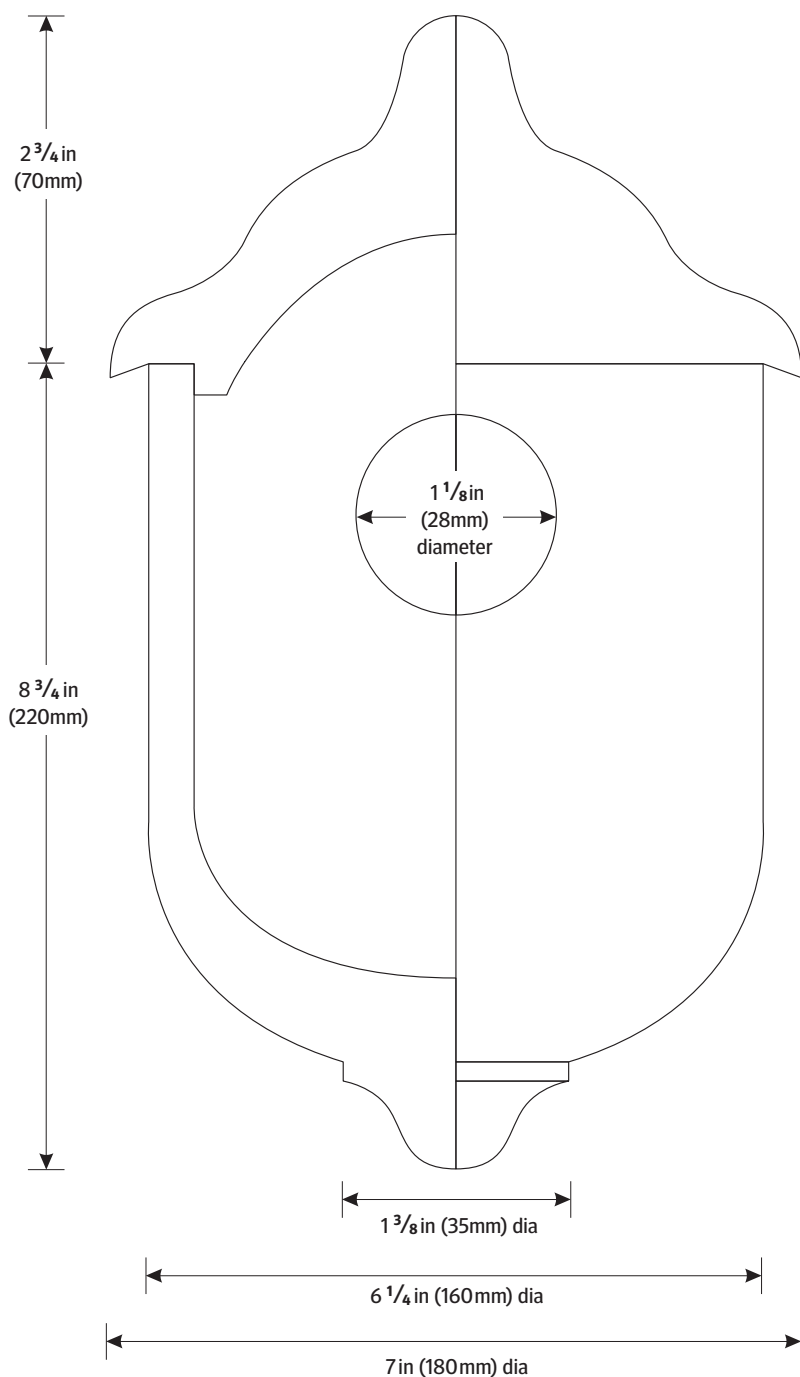


PHOTOGRAPHS BY ALAN HOLTHAM

Plans & equipment

Tools & equipment

- PPE & RPE as appropriate
- $\frac{3}{4}$ in (19mm) roughing gouge
- Square-side cutting scraper 5
- $\frac{3}{4}$ in (19mm) skew chisel
- $\frac{3}{8}$ in (10mm) parting tool
- $\frac{3}{8}$ in (10mm) bowl gouge
- 1in (25mm) round-nosed scraper
- Standard parting tool
- $2\frac{1}{2}$ in (63mm) and $\frac{7}{8}$ in (22mm) sawtooth bits



The making

1 Use dividers or a compass to determine the maximum diameter of usable timber and mark the centre at either end. Offset this a bit if the log is badly bent or out of balance, although this can be corrected later as you will see.

2 Wet oak logs are heavy and uneven, so make sure the drive centre is well engaged by knocking it in deep with a mallet. A two-prong centre often penetrates better and provides a more positive drive for big pieces like this, though a four-prong centre will be fine provided the wings are sharp.





3 Because of the unevenness, do take care with the initial positioning of the toolrest and swing the log round by hand to make sure it is well clear before you start up the lathe.

4 Depending on how uneven it is, spin the lathe at about 250rpm to start with – until it all becomes balanced – and then increase the speed to what seems comfortable. I managed to turn this piece at 400rpm, as it was naturally quite cylindrical, but each piece varies as regards the internal balance. If in doubt, start really slow and see what happens.

5 Start with the roughing gouge, nibbling away at the right-hand end to start with, then gradually working back further to the left with each successive cut.

6 With the slow revolution speed and irregularity of the blank, the initial roughing stages are usually quite slow, particularly if there is a large lump on one side. Take your time and present the gouge carefully, until you know exactly what you are dealing with. These lumps are not always clearly visible on the blank as it spins.

7 Work from either end with the roughing out, it will become much easier as you gradually approach a true cylinder.

8 Large areas of bark often come loose as the roughing proceeds, so stop the lathe occasionally and remove any pieces that are likely to fly off at you.

9 As the irregularities are removed, a large gap will open up between the blank and the toolrest, so move it in as you work, to maintain maximum support for the tool.



HEALTH & SAFETY

Caution

Because of the irregularity, always stop the lathe if you need to move the toolrest. Even at slow speed these large blanks have a fair bit of momentum, and will give you a nasty knock if you catch the toolrest.



10 You will soon be able to see if you didn't quite get the centring right, so reposition the centre at one or both ends if necessary.

11 Use the parting tool to true up the ends, as this will remove a lot of the imbalance and vibration.

12 Once everything is running more smoothly, you can try increasing the speed a bit, to make the cutting process a lot easier. Go as fast as you can without making the lathe vibrate excessively, though this will depend on the internal balance of the blank.

13 Now you can quickly remove a lot of the outer sapwood and start the shaping at the top end. The roughing gouge will soon whip this away, which is great fun in wet timber.

14 Form a long spigot on the top end of the blank, to fit the longest chuck jaws you have. Make sure the sides of the spigot are dead straight, as you need a really firm grip for these large sections.

15 Use the parting tool to mark where the join will be between the lid and the base, and form the internal flange on the underside of the lid.

16 To form the overhang of the lid, remove the bulk of the waste from the bottom end of the box, taking it down by about $\frac{3}{8}$ in (10mm).



17 Next, shape the bottom end, swapping the roughing gouge for a $\frac{3}{8}$ in (10mm) bowl gouge as the radius gets tighter and the tool overhang increases. Complete the rough shaping of the outer profile, forming the overhang of the top.

18 Form another spigot on the bottom end, again making sure it is perfectly parallel. If you have one, a $\frac{3}{8}$ in (10mm) beading and parting tool is ideal for this heavy work.

Top tip

When working with a wet log it is particularly important to seal it in a plastic bag if you have to leave it for any length of time. Even if it is just left overnight, part-turned work can split quite drastically without this sealing.



◀ **19** Try to undercut the shoulder slightly, using the skew chisel as a flat scraper so that the blank seats squarely in the chuck.

20 Put in the internal flange that will form the join between top and bottom sections, making it about $\frac{3}{8}$ in (10mm) long. Then, part through clear of this flange, going as deep as you can with the parting tool and widening the groove slightly as you go, to maintain some clearance for the tool.



Top tip

When you are nearly through, stop the lathe and finish off with a handsaw, as it is so much safer than trying to part right through on these heavy sections.



21 Remount the top section in the spigot jaws pushing the spigot shoulder tight up against the jaw surfaces to ensure that it is properly centralised.

22 Hollow out the inside of the lid to make the box lighter and to help minimise any splitting as it dries out. Leave the finish as it is straight off the gouge – the birds will not appreciate you sanding it.

23 Remount the bottom end in a similar way. As long as your spigot is properly parallel and sized correctly, the chuck should be quite capable of holding a large blank like this. If you are having trouble maintaining a firm grip, check that the spigot is properly formed.

24 Use a drill in the tailstock to remove some of the centre waste and determine the maximum depth of hollowing. I find large sawtooth bits are the best for end-grain work, but keep withdrawing them to clear the swarf.

25 Start hollowing using a square-ended, side-cutting scraper, pulling it out from the middle towards the rim. Don't get too aggressive with this cut and keep the scraper angled downwards.





26 At this stage hollow out just deep enough to make the lid section a tight fit back in the base.

27 You can now use this base section as a jam chuck to turn the final profile of the top, my preference here being to use the $\frac{3}{8}$ in (10mm) bowl gouge.

28 The detail shouldn't be too complicated, because it needs to shed water easily, so form a gently sloping roof with a hanging knob at the top.



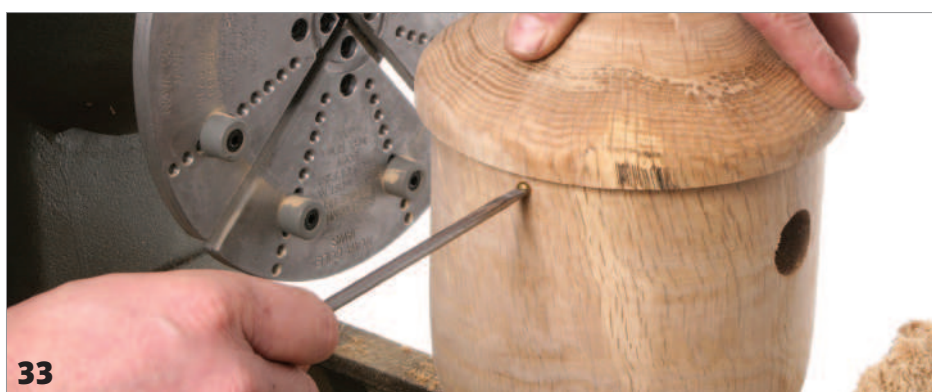
29 Take the lid off the base and finish off the internal hollowing, using a bowl gouge initially and then a heavy, round-nosed scraper as the tool overhang starts increasing. Slacken the fit of the lid slightly, so that it takes on and off easily.

30 There are options for re-chucking to complete the base turning: you can turn up a piece of scrap to act as a jam chuck, leaving a long flange for maximum support, or you can use Cole jaws, but these don't have tremendous grip.

31 You can now complete the turning for the underside of the base, removing the tailstock only for the final cuts.

32 Drill the entry hole through the side of the box using a sawtooth bit. The exact size is critical, depending on the type of bird you want to attract. For small birds use a $\frac{1}{8}$ in (28mm) drill, as anything larger will allow starlings and sparrows to enter.

33 Drill pilot holes, then fix the base and lid back together with a couple of brass screws. The two sections will inevitably twist and warp as they dry, but the screws will hold it together. Add a short length of hanging chain to complete the job. ●



Kurt's clinic

Kurt Hertzog answers readers' questions

Every time I try and drill a hole on my lathe it's never straight. The tailstock has a lot of play.

The comment about never being straight has me a bit puzzled. I'll take a guess at what you mean and offer some ideas and potential solutions. There could be one or more aspects to your question/problem. The tailstock on nearly all lathes has a lot of play until it is locked up. The play allows it to slide easier. Of course, a precision machined casting fitting well on the ways can reduce play, but that costs money and adds some drag on movement – even the most precise needs to have sufficient looseness to move easily. Most companies do a good enough job of machining the fit so that, on lock up, the tailstock is located properly and reasonably repeatable. I find that even my best lathe has some variation in the lock-up position repeatability.

Does your question/comment refer to the quill? Most quills travel straight when advancing using the internal thread and guide system. Yes, some quills have a more precise guide system in the tail centre and have a tighter fit (60° vs 75° for example, along with precision fits) between the threads. Even if there is a loose fit of the quill and less engagement on the threads, the drill should cut on the axis of rotation following the path of least resistance. If your quill wobbles as you advance it, you should investigate that issue. Usually there is simply an internal thread that mates with the advancing screw and hand wheel. There is also an anti-rotation slot tracking a locking screw mechanism. This can range from machine tool fit and finish to sloppy. That still shouldn't be the issue on drilling 'straight'. It might not be perfectly parallel with whatever you are using as a datum but it should be a straight line inside the hole. I'm assuming you mean not straight with respect to your blank. With respect to which surface? Is the blank round? Is it square? Truly square? How are you holding it for drilling? A three-jaw or four-jaw vice? A collet? A two-jaw, V-cut jawed blank drilling vice? A drill chuck? Are your drilled holes a deep, small diameter with potential drill wander? Is your drill long and hanging way out of the drill

chuck? Are you drilling by advancing the quill for the entire process? Are you having to reposition the tail centre when you run out of quill travel? How are you doing that? Are you freehanding the drilling?

