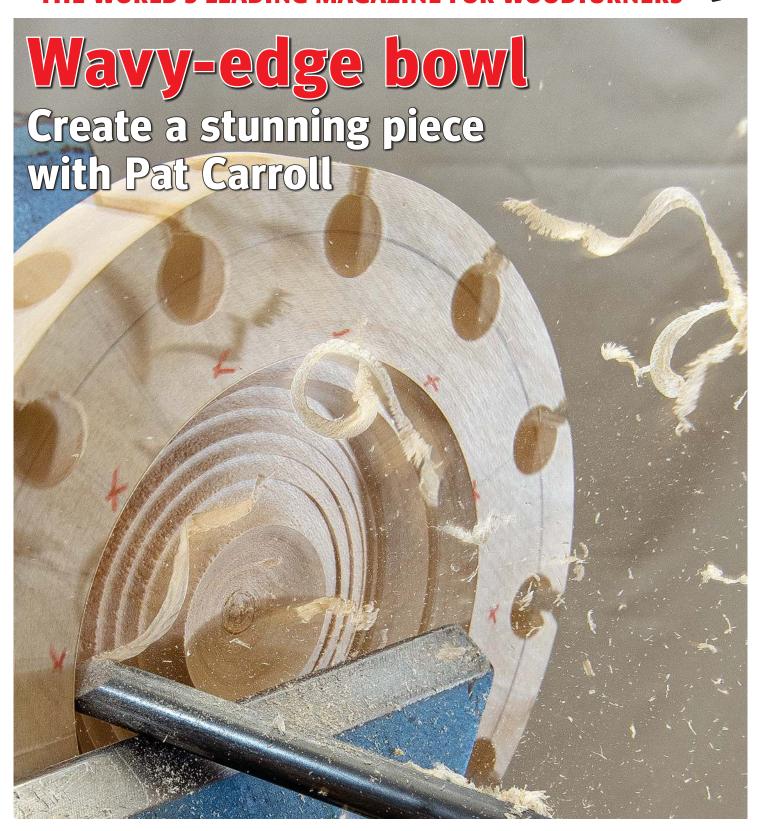
Woodturning THE WORLD'S LEADING MAGAZINE FOR WOODTURNERS



PROJECTS Split-turned wall sculpture • Ladles • Wall clock

- Bottle stoppers **TECHNICAL** Glue chucks explored Your Q&A
- Further experiments in piercing **FEATURE** Arun Radysh-Haasis

The Coronet Herald represents the culmination of decades of expertise in the manufacture and supply of superior woodturning lathes.

Developed with the help of professional woodturners and keen hobbyists, we believe we have produced a world-class lathe for woodturners of all levels. Thanks to a number of innovative design solutions the capabilities, features and performance of the Coronet Herald far exceed anything a machine of this size has been capable of before - it brings top-end professional performance at a fraction of the size and cost of comparable heavy duty lathes.



Specifications

Maximum bowl diameter: 533 mm 508 mm Maximum between centres: Maximum swing over bed: 355 mm Spindle speeds: 96-3890 rpm **Motor input P1:** 1000 W Motor output P2: 750 W Thread: M33 x 3.5 2 Morse taper Taper:

Weight: 48 kg **Size:** W870 x D290 x H252 mm

Optional Fitments

Prices valid until 28.02.2020. E&OE



16011 Cast Iron Bed Extension RRP **£179.99**



16013 Cast Iron Outrigger RRP **£49.99**



16015 Tubular Stand RRP **£149.99**



16012 Bench Feet RRP **£69.99**



16208 In-Line Emergency Stop RRP **£39.99**

Coronet Herald Heavy Duty Cast Iron **Electronic Variable Speed Lathe**

"I found the lathe a delight to use. Functionality wise, it did everything I asked of it without fuss and components stayed put when locked in place...I think it is a great midi-lathe which will suit many turners' needs, capacity and space wise." **Woodturning 317**



"With large blanks mounted you can use the variable speed control to keep the machine stable and vibration free...Would I recommend this lathe? Yes without a doubt, it's well designed and built to a high standard."

Online Review



"The new Herald - Sets a new standard

It surpasses my expectations by a country mile! The size is ideal for the turner with limited space, has outstanding capacity for its footprint and is very quiet indeed... Record Power most certainly have a winner."

Online Review







RECORD POWER STARTRITE **CORONET ∠** CamVac BURGESS

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

AWGB International Woodturning Seminar

9th to 11th October 2020

Yarnfield Park Training and Conference Centre

Stone Staffordshire ST15 ONL





Richard Raffan Australia



Mary Ashton



Tim Yoder USA



Willie Creigton Ireland



Sally Burnett



Colwin Way



Emmet Kane Ireland



Jacques Vesery



Jocelyn Naigeon France



Yan Marot

10 of the best International Turners from around the world showing their skills and passing on their experiences and knowledge, freely and with passion.

Expanded format with more demonstrations in individual rooms with improved AV facilities so you don't miss a "cut".