Also, I'm wondering about the issues presented by your 'not-straight' hole. I have never had an 'unstraight' hole drilled on even the least expensive lathe when talking about the hole itself. Of course, you can drill a poorly shaped and/or surfaced hole with poor drill condition or technique. Holes in plastic can be easily melted, recast, and misshaped with excessive speeds, too much force, and dull drills. You can also have holes that wander off axis. From my experience, every hole drilled on a lathe should wind up on the same axis of rotation as the work as it is mounted. That said, you can have a hole that will follow the grain. If you are drilling a relatively small, deep hole in a material with grain that is off axis to your mounting axis of rotation, you can have the drill follow the grain. That is following the path of least resistance. This can be especially true with long, small-diameter drills. I run into that problem when drilling 1/8in holes to a depth of about 5in in my desk pens. If the grain direction runs off the mounted centre line axis, the grain will take over some amount of guidance of small diameter drills regardless of the care I take. Does that present an uncentred hole with respect to some outer surface? Certainly. Depending on your work-holding method and the various surfaces of your blank, you can put a hole quite far off the blank's actual centre or off axis to the various surfaces. I think the issue isn't with your equipment but perhaps I'm not truly understanding the 'not straight'. If your issue is workholding, you might find some help in general within my 13-part workholding series of articles. You can find exhaustive coverage on the subject in WT238-250. Hopefully some of the issues I've spoken to will give you a path to look at. If not, perhaps it will be of value to other readers. Not mentioned but assumed you are using sharp drills, appropriate speeds and feeds, and good drilling techniques.



1 Large or small drills, I use a technique learned from Dick Sing. With the quill retracted, slide the tailstock forward by hand to drill your hole. **2** Keeping your drills sharp is key to good holes. The best investment I have ever made for drills was an inexpensive sharpening machine. **3** If you do purchase a sharpening machine, be certain you can sharpen the range of drills you use. **4** Many times, issues with concentricity or other drilling related issues are workholding related. Get as much of your stock mounted well. **5** Good drilling practice, using proper speeds and feeds, includes retracting the drill and cleaning the flutes as needed. **6** An 1/8in, 5+ inch deep drilling on an unsupported blank presents problems. Notice the grain orientation that may take over the guidance to a degree.

PHOTOGRAPHY BY KURT HERTZOG

Why is there such a price difference between brands of carbide tool replacement cutters?

Carbide cutters for woodturning tools are in a different league to machine tool carbide cutters. Not only are they usually a more complex design, but are markedly lower volumes. Among woodturning cutters, different designs can have totally different costs. Much like any product, complexity, material consumption, market segment, specific design, proprietary issues, etc. make different cutter costs vary considerably. To compare apples to apples, you need to be comparing the same part number cutter or at least those with direct replacement/interchangeability. Most manufacturers have their own replacement offerings for each tool, including any other designs of cutter that will fit that handle.

The price for different designs varies even within the same company offerings. More carbide in the part, additional complications that increase manufacturing processing, lower volume on that part number, along with any marketing hype, can change costs. That said, if you are comparing a generic design replacement cutter that is offered from multiple companies, the best short answer is likely how many hands touch it between the manufacturer and you. In more detail, there are many factors affecting the cost you experience buying any product. Obviously, the mark-up at your final sales location has

a big impact. Every stop between the OEM manufacturer and you adds additional tiers of mark-up. Along with transportation costs from manufacturing site to each of the interim stops, don't overlook the cost of packaging. A retail, theft-resistant bubble package in your local retailer certainly costs far more than multiple quantity industrial-type packaging or a simple poly bag stapled closed. Some cutters are sold directly to the end user while others go through the multi-level marketing process.

On the manufacturing side, carbide cutters are a milled material blended concoction that are pressed and sintered. The milled carbide materials, binders, and the proprietary magic sprinkles prior to pressing have cost, as do pressing and sintering. Other costs factoring in are the manufacturing batch volumes, tools and equipment, yields and more. Larger companies with higher-volume production processes benefit from economies of scale compared to smaller houses. With all that, my guess is that the marketing costs are responsible for the largest part of the variations you see. Everything said is indicative of any product offering, from bread to automobiles. Don't ever forget that many times the price asked is determined by what the market will bear.



1 Just a small sample of the various carbide replacements available. You need to be certain any replacement nests like the original. **2** The design and fabrication of the carbide cutters is far more complex than perhaps you give it credit. **3** Retail packaging adds cost to your product. It can vary from the simple poly bag to more exotic visual or theft resistant.

Carbide replacements are so expensive. Can I sharpen them? Any tips for getting more life from them?

I do touch mine up but only certain types. I remove the flat cutters when they need attention and use a flat diamond hone. Keeping the cutter flat and in contact with the hone while moving it in a circular motion seems to give me some additional life. You can do this dry or with a bit of water or oil. Nothing required on diamond. I don't think I get as good as new but it certainly gives me some added use. Other designs don't lend themselves to touching up. I find that marking my cutter and rotating the cutter as needed extends its life. A simple line that sometimes needs

refreshing with use serves well. As an edge begins to lose it, use it for the heavy lifting. When you need your fine touch, rotate a virgin edge into place. Once done with any fine work, rotate the pristine edge back out of service to do your tough work with a declining edge.

As the work horse edge becomes unworkable, press the pristine edge into service, setting aside the next virgin edge portion of the cutter for use as needed. Once you've gone all the way around, touch it up if possible or simply pitch it.



CHESTNUT

PRODUCTS

FINISHING SCHOOL

Buffing Wheel Kit

1



1 After preparing your work with Wheel A and Compound 1, continue using Compound 1, sometimes known as White Diamond. This smooths back at an incredibly fine level producing a very smooth surface. It also acts as a cleaner, removing any bloom left over from the first compound.

2



2 Compound 2 is used with Wheel B which is slightly softer than the previous wheel. The two are designed to be used together and complement each other perfectly.

3



3 Apply the compound to the wheel as before, taking care not to apply too much. It's easier to apply more if needed than spend ages buffing out any streaks caused by overloading the wheel.

4



4 Always work in the bottom quarter of the wheel, taking care to buff and smooth the whole item evenly.

5



5 After this part of the process the work will have a brighter, clearer finish and is ready for the final buff.

To be continued...

See our YouTube channel for more tips!
More information available from your local stockists or contact us at:

PO Box 260, Stowmarket, IP14 9BX

Tel: 01473 890118

mailroom@chestnutproducts.co.uk
www.chestnutproducts.co.uk



FOR ALL YOUR WOODTURNING REQUIREMENTS



ProEdge sharpening system, repeatable sharpening every time. We won't be beaten on price.

Robert Jerby



hamlet
CRAFT TOOLS
Sheffield, England



pfeil

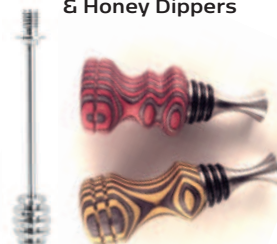


Nova Stockist



Plenty of Australian Goldfield Burrs, Native Burrs in store

Stainless Bottle Stoppers & Honey Dippers



STAINLESS
BOTTLE STOPPERS

AUTHORIZED UK
DISTRIBUTOR



Open 10am-5pm, Monday to Friday. Closed Weekends

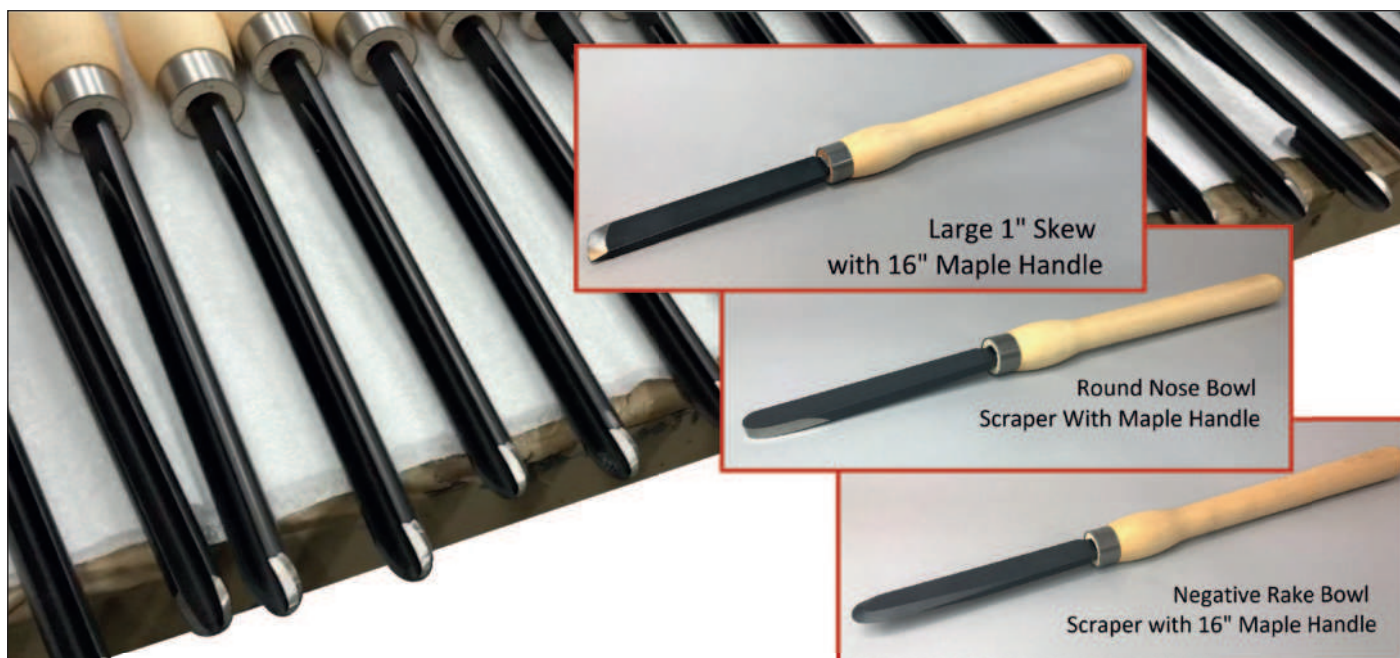
www.toolsandtimber.co.uk

CALL, VISIT
OR SHOP
ONLINE

G&S SPECIALIST TIMBER

The Workshop, Stainton, Penrith, Cumbria CA11 0ES

Telephone: 01768 891445 • Email: info@toolsandtimber.co.uk



Large 1" Skew
with 16" Maple Handle

Round Nose Bowl
Scraper With Maple Handle

Negative Rake Bowl
Scraper with 16" Maple Handle

Turner's Edge tools are manufactured
by Robust Tools using **Nitrided** M2 and M42.

Nitriding loads the tool surfaces with extra carbon and nitrogen,
significantly improving edge holding and reduces sharpening.



Available handled and unhandled, gouge flutes are
stone polished to remove tool marks.

www.turnrobust.com

PAD-O-VAC® DUST EXTRACTED POWER SANDING FOR WOODTURNERS

AS REVIEWED IN WOODTURNING MAGAZINE
ISSUE 355



£48.70 inc p+p*

*Within the UK

Read reviews at padovac.co.uk

+44 (0) 7410 963 046

We also stock a range of abrasive discs,
plus backing and interface pads.

WHY-AYE WOOD
WOODTURNING SUPPLIES
www.whyaewood.co.uk
Tel:- 07730791935

Cockenzie House &
Gardens
22a Edinburgh Road
Cockenzie
East Lothian
EH32 0HY

Free Delivery on orders over £50
(excludes Machines)

Stockist of Home and Exotic Spindle and Bowl Blanks.
We have many project and pen kits in stock



10% off when you buy any 5 Lids with code LID5
Open Times:- Tuesday to Saturday 10am - 3pm

Follow and like us on



We stock Products from these suppliers



Fruit bowl

Sue Harker turns a dish with a raised base from one piece of timber



PHOTOGRAPHS COURTESY OF SUE AND GRAHAM HARKER

This article shows how I made a chunky fruit bowl on a raised base from one bowl blank of rippled olive ash, measuring 300mm diameter x 100mm thick.

A few years ago I was fortunate enough to acquire a second-hand bowl coring system, which I found extremely useful for coring out the centres of large salad bowls I had been commissioned to make. This not only cut down on the number of shavings made by each bowl, but it provided me with numerous 'free' smaller bowl blanks.

For this project, I used the corer to take the centre out of the fruit bowl and used the cored material for the base. The beauty of this is that the colour match and grain pattern are the same on both pieces. However, should you not have a bowl saver then the base can be made from a piece of timber approx. 170mm diameter x 50mm thick in either a contrasting timber or a piece of timber as closely matched in colour and grain pattern as you can find.

I have chosen to turn the bowl chunky with a solid base so it can contain a full bowl of fruit and look fit for purpose. You can, should you wish, make a thinner version.

Top tips

The chucking method I have used for mounting the bowl blank on the lathe is a 1 $\frac{1}{8}$ in Forstner bit hole drilled to the depth of the jaws. This enables the face of the bowl blank to sit up against a larger portion of the jaws, offering more stability.

When oiling the bowl and base, do not put any oil on the areas to be glued. Bare wood adheres better than treated wood. Remove any surplus glue with a damp cloth.