We will have more one-slot demos from turners & traders in addition to the ten headliners and lots more masterclasses.

Open to ALL turners - all ages.
All demos under one roof

New "Ray Key People's award" trophy for the best piece in the gallery - voted by delegates.

Friday night "Fun" session

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

Tickets are on sale with an **early bird discount**.

Details on the website **awgbwoodturningseminar.co.uk**Keep an eye on the website and facebook for up to date information.

early bird discount ends March 31st

Different viewpoints



It should come as no surprise that I, like many others, become aware of or get involved in conversations that start as one thing then either go off in a weird arc that is unrelated to the original starting point, or becomes focused on a tiny element of what the conversation touched upon but which wasn't meant to be its main focus.

Such conversations can, depending on which way they develop, prove interesting, insightful, hilarious, frustrating or just downright ridiculous. I have experienced them all, as no doubt most people have over the years. We all know that any subject will attract as many opinions and views a there are snowflakes in a snowstorm. I always find it interesting that there will be one person who is a contrarian or has an alternative view of things. I do not decry such a stance as long as the person has considered their viewpoint and can back it up properly rather than just being awkward, wanting to showboat or make a scene. I might not always agree with the alternative views put forward, but I very much respect well thought-out opinions and arguments and such comments and

opinions help challenge the status quo or perceived/received wisdom and make us think more deeply about the why, when and how of things.

I have more than once played devil's advocate when discussing things. OK, according to some, I do this regularly, but I was always taught to question everything and seek answers to things. To do that we need many sources and access to good information. Bad information can prove dangerous in so many ways but how do we know things might be good or are bad? That is a tough one.

Once upon a time in the dim and distant past, people were told asbestos was safe and it was used in many ways in many products. We now know that thoughts of the past concerning this product were wrong. How many product recalls and how many items are now deemed to be bad for people or the environment and such like? It is no different for tools, techniques and so on.

There are always going to be developments and discussions and, concerning turning, I genuinely think

that we have better tools, equipment, machinery and a network through which we can learn and share experiences than we have ever had, but it still requires people to think about what they want to do, what they need to do that thing properly and also how to do it safely.

You won't find that necessarily from one source and we all know accessing many sources can lead to conflicting views, opinions and comments. But a good start is to talk to a professional or a join up to a respected forum. Before mounting wood on the lathe and touching a tool to the spinning timber, assess the information you have to see if it will work well and safely. Keep an open mind as to whether this process can be improved upon safely before you even start turning.

Have fun, Mark

markb@thegmcgroup.com



COVER IMAGE: Pat Carroll (see page 7)



Techniques

13 Alternative chucking

Andy Coates looks at some old-school methods of holding work on the lathe

29 Experiments in piercing part 2

Richard Findley's Editor's Challenge this month is to make a project which includes piercing

72 Kurt's clinic

Kurt Hertzog answers some readers' questions

Features

54 Building a dream

Arun Radysh-Haasis shares his turning experiences with Mark Baker

85 Nature's perfection

Mark Baker explores the ways in which nature continues to inspire and influence our designs

92 Arizona Woodturners Association

Patricia Jones talks about what her local club is doing to share and grow

104 My name is Pete and I am a hoarder

Pete Moncrieff-Jury is planning to get on top of his burgeoning offcuts pile

Projects

7 Wavy-edge bowl

Pat Carroll serves up a dish that mimics some of nature's finest curves

21 Split-turned cross-grain wall sculpture

Mark Sanger goes all out over this colourful decorative project

37 Wooden ladles

Les Symonds makes two versions of this handy lathe-turned vessel

45 Bottle Imp

David Springett creates an ingenious trick bottle

60 Orbital arc box

Jason Breach shares the processes for making his signature style of box

68 Bottle stoppers

Ian Woodford creates a craft stall favourite

79 Art Deco-style skeleton clock

Walter Hall takes time out to make a clock

94 Arcs with inlay

Christ West produces some off-centre inlaid arcs

Community

3 Leader

Mark Baker talks about different viewpoints

53 Community news

The latest news and dates for your diary

75 Our contributors

Meet our authors

77 Next issue

Find out what's in store for next month

91 From the community

Here are some letters the Editor has received from you, the readers

100 Advertising index

See who is advertising this issue

Kit & Tools

98 Kit & tools

Focus on box making with a selection of products and tools that may well help



NEWS, LATEST PRODUCTS, MAGAZINE UPLOADS & EVENTS

can all be found on www.woodworkersinstitute.com. These all appear on the magazine homepage and you can see a bigger selection by scrolling down the page and clicking on the individual stories. We also have an extensive online archive for you to browse, or see us on Facebook & Twitter.



Subscribers!

Turn to page 51 for subscription special offers and you could save 30%!



HEALTH AND 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).