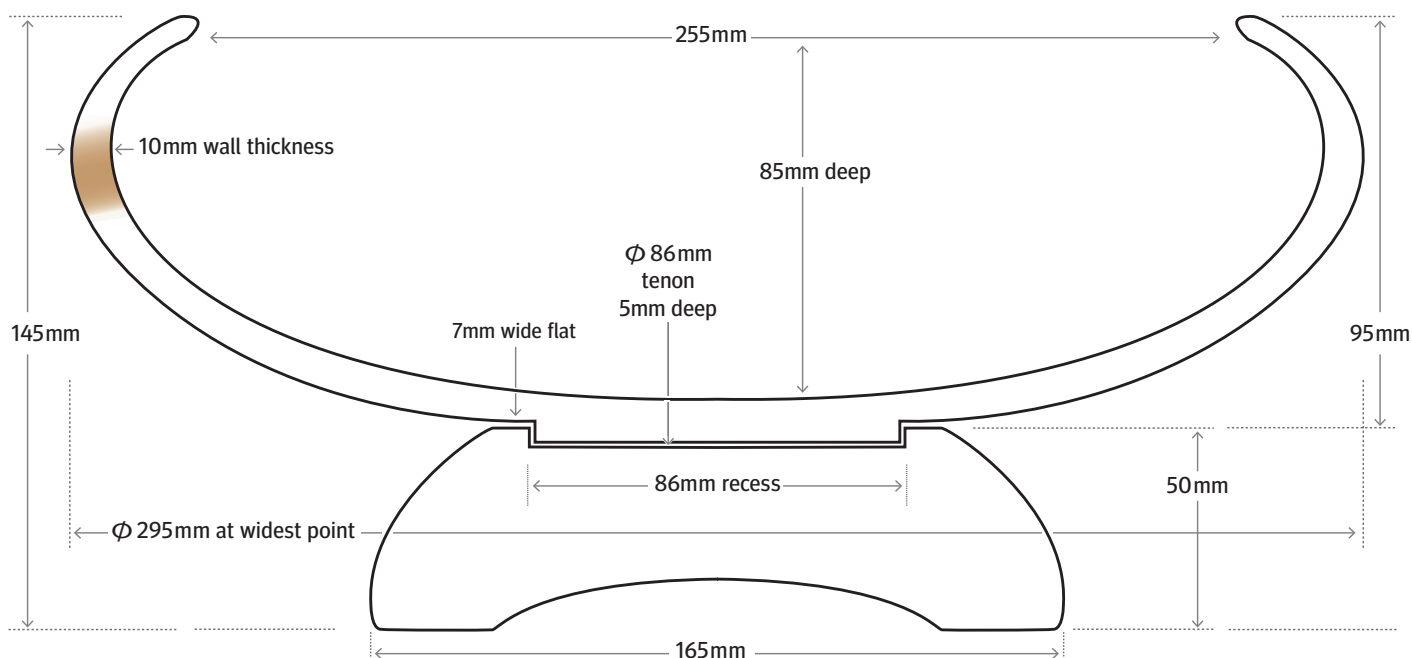
Plans & equipment

Tools & equipment

- PPE & RPE as appropriate
- $\frac{3}{8}$ in standard grind bowl gouge
- $\frac{1}{4}$ in standard grind bowl gouge
- $\frac{1}{8}$ in parting tool
- Flat-shaft skew chisel
- Rotary sander
- Sanding arbor fitted into a battery drill
- $1\frac{7}{8}$ in Forstner bit fitted into a drill stand
- 120, 180, 240, 320, 400 grit abrasives
- D-shaped callipers
- Woodcut bowl coring system

Materials

- Rippled olive ash bowl blank 300mm diameter x 100mm thick
- For those without a bowl coring system – a piece of ash or contrasting timber approx. 170mm diameter x 50mm thick
- Chestnut Hard Wax Oil
- Wood glue



The making

1 Mount a piece of timber 300mm diameter x 100mm thick on the lathe. Here I have used a piece of rippled olive ash, which has some remarkable grain pattern, and mounted it by drilling a $1\frac{7}{8}$ in hole to a depth equal to the depth of my jaws. This allows the bowl blank to sit flat against the front face of the chuck offering more stability. True up the outer edge and front face using a standard grind $\frac{3}{8}$ in bowl gouge. Next, with a $\frac{1}{8}$ in parting tool cut a chucking tenon the correct size for a set of large jaws. My large jaws require an 86mm dovetail tenon, so using a flat shaft skew chisel laid flat on its side I cut a dovetail.



◀ **2** Draw a reference mark at 100mm diameter, this is the diameter of the chucking tenon and a 7mm flat surrounding it. Start to shape the underneath of the bowl.

3 Continue to shape the bowl, creating a continuous curve which reduces slightly at the rim.

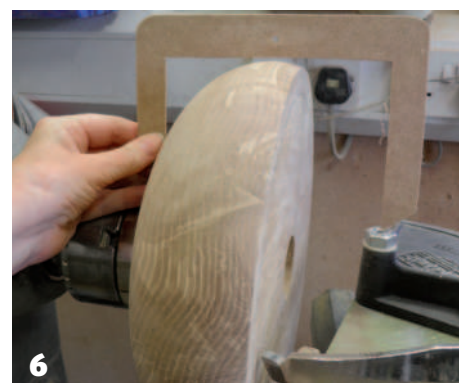
4 With the underneath of the bowl shaped, sand starting with 120 grit abrasive fitted to a rotary sander. Work through grits 180, 240, 320 and 400, checking the surface of the timber for imperfections between each grit.

5 Remove from the lathe and change the standard jaws on the chuck to a set of large jaws. Mount the bowl using the chucking tenon cut earlier. Next, true up the front face using a $\frac{3}{8}$ in standard grind bowl gouge.

6 For the base, a small blank can be cored out of the centre of the bowl. If you have a bowl coring system, set in the toolrest banjo and use the measuring jig which comes with the corer to set up the correct position and secure in place. Here I am using an MDF jig I made for the correct placement of the corer when using the large cutter. Secure the banjo, tail drive and coring jig in place, taking extra care to tighten the banjo post to the corer.

7 With the lathe running approx. 800rpm, start to gently cut out the core, withdrawing the cutter at intervals to prevent clogging. Vibration should be minimal, however, should the vibration increase in its intensity, stop the lathe and check that everything has remained tightened, including the tool post to the corer, and the chuck hold, these can sometimes work loose.

8 Watch the centre core as you progress with the cutting. When the core starts to vibrate/wobble slightly, withdraw the cutter and stop the lathe. I have a line marked on my cutter which lets me know when the cutter is nearing the centre of the timber. The small core can now be pushed at the top to break the centre pip left by the coring. Remove the coring jig and carefully remove the cored blank.



Top tips

Bowl coring

- When using a bowl saver, ensure all areas of adjustment are tightly secured, especially where the tool fits to the tool post as this can vibrate loose.
- If the vibration increases, withdraw the cutter from the bowl, stop the lathe and check all is secured tightly, including the chucking tenon.
- If you do not have a bowl coring system then a piece of olive ash, as near as possible in colour and grain pattern as the bowl, or a contrast piece of timber can be used.

9 Reduce the wall thickness of the bowl and round over the edge. A standard grind $\frac{3}{8}$ in bowl gouge can be used for this. If you have not cored the centre bowl, turn the centre as you would for any other bowl, creating step cuts to remove timber around the rim to allow for it to be shaped.

10 Next, undercut the rim of the bowl – this curve is quite tight, so using a $\frac{1}{4}$ in standard bowl gouge offers better access. Remove the timber and refine the shape, taking small, controlled cuts as it is easy to slide back with the tool, digging out grain and creating a surface that is difficult to sand. Continue until the desired wall thickness has been achieved.

11 Create step cuts towards the centre of the bowl, to create more space for the undercut to be extended into the main part of the bowl. Continue with this method, checking the wall thickness as you progress.

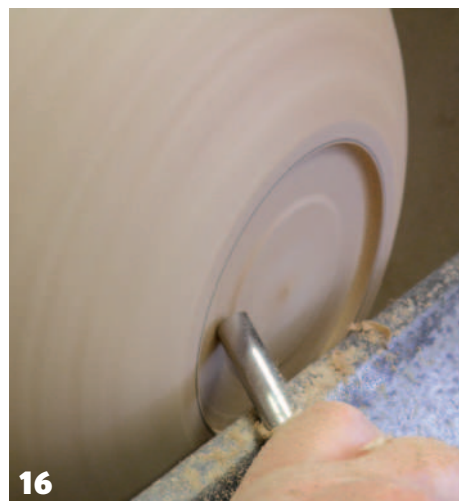
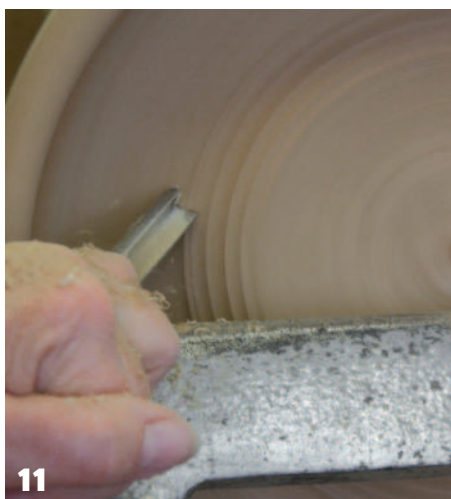
12 Finally, reduce the step cuts towards the centre of the bowl and continue the curve to the centre. It is easy to overestimate the thickness of the bottom of the bowl, so check the wall thickness with some D-shaped callipers. Take further cuts if needed, remeasuring as you progress until the correct wall thickness is achieved.

13 Using a sanding arbor fitted into a battery drill, sand the inside of the bowl starting with 120 grit. Check the bowl for any torn fibres, particularly on the undercut section. Should you have any torn fibres around the undercut of the bowl, spray some water over and allow to dry. This will stiffen the fibres and the surface should be improved by a 120 grit sand. Work through the grits as previously used, checking for any imperfections as you progress. When you are happy with the finish, remove the bowl from the lathe and refit the standard jaws to your chuck.

14 Mount the cored blank on the lathe, using the original chucking recess. Then draw a reference mark at approx. 100mm diameter and, using a $\frac{3}{8}$ in standard grind bowl gouge, turn a flat to the reference mark. If using a small bowl blank, mount on the lathe using a shallow drilled recess and true up the front face before making a reference mark at 100mm diameter.

15 Measure the chucking tenon on the underneath of the finished bowl and draw a reference mark that diameter on the front face. Next, measure the depth of the recess and, using a $\frac{1}{8}$ in parting tool cut a groove to that depth. Cut approx. three widths of the tool, starting at a slightly smaller diameter than the reference mark.

16 Remove the centre of the recess with a standard grind bowl gouge and try the bowl for fit. Adjust where necessary until the bowl tenon fits, ensuring the surface of the recess is flat.



◀ **17** The dimensions of the cored bowl blank are 220mm diameter x 55mm thick. The diameter of the foot is only 165mm. On the back face of the bowl blank, measure 27.5mm in from the outer edge and draw a reference mark. Reduce the diameter of the bowl blank to this pencil mark.

18 Draw a reference mark 7mm wider than the recess – this is for the flat around the tenon to sit. From this reference mark start to create a curved shape leading to the outer edge. Sit the bowl on to the base to check the joint is correct and adjust if required.

19 With the base shape refined, sand using a rotary sander and start with 120 grit abrasive, working through 180, 240, 320 and finishing with 400 grit, checking the surface between each grit.

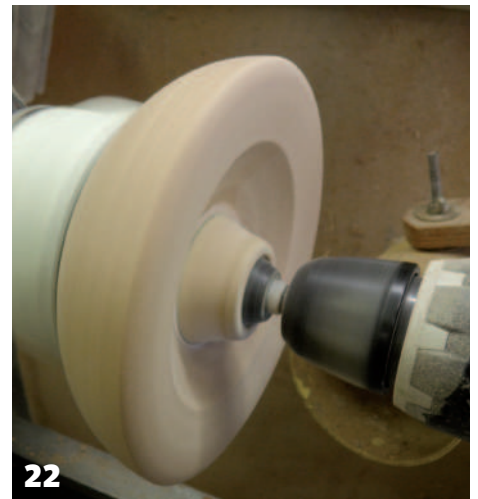
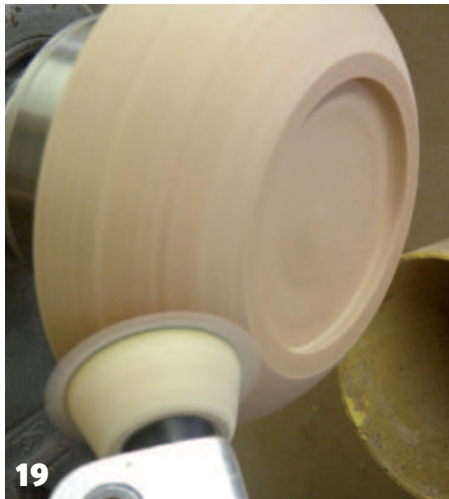
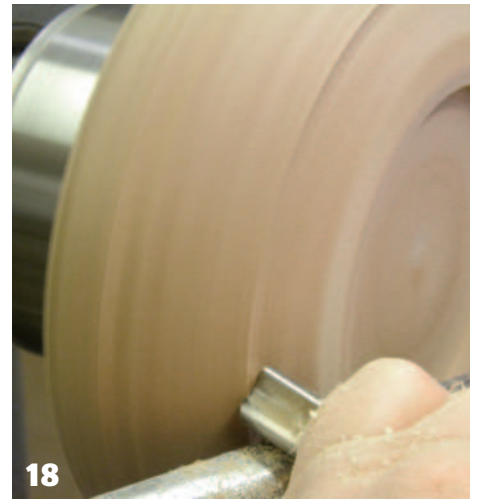
20 Remove the base from the lathe and open the jaws to enable them to fit into the recess created earlier. This will cause the jaw carriers to stick out from the main body of the chuck. For safety, peace of mind, and as a reminder that they are protruding, I have covered them with masking tape. True up the front face and create a slightly rolled-over edge which will act to lift the base slightly from the surface it will sit on. A standard grind bowl gouge is used for this.

21 Next, remove the chucking recess by turning a curve to the bottom of the hole, starting from a diameter of approx. 100mm.

22 Attach a fresh piece of 120 grit abrasive to a sanding arbor fitted into a battery drill. Sand the underneath of the base and check the finish, if okay continue through the same grits as previously used, checking between each grit. Blow the dust out of the open grain of both pieces of turning with compressed air or clean with a tack cloth should you prefer.

23 With both pieces finished, apply a coat of hard wax oil, avoiding the areas to be used for gluing the pieces together. Several coats of this oil will provide a water-resistant, hard-wearing, gloss finish.

24 Apply a thin coat of wood glue to the tenon and the flat surface surrounding it. Line up the grain pattern on the outside of the bowl to the same patterned area on the base and fit the tenon into the recess in the base. Hold firmly in place by sitting a large bowl blank or something similarly heavy over the top of the bowl and wipe away any surplus glue using a damp cloth. Leave for approx. 30 minutes and avoid putting the joint under any pressure for at least 24 hours. To achieve a glossier finish, apply more coats of hard wax oil, allowing at least four hours between coats. This bowl was photographed after only two coats. ●





WEST YORKSHIRE'S WOODTURNING & WOODWORKING SUPPLY SHOP



PROUD TO BE THE ONLY MANUFACTURER OF BRITISH MADE PEN KITS



-YORKSHIRE GRIT-
Woodturners Abrasive Paste



TaylorsMirfield.co.uk

UNIT 44, Holmebank Business Park,
Mirfield, West Yorkshire, WF14 8NA
01924 491949



STAINLESS BOTTLE STOPPERS

TURNING KITS, ACCESSORIES, AND MORE



Patented Bottle Stoppers

Made in USA



www.stainlessbottlestoppers.com

Phone: (570) 253-0112

email: sales@stainlessbottlestoppers.com



The Beall Wood Buffing System

Check out our demos on You Tube

THE BEALL TOOL CO.

Newark Ohio 1-800-331-4718

www.bealltool.com

TIMBERMAN Woodworking Supplies

South Wales~ Bronwydd, Carmarthen, SA33 6BE

Tel: 01267 232621 / email: sales@timberman.co.uk

LAGUNA

Stockist of Local & Exotic Hardwood Timber & Bowl blanks,

charnwood

Woodworking Machinery, Woodturning Lathes,

Robert Forby

Power tools and Much more....

DEWALT
PREMIER CENTRE

trend
ROUTING CENTRE

FIDDES & SONS
FOR BEAUTIFUL WOOD

ellipse

STUBAI

SHOGUN

CHESTNUT

metabo



Open: 9.00am to 5.00pm MON-FRI
9.00am to 12.00pm SAT

SALES ~ SERVICE ~ REPAIRS ~ ADVISE

Supplying Woodturning lathes and Machinery for over 40 years

Spiral Fire

Neil Turner creates a beautiful turned and carved piece in sheoak

Last year, a collector contacted me about a piece on my website and asked if it was still available. After a conversation and reviewing the size, a smaller version would suit his needs better, and the type of timber would be changed to sheoak.



PHOTOGRAPHS BY SUELLEN TURNER

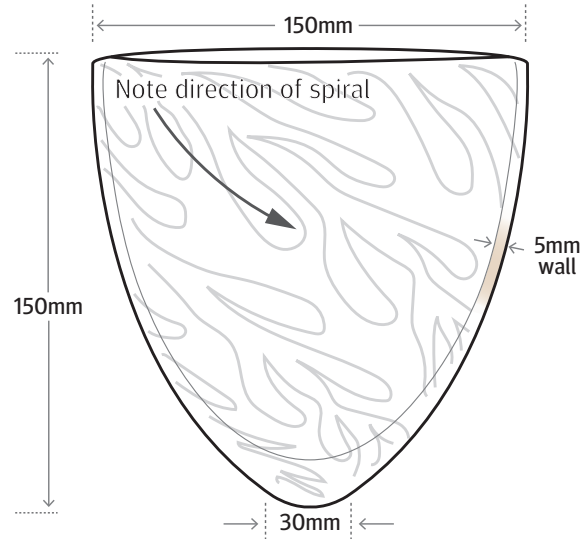
Plans & equipment

Tools & equipment

- PPE & RPE as appropriate
- 1in skew
- Spindle roughing gouge
- Long-ground $\frac{3}{4}$ in bowl gouge
- Four-jaw chuck with gripper-type jaws
- Thickness callipers
- Pendant handpiece or other micro-cutting tool and cutters/burrs
- Abrading arbors in a range of shapes and sizes

Materials

- Sheak log, 6 x 6-7in



The making

1 He wanted the finished piece to be 150mm (6in) in diameter by 150mm high, so an end-grain blank precisely the right size to make this piece is mounted between centres.

2 Rough the blank into the round with a spindle roughing gouge. Once in the round, create the chucking tenon on one end, 80mm diameter x 30mm long (or to suit your gripper-type jaws).

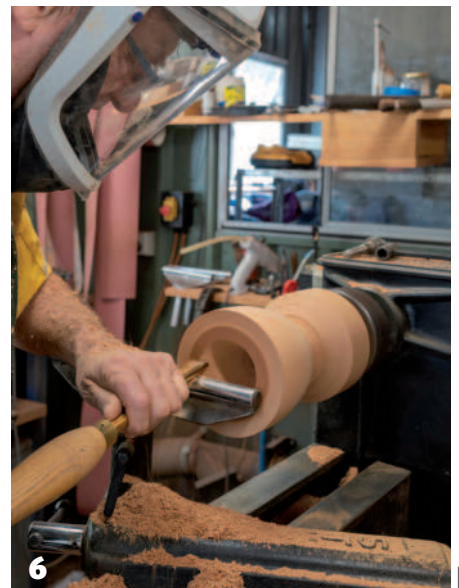
3 Use a set of shark jaws to hold the timber. One thing you should always do is undercut the face slightly where the jaws make contact. This ensures that the outside of the jaw face makes contact with the wood. Once tightened, this chucking system will provide excellent holding capacity during the hollowing process.

Secure the chuck in situ. After removing the spur drive, open the shark jaws to accommodate the tenon. Don't tighten at this moment. Move the tailstock into position, then gently tighten so the jaws make contact. Now tighten the chuck as tight as you can, driving the teeth of the jaws into the wood.

4 With the tailstock still in position (for safety keep it in place as long as you can), turn the outside form using a bowl gouge or spindle gouge. In this case, we need to leave some material at the base for the hollowing process.

5 Remove the tailstock centre and substitute a drill of some type (in this case, a 30mm spade bit) to drill a hole to the required depth of the vase. This hole will assist the hollowing process. Draw back, or remove the tailstock from the lathe, ready for hollowing.

6 There are many ways to remove the material from the inside. This is an end-grain situation, so a system of pull cuts with a bowl gouge or a spindle gouge can be used. With the flute at 10 o'clock, a pulling motion from the centre up the rim is used to remove the timber. The final form requires even wall thickness. To achieve this, use a simple wall thickness gauge. Establish the required thickness at the top, in this case, 5mm, then remove the material, checking wall thickness as you proceed.



◀ **7** The finishing cuts are made with the flute pointing at 2 o'clock, rubbing the bevel to give a better finish.

8 Another option is a simple system of small carbide-tipped cutting tools, which can be employed to achieve the same result. Continue to check the wall thickness and make small adjustments as required throughout. Thickness callipers are a must for this job.

9 Finish turning the outside shape to the required base size of around 30mm.

10 Remove the final material from the inside using a bowl or spindle gouge and a scraper with a 25-30mm cutter in a negative rake position for the final cuts.

11 If it is slightly thicker in this lower area, this will provide extra material to support the carving. Sand the inside and outside to remove all tool marks. Sand to 400 grit as the inside will be highly visible in the finished work. Power sand the outside to 400 grit.

12 Sanding on the inside can be completed with many different methods; this round sander with Velcro attached is very useful to achieve the required finish.

13 Draw 12 longitude lines on the form using the lathe indexing. Next, draw latitude lines spaced by eye closer together as you proceed to the bottom. This provides a grid pattern which you will later use to enable you to replicate the same curve for each of the six spiral fire designs you will draw around the form.

14 Starting at the base, from alternate blocks draw the fire form following a curved line, working diagonally, and gradually increasing in width as you spiral to the top. Initially, draw in pencil for easy removal with an eraser. Once the final drawing has been finished, use a fine art line pen mark over the pencil line because the pencil will rub off with the constant handling during the carving process.



HEALTH & SAFETY

Carving with powered cutters and burrs

- When carving with powered cutters and burrs, extreme care needs to be taken to prevent cuts to the hand and fingers. A protective cut-resistant glove may be preferred for inexperienced carvers. Dust extraction at source is also required when working with small abrasive tools such as burrs and sanding arbors, and a filtered face mask is advisable.
- If working with a piece on your lap, have a protective pad from some robust material, such as leather, to place on the knees; this can help control the movement of the workpiece and also protect the legs from tools.

15 With the lathe switched off, the vase can now be carefully parted off the lathe using a fine pullsaw. The base can be abraded by hand or with a small arbor and abrasive. Carving begins with a spiral cutter to remove the waste, working as close to the lines as possible.

16 Leave a solid ring at the top; this timber must remain as the structure is very delicate at the base and will be removed in the final stages of carving. Using a 2mm spiral cutter, remove timber between the flame tips, carefully supporting the work with your finger as you work.

17 You can make a small sanding disc out of a 25mm silicon carbide rubber polisher with Velcro attached top and bottom. Additional refining can be made with the sanding disc using 180 grit Velcro abrasive.

18 With a 5mm wax barrel burr, refine the tips and other detail up to the solid ring.

19 Sanding is carried out using a few different sanding attachments. Move through the grits down to 400. You cannot correctly sand other areas with the disc sander – use a small 12mm barrel sander in the curves to tidy them up. These sanders are excellent because you can work down through the grits to 400.

20 For the tighter places, use a flapper sander with some sanding paper wrapped around it. They are called flapper sanders because the paper flaps. To prevent this, roll a small O ring (5 or 6mm in diameter) over the paper.

Apart from the mechanical sanding, there is a lot of hand sanding. With the bulk of the carving now completed and sanded to finish, start to carve and finish each individual spiral. These must be completed before moving on to the next one. Repeat until all six sections are completed. This is a highly delicate process and one slip can end in disaster.

With the sanding completed, apply a lacquer finish. ●



WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



AVXLIVE ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>

Tools and Supplies at www.oliverswoodturning.co.uk

Robert Torby



HOPE
woodturning



hamlet
CRAFTTOOLS



nova



rotur
specialist woodturning products



CHESTNUT
PRODUCTS



INDASA



UNICORN
SPIT



ZAP



GlassCast
THE CLEAR CHOICE IN RESIN



elipse



Honeywell



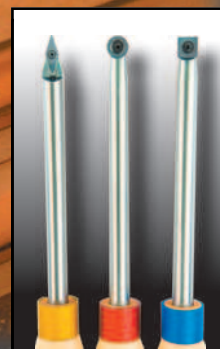
INNOVATIONS MADE IN THE USA FOR OVER 90 YEARS

The AXE™ Carbide Woodturning Tools

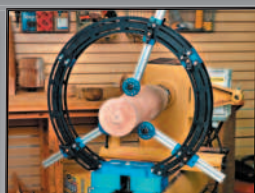
NEW

Setting the New
Standard for Carbide
Woodturning tools.

- Extended Length Stainless Steel Cutting Bar for Strength & Balance
- EZ ID™ Color Coded Ferrules across the entire size line
- Flat base with Skew Bevel for Easy Transition to Skew Cutting
- Super Sharp Long lasting Carbide Cutters
- Ergonomic Handle for Extreme Comfort and Control
- Free 2nd Cutter with every tool (up to \$19 USD value)



**ACCURIGHT®
CENTER MASTER**
Blank Creation System



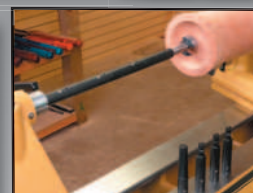
MULTIREST®
Vessel Support System



HOLLOW ROLLER®
Vessel Turning System



PERFECT SPHERE™
Sphere & Bowl Turning System



STRONGBORE™
Modular Boring Bar

International
Dealers

Austria/Europe
Neureiter
MASCHINEN UND WERKZEUGE
www.neureiter-shop.at/

Germany/Europe
steinert®
www.drechsler-shop.de/

Australia
GREGORY
Machinery
www.gregmach.com

Russia
ITA
www.jettools.ru/

Norway/Sweden
GUSTAVSEN
www.gustavsen.no/

Japan
OFF
www.off.co.jp



Band Saw Accessories
Lathe Accessories
Band Saw Guides
Band Saw Blades
Band Saw Tires
and More!

Innovative Solutions for all your Woodworking Needs

WWW.CARTERPRODUCTS.COM • 616-647-3380 • US TOLL FREE 888-622-7837

Community news

What have you been turning? Please email your images to WTEditorial@thegmcgroup.com

THE SPACE BETWEEN – 2022 POP EXHIBITION AND AUCTION

The Space Between, the American Association of Woodturners' (AAW's) 2022 Professional Outreach Program (POP) exhibition and auction, featured small-scale work by 46 artists from 10 countries and 14 US states. The theme, which grew from a discussion about the artistic concept of negative space, brought out a wide variety of responses: from Gerrit Van Ness's humorous take on the male/female left brain/right brain divide and Joshua Salesin's dual definition of space, to Kailee Bosch's elegant meditation on volume and Roberto Ferrer's homage to Binh Pho and all who bravely step across the space between an old home and a new one. This exhibition was on view at the 2022 AAW International Symposium in Chattanooga, Tennessee.

The POP exhibitions started in 2007 with Japanese Bowls: A Western Perspective, and have been produced annually since then. A showcase of excellence, the shows have always reflected the international nature of the AAW; the POP actively seeks out under-represented and emerging artists, with 25-30% of the artists in each show reflecting those goals.