INNOVATIONS MADE IN THE USA FOR OVER 90 YEARS





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







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

Innovative Solutions for all your Woodworking Needs

HOTOGRAPHS BY PAT CARROLL

Wavy-edge bowl

Pat Carroll serves up a dish that mimics some of nature's finest curves



Inspiration for this bowl mainly came from pottery pieces I have seen over the years. Again, it is not a unique style of work as I have recently seen similar carvings created in wood. One such piece is the work of Lisa Chemerika who had created a wonderful wavy-edged bowl in wood which is a variant of the one created here. A profile on Lisa's work will be featured in the next issue.

This article shows my effort to create a continuous rolling edge with an outer defining texture framing the finer interior surface. I chose sycamore as I find it works well on these projects. This piece was a very dry kiln-dried piece of wood. Water-based paints were used for the coloured finish and a pearlised white added to create vibrant shades as the piece is viewed from different angles.

Marking out the piece is very important to the position of the curves, so forward planning is greatly advised. It's a pity I didn't listen to my own advice as the diameter of the holes on the first attempt was too big for the rim on a piece this size. The problem was that the vertical holes cut through the wall of the horizontal holes. The piece of wood was changed, turned to the point of drilling as in the photos, and a smaller hole was drilled to suit the design intended. The shaping of the bottom and interior are carried out after the carving.

The lathe is used as a drill press because trying to drill the side of a disc freehand can be dangerous. The decision to round the bottom was taken to make it easy to tilt the bowl forward or to one side so the rim can be viewed from many angles.

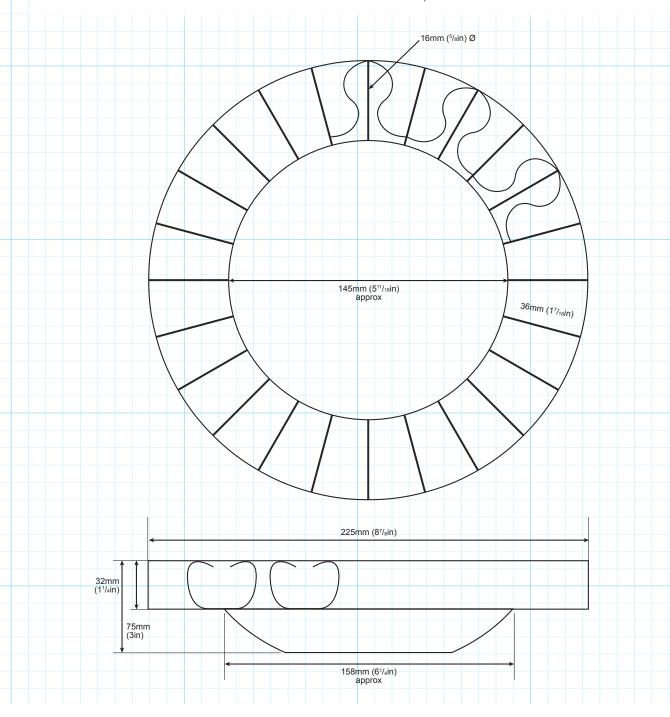
TOOLS AND MATERIALS

- Personal and respiratory protective equipment (PPE & RPE)
- Bowl gouge
- Parting or beading & parting tool
- Beading & parting tool
- Screw chuck or faceplate
- Chuck
- Revolving tailstock centre
- Indexing unit
- Marking table
- Lathe-mounted drilling table
- Pillar drill
- Drill chuck
- Sanding arbor
- Rotary carving unit
- Various sizes of ball-ended burrs

- Flame burr
- Drum sander
- Sanding wheel
- Pyrography unit

MATERIALS

- Sycamore (Acer pseudoplatanus)
- These are guideline measurements, create to your ability, requirements and lathe capacity
- Abrasives down to 400 grit
- Airbrush or brushes
- Black yellow
- Pearlised white
- Red, blue and green colours to mix with pearlised white
- Satin lacquer

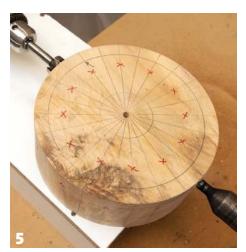


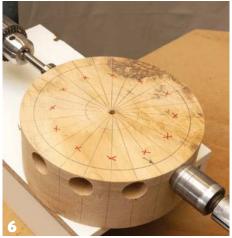
















Initial preparation and marking out

- 1 Mount the blank on a screw chuck or faceplate. Use all PPE & RPE and be safety aware during the processes of harvesting of the wood to the finishing of the piece.
- **2** When jointing and using any new blank, attention must always be paid to when the lathe is turned on. Always start at a slower speed and only increase speed when fully sure it is safe to do so. Bring up the revolving tailstock centre for support, and once secure, use a bowl gouge to true up the side and face of the timber.
- **3** The blank will be held on a recess as keeping the base of the disc flat is important when drilling the holes for the carved rim. A parting tool is ideal for this job. Take light cuts and ensure a good fit for the jaws of your chuck. A depth of 5-6mm is turned to allow for the chucking recess.
- **4** A homemade platform is now used to mark out the sections of the piece. The platform/table is made to the height adjustable and in this case needs to be set so that the pencil is exactly on centre when laid flat on the surface. Using the lathe's or add-on index system, the piece is marked on all available sides in 24 sections. Then, mark the lines to be drilled on with a red cross/x.