Initially an invitation-only exhibition, the series now includes an average of five juried-in artists, and although the great majority of pieces are turned, a small number of non-turners are invited annually.

'I love the POP shows because they are always a surprise – I might know what an artist usually does, but all bets are off when it comes to how they will interpret the theme. Between the invitations going out and the work arriving at the Gallery of Wood Art, magic happens,' says AAW curator Tib Shaw.

1 Alain Mailland (France), Temple Tree, 2021, arbutus root, 4 × 4in (10 × 10cm): 'The Tao says that what is important in a pot is not the clay, but the empty space inside. Same with a basket or a house with its rooms, windows, and doors. I have always been celebrating the space in my work: space means wind, energy, light, spirit. This little piece is just to celebrate the tree and its wedding with wind, rain, and sun.'

2 Malcolm Zander (Canada), Swan Song, 2021, basswood, Brazilian rosewood, 6 × 6 × 5³/₄in (15 × 15 × 15cm): 'Negative space can bring lightness and delicacy to a sculpture and can also imply movement. Frank Cummings III created pierced vessels evoking childhood memories of carousels, with undulating rim waveforms reflecting his love of music. Rotating Frank's vessels had an optical effect. Arthur Jones also used movement in his Black Hole series, where light passing between

numerous close-spaced wooden rays flickered as one walked around the sculpture. Swan Song is my own exploration of negative space and movement.'

3 Elisabeth Mezieres (France), In the Space, 2022, hackberry, acrylic paint, 3 × 3¹/₂in (8 × 9cm): 'Space contains so little matter that it can be considered empty. Reduce the material as much as possible, refine it as much as possible, and thus reduce the space between.'

4 Art Liestman (Canada), Little Village, 2022, quilted bigleaf maple, walnut, acrylic paint, each: 5¹/₂ × 2¹/₄ × 2⁵/₈in (14 × 6 × 7cm): 'Two whimsical buildings to be played with. They are bending and twisting from prevailing winds, or perhaps bad wolves. The two can be repositioned to present differing negative spaces between them. Are they friends, enemies, or simply ignoring each other? Their relationship can change as you wish.'

5 Elizabeth Weber (Washington), Threads of Time, 2022, sycamore, acrylic paint, 3 × 5¹/₂in (8 × 14cm): 'The threads on this bowl tie together the space between past and present. Like time, the colours are both united and separate; they flow in a colour wheel, but each colour is separate, marking the space between memories. My grandfather worked for DMC, the largest thread manufacturer in France. His family was in the business of dyeing wools and cottons for 200 years in Alsace. My parents, both history professors, taught me that understanding time and our past is essential to moving forward in more positive ways.'

6 Cory White (Texas), (De)Composition, 2022, spalted pecan, 6 × 6 × 6in (15 × 15 × 15cm): 'There is a crate weathered by harsh elements and the passage of time. And while this crate is crumbling, inside is a vase of all things, immaculate and somehow perfectly intact. We, as woodturners, undergo a continual struggle as we work. To create beauty, we must first tear pieces apart. (De)Composition shows how sometimes we must destroy in order to create.'

7 Kalia Kliban (California), Rough Years, 2022, redwood burl, 3¹/₄ × 4in (8 × 10cm): 'Years of adversity leave their marks on a tree. We can look at the space between the growth rings and say, "Here it was – the drought, the flood, the hard time." In the end, when we are broken wide open, what will we point to within ourselves to say, "Here it was..."?'

8 Roberto Ferrer (Illinois), The Rubicon, maple, steel, acrylic paint, 1¹/₂ × 6in (38mm × 15cm): 'As human beings, we all come to a point in life where we must make an important decision and take the next step. It is up to us to go back or to cross the



river, knowing that this decision will change our lives forever. Dedicated to all those who, like Vietnamese-born woodturning artist Binh Pho, had to leave their homeland, in some cases forever.'

9-10 Gerrit Van Ness (Washington), Common Man, 2021, wood, paper, wire, acrylic paint, 6 × 5 × 6in (15 × 13 × 15cm).

11 Terry Martin and Zina Burloiu (Australia, Romania), Embrace, 2022, Chilean myrtle, 6 × 5in (15 × 13cm): 'In the dappled light between the trees, people find shelter and new hope for a better world.'

12 Kailee Bosch (Colorado), Volume (x2), 2022, maple, bronze, brass, 5 × 4¹/₄in (13 × 11cm): 'I cast the bronze connections to hold the turned spindles apart from each other, creating two designated volumes. The most apparent is in the centre, as with any vessel. The second, hidden inside the space between each set of spindles, is a continuous volume with no identifiable start or end.'

13 David Fisher (Pennsylvania), Between the Handles, 2022, black walnut, 4¹/₂ × 6 × 5³/₄in (11 × 15 × 15cm): 'The theme reminded me of a line from chapter 11 of the Tao Te Ching: "It is the empty space within that makes a bowl useful." Most of the bowls I carve are long and shallow, very open between the handles. By condensing the form and pushing the handles up and toward each other, the eye is drawn to the space between them, to the important emptiness within.'

14 Keith Holt (Maryland), Life, 2022, cherry, birch, 5¹/₂in (14cm): 'This work is a representation of the space between conception and death.'

15-16 Joshua Salesin (California), Rocket Box, 2022, African blackwood, pink ivorywood, betel nut, 6 × 3¹/₂in (15 × 9cm): 'Rocket Box explores the space between our planet and the celestial skies beyond. And inside the threaded box are toothpicks – to explore the space between your teeth'

The AAW is the premier woodturning organisation in the world. Visit woodturner.org to discover the many benefits of membership, including the award-winning American Woodturner journal, Woodturning FUNDamentals, a searchable archive of woodturning resources, and so much more. Learn about AAW's 2023 exhibition opportunities at tiny.cc/Calls.





Flying High in the North

Duncan Hutchinson shares the charity work of Teesside Woodturners' Association for the Great North Air Ambulance

Teesside Woodturners' Association (TWA) was established in 1998 and since then has supported several charities. While we continue to support other charities, the Great North Air Ambulance Service (GNAAS) has been our principal charity since 2007, in which time TWA has had a GNAAS collection box, held raffles, done woodturning demonstrations at fetes, fairs, country shows and for other organisations at their own events, and also sold turned items, all with the aim of raising funds for the GNAAS. Over the years, the club has donated £6355 to GNAAS.

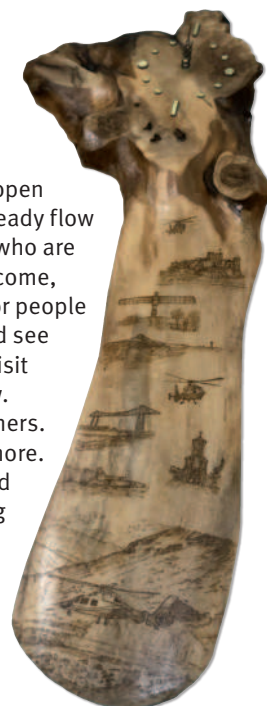
Teesside Woodturners' Association meets every Wednesday evening and, while Covid has had an impact on the

club with the number of members and attendance at club nights dropping, we are a proactive club with a growing diverse membership of 75+ men and women of various ages and skill levels, with average attendance at club nights being 30+ we're going from strength to strength.

On normal club nights we have several lathes available for use, a club shop selling timber and all manner of consumables, free tea and coffee plus lots more on offer, so if people want to do some turning, sharpen their tools or just want a chat they're made welcome. Once a month we have a live demo night where members can watch an in-house demonstration or one by a visiting professional turner.

Now that we're open again there's a steady flow of new members who are always made welcome, and we're open for people to come along and see what's on offer. Visit our website, www.teessidewoodturners.com, to find out more.

Covid put an end to our fundraising as club nights were cancelled and we weren't able to attend any of the usual events, so with lockdown ending





and wanting to continue our support for GNAAS as soon as possible, we came up with the idea that club members could make items which would be donated to the GNAAS for use in fundraising.

The concept was that members could make things using whatever materials and decoration methods they wished. The take-up by members was tremendous and there were some 121 items donated, ranging from bracelets to windmills, with many magnificent boxes, bowls, pens and vases being made, incorporating all manner of decorative finishes. There were some unusual items including helicopters, wands and an impressive wall clock incorporating

GNAAS-inspired pyrography. We also managed to raise additional money, much of which was down to the efforts of our past chairman of 18 years, Stan Lax, who championed TWA support for GNAAS but sadly passed away before the project was completed.

This culminated in a club evening on 25 May attended by members, partners and guests, at which the GNAAS made a presentation about its organisation and work. The donations were on show and presented by our chairman Ian Lockwood along with a cheque for the further £800 to Sophie Bendelow of the GNAAS.



Starting young

In the last issue, you asked for pictures of reader projects. Here are a few pictures of a bowl I turned recently. I'm 14 and relatively new to woodturning. Recently, most of my work has been experimenting with new forms, but I decided to try a simpler form. I am very pleased with the result.

Thanks, Adam Shoning



AWGB International Woodturning Seminar 7–9th Oct 2022



Where Inspiration meets Creation

Come and celebrate the process of creation with a world-class line-up of demonstrators. The 17th woodturning seminar will take place at Yarnfield Park, Staffordshire. Join the experts from around the world to improve your skills to the next level of expertise. Whether you're new to turning or, an old hand, there will be something to inspire educate and entertain you! Over the three days there will be over 50 professional demos, masterclasses, and several demonstrations where attendees can learn specific techniques. It will start with lunch on the 7th and finish at 3:30pm on the 9th.

Friday night will include a free fun event for attendees, followed by an opportunity to chat in the comfortable bar area. On Saturday evening there will be an informal dinner followed by presentations and the auction which raises funds for AWGB development and grant activities. It's a fantastic opportunity for fellow enthusiasts to come together, learn, share their skills, and just enjoy. The seminar is open to AWGB members and non-members alike. We look forward to seeing you there! Go to www.awgbwoodturningseminar.co.uk for more information and booking.

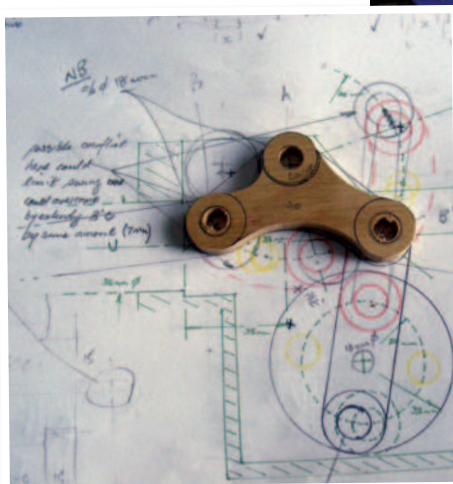
Full steam ahead

There have been a number of articles recently, discussing design, sources of inspiration and whether something was Art or not. This caused me to reflect on my latest project and wonder if there was more to it...

In my younger days the local Council had a Steam Roller to repair its roads. I remember being both mesmerised and intimidated when I went near it. Parts of it quietly whizzed round without too much fuss, while the rest angrily huffed and puffed, never quite going where the driver wanted it to go. The driver on the other hand, always sat way up there, with a satisfied smile never too far from his face.

I decided to go about designing and making one of these for my grandson who is mad about anything with wheels, trying to capture these early impressions. The idea was that it would actually do something and more importantly, he could see and work out how it did it.

In concept, the main driving wheels would turn the 'fly wheel', 'piston' and cylinder' mounted on top of the 'boiler', quickly and quietly without too much fuss via pulleys and a drive belt; the main driving wheels would also slowly and rhythmically drive a piston up and down the 'boiler' via a visible crank, oscillating beam and connecting rods, to displace enough air to give a playful toot from a whistle embedded

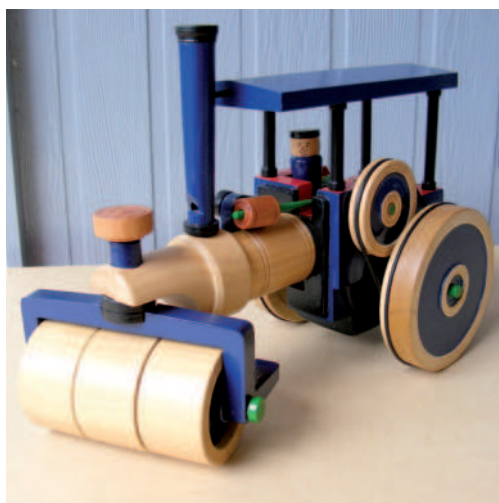


in the chimney. There would also be a driver with the ever-present smile on his face. The design took a bit of working out with quite a few iterations to resolve the spatial conflicts that were initially overlooked, and to also displace enough air to get the whistle to work.

Anyway, here it is. There are no metal parts; the wheels, boiler and roof came from a Macrocarpa garden sleeper; all the 'precision' parts (connecting rods, axels, bearings etc..) were turned from 40mm square hardwood stakes from our local garden centre; and the cab was fabricated from layers of 5mm ply, interlocked together to keep the design strong and compact – the attached pictures show some early workings and prototypes, together with how it finished up.

I am very pleased with the result but who knows if it's Art or not. It's not overly embellished nor designed to stay in one place to be occasionally looked at in passing. But thought was given to its aesthetics, it does evoke happy memories of another time, and the playful 'toot' always gets a smile.

Is there more to it? Well, the memories it evokes are in the eyes of the beholder, I have no control over that. As for my grandson, he enjoys playing with it and getting it to 'toot', but I'm not certain he knows 'quite what it was, and I guess he never will' has a familiar ring to it!



Kevin Allen, Auckland, New Zealand



HENRY TAYLOR

(TOOLS) LIMITED

EST. 1834

The Forge, Peacock Industrial Estate, Livesey Street, Sheffield, S6 2BL



email: sales@henrytaylortools.co.uk tel: 0114 234 0282 web: www.henrytaylortools.co.uk

Find your local stockist at:

www.henrytaylortools.co.uk/stockists

HUNTER™
TOOL SYSTEMS

www.HunterToolSystems.com

HunterToolSystems@gmail.com

All Hunter Tools Made in the USA

Now Available

Local Shipping From The UK

HUNTER™
TOOL SYSTEMS

Europe

www.HunterToolsEurope.com

• VICEROY •

5/8" & 1/2"

Shaft Available

- We do not scrape, we cut
- We cut knots, end grain, side grain
- We cut bark inclusions
- We like controlled precision cuts
- We cut exotic, dense woods

Scan QR Code
with Smart Phone
For Complete
Tool Line,
Information and
How to Videos



Wall clock

Ian Woodford creates a simple timepiece with turned inset chapter ring markers



PHOTOGRAPHS BY IAN WOODFORD

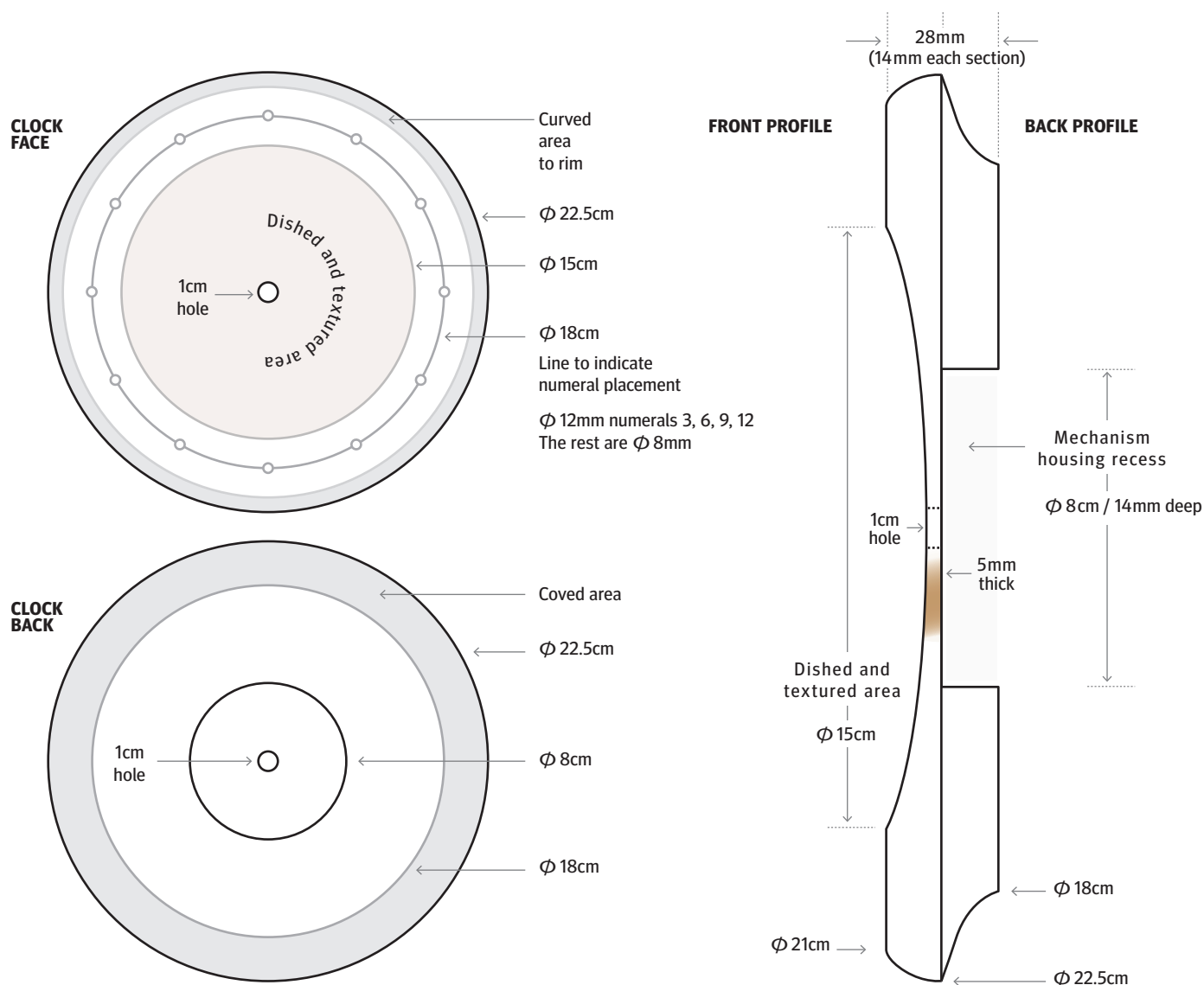
For many years my passion for woodturning ran parallel to my interest in antique clocks, so it was inevitable I would start making/turning my own design clocks. This wall clock project is basically a simple turning using very few tools and a sycamore blank. The small numerals are turned from yew and the four large ones are from walnut. The only part that requires a little bit of patience is texturing the inner area and this can be done with a hand tool or a reciprocating carver.

Plans & equipment

Tools & equipment

- PPE & RPE as appropriate
- 9½in diameter, 1½in thick sycamore/maple bowl blank
- Yew and walnut spindle blanks, ½in thick
- Bowl gouge
- Spindle gouge
- Skew

- Carving gouge or powered carver
- 12, 10, 8mm drill bits
- Screw and four-jaw chuck
- Abrasives from 120 through to 400 grit
- Sanding sealer and matt lacquer
- Clock mechanism and hands



Making the clock

1 This shows the sycamore blank. The centre needs to be located and a hole drilled through to suit your screw chuck. There are other ways of mounting the block, like using hot-melt glue on waste wood held in the chuck, but the screw chuck is the easiest.

2 Mounted on a screw chuck the back of the clock will be formed first. The edge has been trued and the face roughly turned. A pencil line is drawn to mark the area where a curve will be formed toward the outside edge.



◀ **3** Using a bowl gouge, start to turn the recess where the mechanism will be inserted – follow the diagram for the dimensions. The inner edge of this recess can be trued with the point of a skew.

4 Now the recess is complete and sanded, turn the cove toward the outside edge. Leave an edge about 1/2in wide that will be rounded when the front of the clock is formed.

5 The back has now been sanded and sealed. When the sealer has dried, spray with a couple of coats of matt lacquer. Remove from the screw chuck and remount on to a four-jaw chuck using the recess.

6 Use a bowl gouge to true the face and then round the outside edge to the point of the cove at the back of the clock. A line has been drawn to denote the area where the numerals will be placed and the inner area will be textured. This line has been drawn to coincide with the end of the minute hand.

7 With the point of a skew on its side, make a slight recess on this line. Start to slightly dish from this line to the centre using a bowl gouge. The brass screw section of the mechanism will project through the centre of the clock face so the wood thickness at this point needs to be accurate. For the mechanism I use, this needs to be 5mm thick (see diagram). Once this dished area is done, lightly sand down to 400 grit. Use a 10mm drill bit held in a Jacobs chuck to just widen the centre hole.

8 Draw a line from the recessed line to the start of the outer rim curve. Using your lathe's indexing system, mark out the 12 positions for the numerals. I prefer to have the grain orientation in a horizontal position, so mark the positions as shown in the photo.

9 With a Ryobi carver using a curved blade, start to make recesses toward the centre of the face. Occasionally alter the angle of the recess as this makes it more interesting and 'arty'. You can also see in the photo that I have used a centre punch to accurately position where the numeral holes need to be drilled.

10 All the texturing is complete and holes have been drilled for the numerals using a pillar drill. The position of numbers 3, 6, 9 and 12 were drilled using a 12mm drill while the rest were drilled using an 8mm bit. Remove the clock from the chuck.



11 It is now time to make the numerals and this is done by holding spindle lengths in the chuck. Turn to a fraction larger than the required diameter with a slight taper toward one end that is smaller than required. When parted off with a thin parting tool, this can be slotted into the drilled hole and fit tightly. Glue all pieces using a good wood glue and allow to set. Walnut is used for the four larger holes and yew for the rest.

12 This picture shows all pieces in place and glued securely. Depending on the glue used, I allow plenty of time for it to dry before starting the final turning. When turning the numerals down to the level of the clock face be very careful as you don't want to knock any of the pieces out.

13 It is also a good idea to form a recess around the centre hole so the outer edge of the retaining screw fits snugly and flush to the clock face.

14 All turning is done and the entire face has been sanded down to 400 grit. Spray the face with sanding sealer and when dry spray with two coats of matt lacquer. Remove from the chuck.

15 This picture shows all the mechanism parts and the hands I used for this project. It all came from a website called Megaquartz. I chose this mechanism because it is silent as opposed to some other makes. There are also plenty of hand styles to choose from.



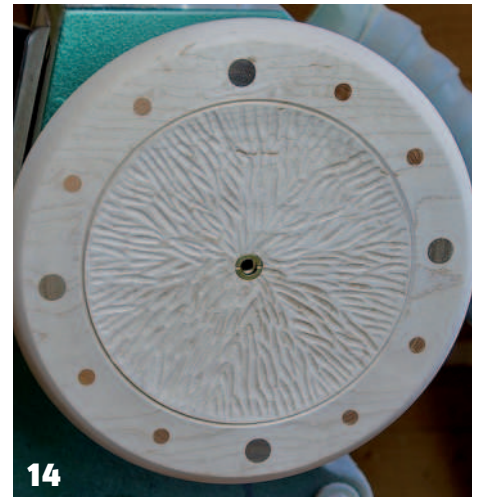
11



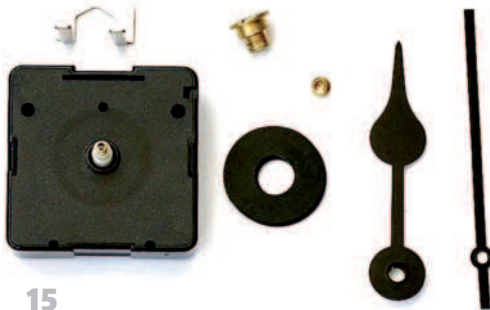
12



13



14



15

16 A view of the back showing the mechanism fitted. The clock is hung using a small screw or nail partially put into a wall with the screw head slotted into the metal V-section.



16



The clock hung in place.

**BACK
FOR
2022!**

**NORTH OF
ENGLAND
WOODWORKING
& POWER TOOL
SHOW**

**DEMONSTRATOR
LINE-UP TO BE
ANNOUNCED
SOON!**

11–13 NOVEMBER 2022

Hall 1, Great Yorkshire Showground, Harrogate

Info phone
07946 855 445

Admin phone
07809 736 080

Email
**exhibitions@
mytimemedia.com**

NEW WEBSITE
www.harrogatewoodworkingshow.co.uk

TICKET PRICES

**Advance tickets on sale
from 31 August 2022**

PRE-BOOKED TICKETS
Adults: £10
Concessions (60+): £9

GATE PRICE
Adults: £12
Concessions (60+): £11
**Accompanied Under 16s:
free of charge**

Now in its 27th year, The North of England Woodworking & Power Tool Show – affectionately known as the ‘Harrogate Show’ – is the longest established, highest attended retail woodworking event in the country

Attendees can expect to see more than 40 top demonstrators in each of the five ‘mini’ theatres; various hand tool workshops; a woodworker’s ‘clinic’; 3 × 1.5m panel of beautifully-crafted carvings – incorporating everything from automata to sound – as well as over 80 companies exhibiting on trade stands.

The ‘Harrogate Show’ really is a great day out for all! The dates for this year’s event are **11–13 November**. Following a three-year hiatus, we look forward to welcoming you back to Hall 1 of the Great Yorkshire Showground!

As natural as our beloved commodity
New finishing products from Germany!
www.hopewoodturning.co.uk

HOPE
woodturning

König Holz und Harz - Wood obliges!

König Holz und Harz is a family-owned business that specialises in producing ecologically valuable and high-quality products for the surface treatment of wood. They are safe, protective and the ideal finish for your turned wooden workpieces.

Natural ingredients - No Chemistry - No artificial additives - Made in Germany

König Woodcream - 120g

Order Nr. KHHWC

The most important properties at a glance.

Highly film-forming - waterproof after 3-4 layers, food safe, made from renewable raw materials, no additives, natural protection of the wood without harmful ingredients, the surface is less sensitive to slight scratches, is crack-proof and does not peel off, the wood remains open to diffusion and retains its natural character.

Application examples for König Holz und Harz wood cream

Drinking cups, salad bowls, spoons and household cutlery, cutting boards, work surfaces, dining tables.

£ 19,⁹⁰
 Price incl. VAT.



Perfect for everything in combination with groceries and if you need a water-repellent surface - Königs Woodcream!

König Friction Polish - 250 ml

Order Nr. KHHFP

Handmade high-quality polish made from mineral oils, alcohols and natural resins. This particularly high-quality polish also makes it possible to produce a high-gloss surface on workpieces with a diameter of more than 10 cm, unlike most other friction polishes

Made from: Shellac from the food industry (this is also used as a coating agent for apples or sweets), High purity alcohol >= 99, Pure, filtered, healthy linseed oil from first pressing, no drying agents or other additives

£ 19,⁰⁰
 Price incl. VAT.