Drilling and rough-shaping

- **5** I used a 28mm Forstner bit to drill the holes but, as stated in the introduction, this was the wrong size for a bowl this diameter. I Marked out a new piece and prepared it for drilling with the smaller 16mm bit. Another platform is used to support the piece for drilling on the lathe. Ensure the Jacobs chuck is very secure in the headstock and, using the index lines, the tailstock is the driving force to push the blank on the wood.
- **6** The holes are drilled in 10mm increments, stopping the lathe each time and withdrawing the Forstner bit to clean the shavings out of the hole and the drill bit. This is a slow process, but I found it to be the safest as the drill bits can clog and have been known to have been pulled from the headstock or tailstock.
- **7 & 8** The top holes are drilled with a drill press, and once again drilled in stages. Pay attention to the depth drilled to ensure the holes are sufficiently deep enough to carve through. Once drilled, remount the piece on the lathe and turn a recess on the top for when turning the underside later. Shaping of the underside of the rim can now be carried out. Take care as the holes are exposed. The underside is cut to create a rim of equal distance of either side of the cut holes to enable carving to be carried out and create a uniform wave edge. Once the rim is cut, re-chuck with the piece held on the base recess. Now, cut away the centre mass between the holes with a rotary cutter. You can use various tools and cutters to do this - I used a mini long-neck angle grinder and disc.





9 & 10 The width of the rim is now established by removing part of the interior of the bowl. Do not remove too much from the centre as this will weaken the piece. Once the internal bowl width is sorted, the rotary carving tool is used to cut a slot on the offset side grooves to create a line from the outside of the rim to the inner bowl area. Some of the corners are carved away at this point

11 A teardrop burr is used in a flexible shaft rotary carving unit to remove the bulk of the wood. Be careful using large burrs in small areas as contact with too much surface area of the tool causes kick-back and may do damage.

12 & 13 A smaller round burr is ideal to undercut the lip of the rim and refine the shape. A 50mm flap wheel, or other suitable item, is now put in the rotary cutter. A lot of sanding is gently done to help refine the shapes of the rim.

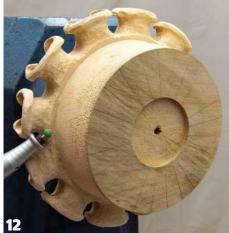
Pyrography

14 The piece was intended to have heavy pyrography texture, so a very smooth surface was never the requirement. Using a homemade U-shaped pyrography tip, the pattern follows the contours of the waves all of the way round, creating a ribbed pattern. Remember, though, to work in an area with no flammable materials or items nearby and use suitable flame-proof extraction and PPE with a carbon filter when using pyrography units.

15 Once the outer rim is textured, work can commence on the design for the inside of the wave forms. A long, straight tip is used to access all areas. The pattern is created by using the pyrography tip to create a very random pattern, working out towards the router rim texture. If you are new to pyrography, it is best to practise the techniques on waste wood so you know what you need to do on the piece to be textured. Experiment with heat strengths and burn depths until you are happy to work on the shaped workpiece.

16 With the pyrography completed on the outside, the inside sections of the waves need to be done. I find uneven surfaces are more pleasing to look at with the pyrography textured surface than perfectly flat or even ones.

























- Adding colour

 17 All of the water-based colours are applied using airbrushes. The first colour applied is a black base coat to form a foundation colour for the following colours.
- **18** The next colour to apply is yellow with some pearlised white added to enhance it.
- **19** With the rest of the colours applied, also containing pearlised white, red, blue and green, and allowing sufficient time to dry between coats, the rim receives several light coats of satin lacquer, again allowing drying time between coats.

Finishing touches

- **20** The bottom of the bowl is now carefully shaped, creating a tenon for a chucking point to turn the inside of the bowl.
- 21 The centre is now removed and, once complete, sanded with 120, 180, 240, 320, and 400 grit sandpaper
- **22** Now reverse the piece on to a jam chuck using the tailstock for support. Take light cuts and create a rounded curve side wall and a flat bottom. Sand following step 21.
- 23 Finish the piece with several light coats of satin lacquer applied, denibbing with 320 grit abrasive between coats.



Tools for Every Turning



Easy Wood Tools makes high quality, easy to use, hand-crafted turning tools and accessories so people will have more time to relax, create, and enjoy woodturning as a hobby or profession.

We're a family-owned business that takes its mission very seriously. We're the leading replaceable carbide-tipped woodturning tool manufacturer for a reason:

- We focus only on turning.
- We are consistently first to market with cutting-edge turning tool and accessory design.
- Our products are high quality and hand made in America.
- We design and manufacture our own carbide cutters for woodturning, ensuring end-to-end quality.
- Our customer service staff is knowledgeable, responsive, and fast.





BUNDLE & SAVE WHEN YOU BUY A 3 PIECE SET

MID SIZE Set# 12024 HOLLOWING Set# 12026 FULL SIZE Set# 12025

THESE DISCOUNTS AVAILABLE ONLY ON THESE THREE SETS
AND ONLY AT:

www.amazon.co.uk

FOR MORE INFORMATION www.easywoodtools.com (859) 246-0294



Alternative chucking

In part one of a series, Andy Coates looks at some old-school methods of holding work on the lathe

Introduction

There was a period of time in woodturning when work holding could be considered to have been in its Dark Days. Just a quick dip into just a small selection of volumes from my collection of books on woodturning, ranging in dates from the early 19th century to the early 20th century, reveals many techniques for holding work on the lathe which have since been consigned to history. Many of these methods were used for a hundred years or more, and by the mid 20th century these techniques had not changed much, and were not really suited to where woodturning had developed between then and the now. Then in the 1950s things began to change, new chucks began to appear, and later a 6-in-1 universal lathe chuck invented by Nick Davidson of Craft Supplies appeared, and woodturners had vastly improved work holding capabilities at their fingertips.

Since then the lathe chuck has seen a number of advances, and now some version of the independent four-jaw scroll chuck is seen as the norm for most turners. The cost of these chucks, however, can still be prohibitive for the new turner only recently deprived of a lump of cash for a lathe, tools, and possibly a bench grinder, and they will often struggle on with what they have to hand, which is usually a four-pronged drive, revolving cone centre, and a faceplate.

Spindle work is quite easily undertaken with a four-pronged drive and revolving centre, but faceplate work can be a challenge without a chuck. The faceplate, often supplied as standard with a new lathe, can rightfully be considered old-school, because it is, but it is a far from perfect holding method, leaving, as it does, screw holes in the base of the workpiece. In days gone by this problem was addressed by affixing a piece of green baize to the base to hide the holes, but as I've said before, the Green Baizers are an endangered species now. Thankfully.

That isn't to say, however, that the faceplate is obsolete – far from it. It has a justified right to remain on the tool rack waiting for the right job, and with some slight modification can be a useful piece of equipment. With a block of scrap wood or plywood screwed to it, it can prove to

be a versatile thing.
This is obviously good news
for anybody who does not yet own a
scroll chuck, but can also be a boon
for those who do. Scroll chucks seldom
come supplied with every variation of
jaws available, jaw sets themselves can
be relatively expensive, and alternative
methods of holding can often solve the
problem of a missing jaw type.

Jam chucks, glue chucks, friction drives, donut chucks, Longworth chucks, Cole jaws, and an assortment of other alternative holding methods each has a place in the turners' armoury of holding techniques; and often these are cheap and simple solutions to work holding problems. The jam and glue varieties are those that I use most of all, and frankly I would be lost without them. So what are some of these arcane holding methods and what are the pros and cons?



GLUE CHUCK SAFETY:

- Use best quality materials for making jam and glue chucks
- Use proprietary glues/adhesives of known high quality
- Ensure glue is completely cured especially for cyanoacrylate (CA) glue prior to turning
- Check all plywood platens for delamination risks prior to use. If in doubt as to its quality, don't use it
- Always wear face and eye protection when turning
- Turn at slower than normal speed and take lighter cuts
- Listen for sudden changes in cutting tone that might indicate a loose workpiece. Stop lathe and check
- Where possible use the tailstock for additional support

Why would you use these holding methods?

You may need to use alternative methods of holding simply because you do not

currently own the correct jaws for a particular hold, and doing so will allow you to perform some task such as finishing the base of a turned piece. You may need to use alternative methods because you are turning something unusual that you are not geared up to produce. It may be that there is no commercially available chucking option for what you are making, such as scoops or ladles, or, as is often the case with me, it is a quick and simple option. Whatever your reasons there is bound to be a technique you can rely upon.

ALTERNATIVE CHUCKING METHODS

If you are used to working with modern scroll chucks then using alternative, old-school methods of holding can often be daunting. It has to be stated that none of these methods is likely to be as sure as a conventional holding method using a scroll chuck, but with some common sense they should not pose any serious concerns.

ALTERNATIVE CHUCKING METHODS

1 Glue chucks:

- CA glue permanent. Solid, strong and quick bond. Requires parting off or cutting away.
- Hot-melt glue temporary. Can be removed with heat.
- Paper wood glue joint temporary.
 Can be split but less assured for larger faceplate operations.

2 lam chucks:

- Internal hold
- External hold
- Friction drive/jam
- Arbor fitting drives for spindle turning spheres etc.
- Custom jaws turned from nylon or similar material block

3 Other alternatives:

- Longworth or Cole jaws
- Vacuum chuck
- Collet chuck bought or workshop made

marine ply then look for plywood that

Glue chucks

Glue chucks rely on the workpiece being glued to a carrying plate – I prefer to describe them as a platen. The platen itself needs to be mounted on the lathe, and there are several ways of achieving this. If you have a chuck then the platen can have a pre-turned block with a tenon glued to it and then mount in ordinary jaws, or the platen could be screwed to a faceplate. If the platen is made from wood that can be considered as sacrificial then a shallow recess turned to the diameter of the workpiece can be used to centralise it before gluing proceeds.