König Sanding Pastes - 220 g

Order Nr. Rough paste: KHHSR / Fine paste: KHHSFP

Handmade high-quality paste from natural oils, orange oil, natural waxes and mineral abrasives, for wood and resin processing. Sands from 400 to 2000 and from 2000 to ~10000.

Ingredients Sanding Pastes

Natural oils, orange oil, beeswax, stone powder / mineral abrasives for wood and resin processing.

£ 19,⁰⁰
 Price incl. VAT.



*If you want to achieve a shiny finish, then Königs Sanding paste and Friction Polish is your Choice! - Pastes and Polish is also available as a test-set.
 Order-Number: KHHSFP*

König Hard Wax Oil - 250 ml

Order Nr. KHHWO

The most important properties at a glance.

UV - stable, no additives, very durable

Application examples for König Holz und Harz wood cream

Turned objects in daily use, bowls, plates, decorative objects, tables, work-tops.

£ 25,⁰⁰
 Price incl. VAT.



Natural Finish for you natural table - König's Hardwaxoil. For an even better, stable finish, you can put a layer of Woodcream on the top!

König Natural Wood Varnish - 250 ml

Order Nr. KHHNV

Advantages of König's Inatural wood varnish

Breathable: The treated wood remains breathable and retains its warm, natural character. **Durability of the surface:** Due to the relatively slow hardening of the oil, it can penetrate deeply and thus harden the surface. The surface does not become brittle or cracked due to changes in shape. The oil varnish works with the wood. **Repair-friendly:** Minor damage or wear can be easily removed by repolishing with the same oil. **Enhancing the grain:** oiling emphasises the grain of the wood and brings out its natural beauty. Deep natural shine Strong protection in all areas



£ 12,⁰⁰
 Price incl. VAT.



*Not only for woodturned objects, but also for your bench outside
 König's Natural Wood Varnish*

König Sanding Sealer - 250 ml

Order Nr. KHSS

König Holz und Harz sanding sealer is a sanding sealer that facilitates the sanding of wooden surfaces. It does not close the pores, strengthens the wood fibres and sets them up. This ensures a noticeably better sanding result and a very smooth surface. This sanding sealer is the perfect base for waxed or high-gloss surfaces.

£ 9,⁰⁰
 Price incl. VAT.



“

*I should never
agree to make
1000 of anything
ever again*

”

Diary of a professional woodturner – part 15

Richard Findley reminisces about a large contract, relives a drama at a demo and shares some exciting news about a woodturning course

The magazine runs on roughly a four-week cycle between issues, so at times it feels like there is always a deadline looming to get my next article in. During holiday periods around Christmas, Easter and the summer holidays, those cycles are shortened to get the magazine published and out to the readers, even when the team that put it together aren't at work, so this cycle, written as the summer holidays are approaching, is slightly shorter than some and most of the time between writing this and the last diary article has been taken up making another 100 wooden doughnuts, which doesn't make for the most exciting reading. Luckily there have been a few other things going on that I can write about, so despite this month's seeming lack of variety I still have a few tales from the workshop...

Large production jobs

I have written before about the pros and cons of production work. These 200 doughnuts have definitely been at the upper end of the size of production jobs I will take on and have taken almost five weeks to make, spread over a couple of months. I'm glad to see the back of them now. But 200 is not the biggest batch I've ever made of something – I once made 1000 keyrings for a good customer that taught me several valuable lessons.

The customer was the same one I made the Gothic walking canes for a couple of months ago. Their main line of business is all things Gothic, but from time to time they will take on a contract for different merchandise for one thing or another. On this occasion, they had agreed to make a thousand keyrings as a gift for attendees at some large event. This was in the early days of my business, way back when I was still very much part-time and working for my dad. The design of the keyrings was fairly simple but had several stages. They were a block of beech with a routed slot that held a small sand timer, a hole with a chain and engraved plaques fixed to each side, all finished with a satin lacquer. Being extremely naïve, I thought this would be a great opportunity for me, so I put in my quote and got the job.

The first shock I had was just how large a quantity 1000 of something is. There were piles of these keyrings everywhere! And every process, no matter how quick it seemed, when multiplied by 1000 just took forever.

By the end of the job, which I had assumed shouldn't take too long (dangerous last words), I had everyone helping me, including my parents, the guys who worked for my dad, my wife and even my mother-in-law was glueing the engraved plaques on to the keyrings.

The whole job, although successfully completed to the customer's satisfaction and on time, was massively stressful. I'm sure I must have aged 10 years over the few weeks I was working on the project and the memory of it still brings me out in a cold sweat. Worst of all, I didn't make any money from it. Had it not been for all of the free labour supplied by my friends and family, there is no way the job would have been finished on time and I would have been severely out of pocket.

This sort of experience is not to be recommended, but was an important learning opportunity for me, even if all I learned was that I should never agree to make 1000 of anything ever again and that I should charge more.



1 The latest batch of doughnuts is finally finished

Experience

All of these things that test you in many ways over the years have the power to either make you completely give up or to learn and grow. I'm a pretty stubborn person though, I'm not one for giving up, so I have to learn and grow. Famously, doing the same thing over and over and expecting different results is the definition of insanity, so you have to learn and change otherwise the whole thing is destined for failure.

I think a lot of it is about mindset and general outlook. I had a problem at a demo recently that many would think of as their worst nightmare, but because of my experience and positive mindset, I was able to turn it into an enjoyable and positive thing for myself and for everyone watching.

I was demonstrating at East Yorkshire, near Hull, a couple of weeks ago, during one of the hottest days of the year so far. The project was my lidded bowl with a finial and all was going well, the bowl and the lid were done and I was just on the final stages of turning the finial when the club's lathe just stopped working. Initially, I thought someone had unplugged the power but after a quick investigation I found that there was power going to the plug socket, but the lathe was simply dead.

From that point, there could have been several outcomes, most of which end in some sort of disappointment for the audience or embarrassment for myself or the club committee, so I needed to think on my feet. Rather than just apologising and ending it there, or blaming the club or its lathe I decided to try something out. When demonstrating a planing cut with a skew, I will often position the tool on the wood and turn the lathe by hand to show clearly the correct presentation and how a sharp tool cuts even under only hand power, so I decided, as I only had a few cuts left, that I would give it a go here. I needed to size the tenon on the base of the finial and then reshape the teardrop at the top and part it off. Just as the chairman was about to apologise to everyone for the equipment failure and wrap up the meeting early, I started to explain that sharp tools don't necessarily need 2000rpm to cut, just good presentation. As I turned the handwheel the tool made shavings and I gradually approached the correct diameter. Once I had made my point and emphasised the importance of sharp tools (again) I was considering leaving it at that when a club member said 'would you like me to turn the handwheel for you?' and before anyone knew what was going on, I



2 In action during a different (not the East Yorkshire) demo

had an assistant turning the lathe like in the old days before electricity. Despite the low rpm, I was able to get the cuts done that I needed. At one point my new assistant stopped for a breather as, on the hot and humid June evening, he was building up quite a sweat. There was much laughter when I asked why he'd stopped and told him to crack on with his job.

In the early days of my demonstrating career, something like this would have completely thrown me. I used to get quite nervous before a demo but I have done so many now that I am very used to it and any nerves can be channelled into positive energy which, I hope, only improves my demos. My main takeaway from that tale is to never panic and to try to find the positive in whatever turn events take (pun entirely intended).

In a meeting

I had quite an exciting meeting a few weeks ago, the outcome of which I can only now talk about. So often I hear friends say 'I've got a meeting' or 'I'll be in a meeting all morning', but I rarely have meetings of any sort. With my business being run by me, myself and I (with some help with paperwork and general organisation from my wife), business meetings would generally be a lonely affair and people say rude things about people who talk to themselves. But when I actually do have a meeting, I like to make sure my wife knows (all very tongue in cheek) that she won't be able to contact me because I'll be 'in a meeting'.



3 The main building at West Dean College



4 Part of the well-tended gardens and Victorian glasshouses in the background **5** Teaching at Craft Supplies USA in 2018

This particular meeting was with the very prestigious West Dean College, which was looking for a new tutor for its woodturning courses. For many years, Dave Register (a name you may remember if you've been reading *Woodturning* magazine for as long as I have) and Mark Hancock have been the course tutors, but Dave is retiring and Mark is moving to the US. I am grateful to Mark for mentioning my name to the college as a potential tutor. So after a chat with the organiser at West Dean, I agreed to go to West Sussex and visit. I checked my diary and planned it in for a day when I had an evening demonstration in the same area. It wasn't exactly in the same area, but was at least in the same quadrant of the country and only added 70 miles to my day, so wasn't too bad.

West Dean College specialises in arts, crafts and conservation and is based in what was previously a manor house set in more than six acres of grounds, including managed gardens with Victorian glasshouses. The setting is truly spectacular and they host a range of courses, from short one to five-day sessions to full degree and diplomas with on-site accommodation and catering. I was shown around the house and workshops, including the area that is used for the turning courses, which is well-appointed with Graduate and Vicmarc lathes and a tool kit and extraction for each.

My meeting lasted about an hour and, after discussing all the details, we agreed that I would run a three-day course in October, and as long as it all goes well, another in March 2023. Hopefully, this will be the start of a long relationship and I am excited to get started with the first class. I used to run one-to-one tuition from my workshop but it's not really set up for it, being

more of a production workshop. When I had one old guy pass out on me and I had to call an ambulance, I decided I probably wasn't enjoying the lessons as much as I do other aspects of my work. I do enjoy group sessions though and have run classes for various clubs and even one in America at Craft Supplies USA in Utah. I hope this new relationship with West Dean will give me a way to share my passion for and knowledge of woodturning in a setting and environment that will be beneficial for everybody.

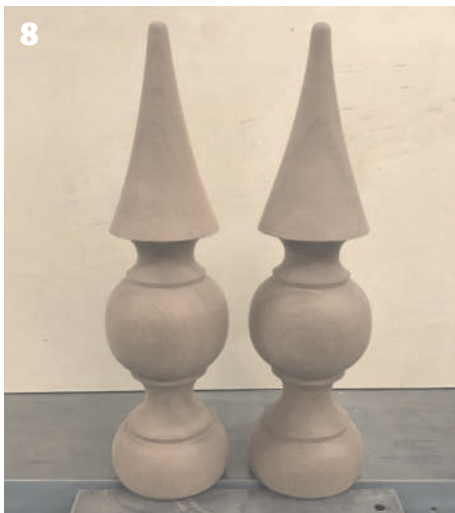
Sapele finials

Before I got stuck into the latest round of doughnuts, I had a few smaller commissions to undertake. The first was for a pair of roof finials. I was sent a photo of one of the original, rotted finials, along with a rough pencil sketch with the important dimensions marked on it. I laminated three layers of ex50mm sapele in my press and then turned them to the image. The customer noted when ordering that they didn't have to be exactly like the originals because they were being swapped for the new ones, but the design was good so I didn't feel the need to improve it in any way. Occasionally, given this freedom, I will tweak a design to make it better but these were well designed, I think.

The next job was more sapele finials, only this time they were newel post finials. Jobs seem to come in phases, where I will find myself turning a lot of the same sort of thing despite not making any of these for months. This is the case with newel post finials at the moment – I seem to have made a lot recently, all for Victorian or Georgian homes



6 The pair of sapele roof finials **7** One of the butchered newel posts, sans finial



8 The pair of sapele roof finials **9** The finished set of sapele newel finials

being restored to their period glory. These finials were for a customer in London whose newel finials had all been cut off, presumably to give a more modern look. The problem is, they hadn't been neatly cut off at a design feature, they had been hacked off at various levels on each newel post so he needed one for his main feature newel in the hallway and four more simple ball finials for the other newels in the staircase.

He sent me pictures of a neighbour's staircase for reference and after discussing the previous woodwork (or perhaps butchery might be a better term) I suggested he should have them all trimmed to the same point so I could make the four finials all the same and they would all sit neatly in place if I left a turned dowel on the base of the finial and he had the post drilled to suit.

The feature newel was an interesting one, it was a turned finial but with an octagonal ring around the centre. With the tilting blade on my saw bench, it was quite easy to make the square laminated blank into an octagon, I then planed the faces smooth before marking the position of the detail, mounting it in the lathe and turning as normal. Turning the transition from an octagon to a cylinder is much the same as turning from square to a cylinder, only easier because the space between points is far less on the octagon. The customer was delighted with the look of his refreshed staircase.

Pipe covers

I was asked to make some oak covers for where radiator pipes go through wooden flooring. These are a standard off-the-shelf item, but the plumber had messed up the pipework and the hole in the wooden floor was bigger than a standard cover would hide, so my customer needed larger ones. The picture he sent me was of a cover with an elaborate dovetail join between the two halves, so they could be positioned around the pipe and slid into place. I've made something similar before and knew of an easier solution that wouldn't involve investing in new router cutters or the need to dust off my dovetail saw, I described it to the customer and he agreed.

The covers need to separate to allow them to go around the pipe so for the best match I made them in one piece, drilling an 18mm hole down the centre of the blank and turning the profile before sanding and parting off. I then split them along the grain using a mallet and chisel. When wood splits along the grain it will glue back together so well that the join is virtually impossible to spot, as you can see in pictures below. There were eight of these covers, so I was very careful to keep the halves in their correct pairs as I worked through them, right until they were individually packaged up and sent off to the customer. ●



10 Turning the pipe covers **11** The cover deliberately snapped along the grain **12** Pressed back together, the join is virtually invisible

Superior Design, Legendary Quality



- 24" swing over bedway
- 36" between centers
- Inboard & outboard extensions available
- 1.5, 2 & 3 HP available
- 42" max. outboard swing
- Tailstock swivel available

Designed and Made in Canada

ONEWAY 2436 LATHE

Powerful, Precise, Smooth.

ONEWAY
EUROPA
Superior Design, Legendary Quality

www.onewayeuropa.com
tel +49 2566 905 106
mark@onewayeuropa.com

Do you want to advertise
in the definitive guide to
Woodturning?



Call now on 01273 402855

Or email gmcadvertising@thegmcgroup.com

Speed Genie

"Keeping wood turning at different
speeds since 1997"



1HP kit from £499

1.5HP kit from £549

Retro fit digital
readout £119.99

**1HP and
1.5HP KITS
BACK IN
STOCK!**

S. Haydock

Spring Bank Farm, Goosefoot Lane, Preston, PR5 0UU.

Tel: (01254) 851918/07849 725195

www.haydockconverters.co.uk

haydockconverters@gmail.com

SNANTON WOODWORKING SUPPLIES

Barker's Lane, Snainton
Nr. Scarborough, North Yorkshire YO13 9BG
TEL: 01723 859545
Open Mon- Fri 10.00am-4.00pm
Sat 10.00am-1.00pm
Sun + Bank hols- CLOSED

www.snaintonwoodworking.com

VB36 WOOD LATHE (LOW)

Used, Inc's Scroll Chuck. Good Condition

£3,950

CHARWOOD

W815 Mini Lathe	From	£229
W824 Midi Lathe	From	£439
W813 Lathe		£579
W813P Lathe + Viper 3 Chuck		£679
W711 8" Bandsaw		£217
W721 12" Bandsaw		£499
B350 14" Premium Bandsaw		£699
W629 10" Table Saw		£1,099
W588 8" x 5" Planer/Thicknesser		£350
PT200 8" Bench Top Planer/Thicknesser		£350
W570 12" Bench Top Thicknesser		£350
BD15 1" x 5" Belt/Disc Sander		£119
BD46 4" x 6" Belt/Disc Sander Package		£155
DC50 Dust Extractor		£109
DC50 Auto Dust Extractor		£159
BG6 6" Grinder		£97
BGS Grinder Stand		£79

CHISEL SETS

Record 3 Pce Bowl Turning Tool Set	£79.99
Record 3 Pce Spindle Turning Tool Set	£79.99
Robert Sorby 67HS Six Piece Turning Tool Set	£175

CHUCKS AND ACCESSORIES

Charwood W810 Chuck	£59
Charwood Viper 2 Chuck	£109
Charwood Viper 3 Chuck	£119
Charwood Nexus 3 Chuck	£119
Nova Pro-Tek G3 Chuck	From £103.00
Nova Pro-Tek Supremova 2 Chuck	From £115.00
Record SC1 2" Mini Chuck Insert Req	£69.99
Record SC2 2.5" Mini Chuck	From £49.99
Record SC3 Geared Scroll Chuck Package	£103
Record SC4 Geared Scroll Chuck Pk Inc's Insert	£123
Record SC4 + SC1 Chucks + Insert	£179

Wide range of Jaws available

10% Off RRP Record Drive & Live Centres

LAGUNA

16/32 Drum Sander Package	£1,799
18/36 Revo Lathe Vari Speed	£2,899
Fusion 3 Cast Iron Tablesaw	£2,899

All Laguna Free Delivery UK Mainland

RECORD/CAMVAC

DML250 Cast Mini Lathe	£279
DML305-M33 Midi Lathe	£389
DML320 Cast Midi Lathe 1HP	£659
Coronet Herald Lathe	Package Deals From £899
Coronet Envoy Lathe	Package £1,699
Coronet Regent Lathe	Package £1,999

FREE Wood Pack

with all Coronet Lathes Collected

BS250 10" Bandsaw Inc. 3 Blades	From £329
BS300E 12" Bandsaw	£749
BS350S 14" Bandsaw	£999
Sabre 250 10" Bandsaw Inc. 3 Blades	From £429
Sabre 350 14" Bandsaw Inc. 3 Blades	From £1,249
Sabre 450 18" Bandsaw Free Delivery UK Mainland	£1,999
DX1000 45 Litre Extractor	£109
DP58B Bench Drill	£379

Full range of Camvac Extractors

ROBERT SORBY

ProEdge Diamond Belt	£159
ProEdge Basic	£319
ProEdge Deluxe	£394.99
ProEdge Deluxe Packages	From £419

All ProEdges Free Delivery UK Mainland

BRITISH WOOD PACKS

Wood Pen Blanks 10 pack	£5
Yew Branch Wood Pack 4 Kilos	£20
Ash Packs	From £25
Square Pack Approx £30 worth of wood	£25
Round Starter Pack Approx £30 worth of wood	£25
Round Large Pack Approx £50 worth of wood	£50
Rounds & Squares Pack Approx £60 worth of wood	£50
Large selection of British & Exotic timber in stock	

Like & Follow Us
facebook



OakleaWoodcraft.co.uk

We specialise in supplying Woodcraft accessories and tooling for the Woodturner stocking both exotic and homegrown hardwoods

· Kits · Tiles · Accessories · Tooling

www.OakleaWoodcraft.co.uk | info@oakleaproducts.co.uk | 01952 884064

The Workshop, Calcutts Road, Jackfield, Telford, Shropshire TF8 7LG



Stiles & Bates



The Woodturning People

Upper Farm, Church Hill, Sutton,
Dover, Kent, UK. CT15 5DF UK

Tel: 01304 366 360

www.stilesandbates.co.uk sales@stilesandbates.co.uk



We are known for our huge selection of woodturning blanks and a free Mail Order Catalogue but there's much more . . .

nova™
Smart Tools, Powerful Solutions

RECORD POWER
ESTABLISHED 1909

ANTEX
Craft

milliput®

Crown Hand Tools

PLANET

CrushGrind® Mills

Robert Dorby

dalmann

Rustins

DELUXE
Materials

SAIT

GlassCast®

Titebond

KIRJES® Sanding and Polishing System



Assisted parking



MAIL ORDER

NARROW BANDSAW BLADES

MANUFACTURED TO **ANY** LENGTH

PHONE **NOW** FOR IMMEDIATE QUOTATION

OR WRITE TO US FOR A PRICE LIST

TRUCUT

Spurside Saw Works, The Downs, Ross-on-Wye,
Herefordshire HR9 7TJ

Tel: 01989 769371 Fax: 01989 567360

www.trucutbandsaws.co.uk



WESTCOUNTRY
machinery 4 wood

sales@machinery4wood.co.uk
www.machinery4wood.co.uk
01726 828388

NEXT ISSUE

WT375 on sale 6th October 2022

We welcome back Les Symonds as guest editor of WT375



**Les turns a decorative
Finnish-style candelabra**



**Jim Duxbury creates a beautiful
holder for a salvaged glass ampoule**



**Learn to use Jesmonite to make
bowl rims with Adrian Jacobs**

TO SUBSCRIBE, VISIT WWW.GMCSUBSCRIPTIONS.COM

Editorial
Karen Scott, Andy Coates, Jane Roe
T: 01273 477374
E: karenc@thegmcgroup.com
Designer Jonathan Bacon
Illustrator Jonathan Bacon
Advertising
Guy Bullock
E: gmcadvertising@thegmcgroup.com
Publisher Jonathan Grogan

Production Manager Jim Bulley
Subscriptions
E: pubs@thegmcgroup.com
Marketing Anne Guillot
T: 01273 402871
Origination
GMC Reprographics
Printer
Precision Colour Printing
T: 01952 585585

Distribution
Seymour Distribution Ltd
T: +44 (0) 20 7429 4000
Woodturning
(ISSN 0958-9457)
is published 13 times a year by
the Guild of Master Craftsmen
Publications Ltd.
Subscribe from £26.95
(including free P&P)

Save 10% with 6 issues
Save 15% with 12 issues
Save 20% with 24 issues
Plus UK subscribers can save an extra
10% by choosing Direct Debit
Post your order to:
The Subscription Department,
GMC Publications, 166 High Street,
Lewes, East Sussex
BN7 1XU, England.

Telephone: 01273 488005
Fax: 01273 478606
Cheques should be made
payable to GMC Publications Ltd.
Current subscribers will automatically
receive a renewal notice (excludes
direct debit subscribers)

Woodturning will consider articles for publication, which should be sent to the Editor together with a stamped-addressed envelope for return. GMC Publications cannot accept liability for the loss or damage of unsolicited material. Views and comments expressed by individuals do not necessarily represent those of the publishers and no legal responsibility can be accepted for the result of the use by readers of information or advice of whatever kind given in this publication, either in editorial or advertisements. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the Guild of Master Craftsmen Publications Ltd

To finish or not to finish

Pete Moncrieff-Jury contemplates the many options for finishing turnings

We have all heard the old maxim, ‘ask 10 turners a question and you will get 12 different, correct answers’, and nowhere is this truer than when asking which finish to use on your work.

The choice is immense, ranging from oils to lacquers, waxes to varnishes and others such as friction polish, glues, and sealers. All have their place; all give different results and none are wrong in themselves. However, There are two criteria that should determine which finish we use. The first is down to personal preference. We may prefer the high gloss effect of a lacquer, whereas another turner may prefer the more subtle sheen of oil or wax-based finishes. There is no specific right or wrong answer, just which we prefer. The second, and arguably more important, question we need to consider – and the one that seems to be a bone of contention with some people – is whether the finish we use is fit for purpose. Is the item we have created going to be used or simply decorative? Is it likely to be handled a lot? Is it going to be in contact with food or drink? These are questions we should ask ourselves when choosing a finish.

For example, I have been making goblets for many years and have experimented with a lot of different finishes, most of which I’ve found useless if you are making goblets for alcoholic drinks. I found out the hard way that red wine, for example, will eat through virtually any finish over time, often after just a couple of uses. Oils will get into the drink and can flavour it – not the ideal cocktail mix. Wax polishes can also wash off, taint the drink and leave the wood bare and prone to discolouring. I have had to try to restore several wooden chalices used for communions where they were originally oiled. With one in particular, the wine had, over the years, seeped right through so the outside of a beech chalice was going pink while the inside was dark red.

The other consideration is whether the finish is food safe. Just because it says so on the label doesn’t mean it is suitable. Some ‘food-safe finishes’ are actually petroleum based and can leave a residue in the drink or on the food. While not necessarily harmful, if used over a prolonged period of time they can again infuse the food or drink. Other simply don’t work. Beeswax is a typical example. While arguably the most traditional of all finishes and giving a lovely satin sheen to most woods, it is not very practical for anything that is going to be used for food or is handled a lot. Any handling can incur fingerprints that will need re-polishing. For items used for foods I have always favoured the oils everyone has in their kitchen, such as sunflower, rape etc. (not olive oil as that can go rancid) and have never had any problem with it. When the bowl, bread board etc. is washed, it is easy to re-oil. If selling or giving someone an item such as this how many recipients will have access to a proprietary food-based finish?

So, what type of finish you use is your choice regarding the look you achieve, but stop and think whether it is fit for purpose. Will it provide a good protective cover consistently and safely if being used and, if it will need renewing regularly, will the owner have access to it?

“
*There are two criteria...
The first is down to
personal preference...
The second, and arguably
more important, question
we need to consider is
whether the finish we use
is fit for purpose.*
”



PHOTOGRAPHS BY PETE MONCRIEFF-JURY

IT'S TIME TO TURN IN

AXMINSTER WORKSHOP LATHES

It's that time of year again when we can look forward to getting back into our workshops and start turning! Whether you're a seasoned pro, getting ready for craft fairs or giving woodturning a go for the first time, our range of Axminster Workshop lathes has something for everyone.

AXMINSTER

WORKSHOP



AW305WL Woodturning Lathe

457 mm between centres
Power: 550 W Speed: 1,000 - 4,080 rpm

£419.98 | Code: 107674

AW205WL Woodturning Lathe

330 mm between centres
Power: 250 W Speed: 750 - 3,200 rpm

£199.98 | Code: 107699



AW240WL Woodturning Lathe

440 mm between centres
Power: 375 W Speed: 700 - 2,800 rpm

£299.98 | Code: 107673



AW355WL Woodturning Lathe

510 mm between centres
Power: 750 W Speed: 250 - 3,550 rpm

£649.98 | Code: 107701



AW370WL Variable Speed Woodturning Lathe

1,100 mm between centres
Power: 750 W Speed: 500 - 2,000 rpm

£579.98 | Code: 107700

3 YEAR GUARANTEE

Available on all Axminster Workshop machinery.



Purchase an Axminster Workshop Lathe and receive a **FREE** introduction to woodturning session at any of our retail stores.

AXMINSTER TOOLS

We share your passion.



For the full range of Axminster Workshop products, visit one of our stores, search axminstertools.com or call **03332 406406**.

Visit Axminster Tool's **The Knowledge** for how-tos, buying guides, project ideas & more >



AXMINSTER • BASINGSTOKE • CARDIFF • HIGH WYCOMBE • NEWCASTLE • NUNEATON • SITTINGBOURNE • WARRINGTON



Rated 'Excellent' on



Trustpilot

THE No.1 CHOICE *For Woodturners!*

THE MOST COMPREHENSIVE CHOICE OF
WOODTURNING TOOLS ON THE MARKET

- Core Woodturning Tools
- Woodturning Sets
- Specialist Woodturning Tools
- Sovereign System
- Woodturning Accessories
- Measuring Tools
- Sharpening Tools

Robert Sorby

PROUDLY MADE IN SHEFFIELD, ENGLAND 

Made by Craftsmen for Craftsmen

www.robert-sorby.co.uk

Robert Sorby, Sheffield ENGLAND

Tel: +44 (0) 114 225 0700 E-mail: sales@robert-sorby.co.uk

FOLLOW US ON SOCIAL @ROBERTSORBY