The material, usually, but not always, wood, used and the type of glue are important too. If wood is to be used then the wood should be properly dry and free from cracks or other defects. If engineered materials such as MDF or plywood are to be used then the MDF ought to be 18mm minimum thickness and in the case of plywood the best option is faced marine or cabinetry ply. Both of these engineered

board types are suitable as they are strong and tend to be more stable than solid wood. There are also advantages to them not having a specific grain direction. Low-cost offcuts are often available at timber merchants, so cost is rarely an issue with this type of chuck making material.

NB: Aluminium (aluminum, to our North American friends) glue platens were at one time commercially available, and aside from a prerequisite to pre-heat them they work in the same way and very well, with the advantage of being extremely durable. 6mm aluminium plate makes an ideal material for making them.

PLYWOOD GLUE CHUCKS

One of the problems with plywood is the great variation in quality between suppliers and also between that supplied in different countries. Check your local supply quality. If you cannot find appears well constructed, and with tight laminations not weakened by fissures or deliminating layers. Faced ply is often of superior quality because it is intended for cabinetry-quality work, and marine ply is of a comparable quality. Discs for platens can be scribed and cut on the bandsaw, leaving only a truing cut to bring them into balance to be made on the lathe.



Glued and screwed tenons on chucks



Poor quality construction plywood



Marine and faced ply (to right) suitable for chuck making

Building your own glue chuck

How you build your glue chuck will depend on what you have available to hand. I use glue chucks in conjunction with a scroll chuck, but let us assume that you do now have one and proceed from there.

The method I use most frequently is to glue a pre-existing scrap tenon to a disc of plywood or MDF. These scrap tenons are left over from other jobs, and saved in a box. They are most likely to be dry and stable by the time I get around to using them, and I attach them using glue and screws. You could, of course, simply turn a tenoned mounting block from suitable scrap square stock.

The pile of plywood samples shown on the opposite page is of poor quality, and such material should never be used as a platen or jam chuck. The marine and faced plywood in the lower middle image on page 14 is good quality and highly suitable for making chucks from, be they glue or jam chucks. I have been using the rear one in the lower right image on page 14 for close to twenty years now...it was a quick two-minute job that I always intended to improve upon. I have never needed to. The blockboard that the piles in the middle image on page 14 are sitting on is suitable for foam-faced jam chucks; it is solid and stable and ideal material for this function, but once again, quality varies, so do select only the best quality available.

A pre-cut disc of plywood or MDF could alternatively be screwed to a faceplate, if the thickness of the board and the length of the

screws used do not present an issue. Once the edge is trued to ensure it is balanced this 'chuck' can now be used as a platen for glue chucking, or faced with foam to make a jam chuck. High quality ply and MDF should not require facing off to ensure the surface is flat, but if it does then take as few passes with a sharp gouge as required to make the surface flat.

PAPER JOINTS AND HOT-MELT ADHESIVE

In times past glue chucks would have been of the 'brown paper joint' variety, which, while a perfectly usable technique, has now been somewhat improved by the advent of high quality hot-melt glues, and this is generally the glue type I use. Hotmelt glues are thermoplastic adhesives, and have many uses. Care should be taken when using them as contact with the skin can result in minor, though uncomfortable, burns. The gun and glue should be of the best quality you can afford, and there is a marked difference in quality between some guns and glues. Go for a brand you trust, and choose a glue stick with a high melt flow index. The gun should be allowed to reach its optimum operating temperature before use, and if your local conditions are below average room temperature the surety of hold can be dramatically improved by pre-warming the platen surface with a hairdryer or heat gun. (NB: Avoid directly heating the workpiece as this can result in cracks or splits forming.)

Using hot-melt glue is a straightforward technique, and a short illustration should be all that's needed to try it out.

Turning a small bowl using a glue chuck

I used a scrap block of laminated hardwood with a pre-existing tenon for this platen because it was stable and available. It could just as well have been screwed to a faceplate, or have been MDF or plywood. The process remains the same.

Start the process by truing up the platen if it is irregular. A scraper will make short work of this. Check the surface is absolutely flat before continuing. A blank of sycamore 85mm x 45mm is used here. Measure the diameter of the work block and scribe a circle on to the face

of the platen using straight-leg callipers. Alternatively, you could cut a shallow recess for the workpiece to locate in.

Have the glue gun fully heated and ready, and if the platen is cold warm it up gently using a heat gun. Bring the tailstock up for support. I always use a revolving ring centre because it leaves a positive central mark which can aid future re-chucking if required. Rotate the work block to ensure it is running true. Align the work block accurately within the scribed line, or in the recess, on the platen and bring up the tailstock to support it.

Apply the hot-melt glue at the joint between the work block and platen, aiming for an even coverage on both surfaces. A second pass can be made for surety if preferred. Allow the hotmelt glue to fully cool to ensure it is cured. The glue will feel very hard once properly cured.

A glue chuck hold is not to be considered as certain as a tenon hold, so everything that follows is carried out in a gentler fashion than is perhaps usual. Ensure that tools are freshly sharpened and take lighter cuts than normal.



Truing the platen



Checking for flatness



Bringing up the work blank



Gluing the blank to the platen



Blank secured and glue cured and cooled



Completing the bowl foot



Loosening the glue joint



Prising the workpiece off the platen

The work block is turned into a small bowl with a 50mm diameter foot. A recess 42mm diameter and 3mm deep is turned into the foot. Work as close to the glue joint as possible but do not cut into the glue band. Once turned the exterior can be abraded, up to the glue line, as usual.

A heat gun and metal paint scraper can be used in tandem to soften the glue. The scraper serves as a heat shield to protect the workpiece and also to direct the heat on to the glue joint. As the glue softens scrape it away. Gently prise the bowl from the platen.

The platen face is cleaned of glue using a long-ground gouge or scraper and the face trued up once again. A short tenon is turned to the dimensions of the recess in the bowl foot. The bowl is pushed on to the tenon. A snug fit is aimed for. The bowl is now glued to the platen just as earlier and the last area of rim on the

exterior can be turned to match the rest of the bowl exterior. The bowl can be hollowed out in the usual fashion. The bowl can then be finish sanded, sealed, a finish applied as desired and removed from its glue hold as previously.

This may only be a small bowl, but it illustrates how useful the glue chuck can be. I would think nothing of turning blanks 200mm diameter and 80mm deep in this manner should the need arise.



Tenon turned on platen to take bowl foot



Truing the face of the bowl







The completed bowl

Using glue chucking for small, delicate items Glue chucks are very useful for small, delicate turnings where suitable jaws are not available, or where the workpiece is of such small dimensions that holding it on pin jaws would result in there being too little wood left to be turned.

A small block of ebony (Diospyros spp.), 30mm square by 90mm long was centred and glued to a platen using

CA glue and an accelerator. Once cured a delicate finial was turned, at a lower speed than if secured in a chuck, using a 10mm spindle gouge without any vibration or mishap. The finial can then be parted/ sawn off from the platen with little waste.

This process is ideal for small objects, such as knobs, finials, buttons, and small decorative doodads.



Block of ebony glued to platen INSET: Delicate finial turned

Conclusions

Glue chucks are useful devices, and once used you will invariably return to using them if only for their ease and speed of setting up. Provided that the materials used are of good quality and it is remembered that the hold is less assured than when held in a scroll chuck so turning needs to be more gentle, there are few limitations to using this technique. Jam chucks are equally useful, as we will see in the next in the series.

Now Available and On Display

at your nearest LAGUNA specialist





Stockists

ENGLAND

Aries Duct Fix

Faversham www.ariesductfix.com

Biven Machinery

Blackpool www.bivenmachinerysales.co.uk

D.B.Keighley Machinery

Leeds www.dbkeighley.co.uk

D.J. Evans Ltd.

Bury St. Edmunds www.djevans.co.uk

G&S Specialist Timber

Penrith

www.toolsandtimber.co.uk

Grovewood Machines Ltd.

Basingstoke www.grovewoodmachines.co.uk

J & C O'Meara Ltd.

Liverpool

www.ukwoodworkingmachinery.co.uk

Mansaw Machine Tools

Wolverhampton

www.mansawwoodworkmachines.co.uk

Markfield Woodworking Machinery

Leicester

www.mwmachinery.co.uk

Middlesbrough Tool Centre

Middlesbrough

www.middlesbroughtoolcentre.co.uk

Pen Tools Ltd

Hereford

pentools@btconnect.com

Norfolk Saw Service

Norfolk

www.norfolksawservices.co.uk

Snainton Woodworking Supplies

Scarborough

www.snaintonwoodworking.com

Tewkesbury Saw Company

Tewkesbury

www.tewkesburysaw.co.uk

Turners Retreat

Doncaster

www.turners-retreat.co.uk

West Country Woodworking

St Austell

www.machinery4wood.co.uk

Yandle & Sons Ltd.

Martock

www.yandles.co.uk

WALES

Timberman

Camarthen

www.timberman.co.uk

Data Power Tools

Cardiff

www.datapowertools.co.uk

NORTHERN IRELAND

B McNamee & Co Ltd

Strabane

www.facebook.com/bmcnameestrabane

The Wood Shed

Belfast

www.wood-shed.com

IRELAND

McQuillan Tools

Blanchardstown www.mcquillantools.ie

McQuillan Tools

Cork

www.mcquillantools.ie

Joe McKenna's

Limerick

www.joemckenna.ie

Frank Clark Ltd.

Cork

www.frankclark.k

John J Ronayne Ltd

Thurles

www.my-tools.ie

W.H. Raitt & Sons

Donegal

www.whraitt.ie

FINLAND

Je-Nettiverstas

Rovaniemi

www.je-nettiverstas.fl

HOLLAND

Baptist Voor Houtbewerkers

Arnhem

www.baptist.nl

SCOTLAND

Just Wood

Ayr

www.justwoodonline.com

Macgregor Industrial Supplies

Inverness

www.macgregorsupplies.co.uk

The Saw Centre

Glasgow

www.thesawcentre.co.uk



Stratos series lathes











Unique texturing tools



Threading jigs



woodturning

and so much more......



Carbide tools



Pro sanders







Negative rake tools

Split-turned cross-grain wall sculpture

Mark Sanger goes all out over this colourful decorative project

In my previous project I turned an endgrain sculptural spit-turned vase. To recap, split turning is a old technique used to produce multiple balusters or spindles for architectural accents on furniture and in buildings. This is achieved by cutting a blank through its length once or multiple times, with these sections being glued back together with a paper between each. The project is turned to the desired form, the sections split apart producing two or more identical items. Having produced numerous split-turned end-grain projects I wanted to adopt this method for a cross-grain project. The blank here with paper joints was produced by cutting parallel along the grain of a bowl blank to produce the waste section, alternatively a piece of waste wood could be sandwiched between two square sections of your choice with grain running in the same direction with the blank being cut from this after the glue has cured. As shown in my previous article in WT341. Both options, once turned and waste section removed, produce an ovoid form when the two outer parts are glued back together. Here a seasoned beech (Fagus sylvatica) cross grain 250mm diameter x 50mm thick bowl blank was chosen and cut on a bandsaw to produce the waste section with the cuts parallel to the wood grain (see blank illustration). The cut faces were planed flat and true before being glued back together with PVA wood glue and decorator's lining paper sandwiched between each join and left until the glue had fully set. The blank was reinforced for turning by screwing semi-circular bands of 10mm thick plywood. After initial turning and finishing of the profile with abrasive the blank is removed from the lathe, the paper joints split apart using a chisel and mallet, the paper removed from each surface and colour added by applying a deep-red water-based wood stain and allowed to dry prior to the outer sections, excluding the middle waste, being glued and clamped back together prior to the centre bowl being turned into the face of the now ovoid blank. Final colour is

added to the project on completion of the



turning with more wood stain and copper acrylic artist paint being added and textured to the inside of the bowl. Finally, copper highlights are added to the surface of the project using a dry brush technique to apply a fine coat of the acrylic copper paint and the piece finally sealed with acrylic matt spray

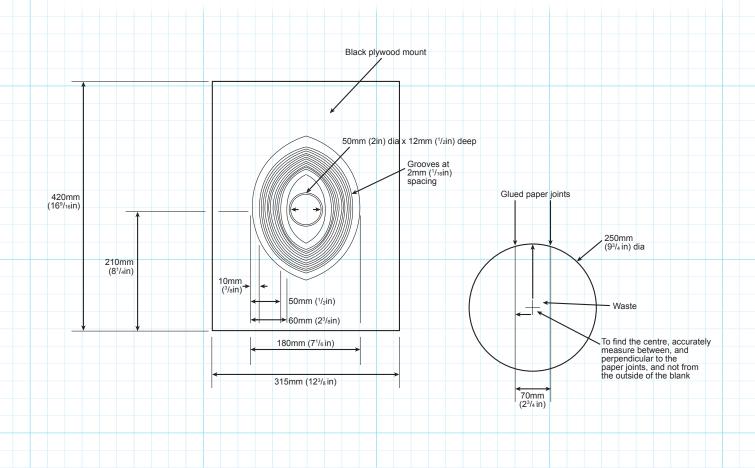
lacquer with the project being mounted on to a black plywood backing for display. As with all projects, the ideas here can be adapted to suit your own taste and preferences of design and/or colour so see how you can adapt the project or simply follow the suggestions here. Above all, stay safe and have fun.

TOOLS AND MATERIALS

- Personal and respiratory protective equipment (PPE & RPE)
- Bowl gouge
- Spindle gouge
- Small skew chisel
- 6mm parting tool
- Chuck
- Revolving tailstock centre
- Drive spur
- Bandsaw
- Hammer and chisel
- 2 x ratchet clamps & 1 x band clamp
- Screwdriver
- Battery powered drill driver
- 3 & 6mm standard twist drill

MATERIALS

- Main form: 250mm diameter x 50mm thick (Fagus sylvatica) cross-grain laminated paper glued seasoned blank (see illustration)
- Backing/mount: 420mm x 320mm x 10mm long ply wood or similar
- Abrasive 120-320 grit
- 5 No 5mm dia x 20mm crosshead screws
- Heavy-duty picture frame D-ring
- PVA adhesive
- Acrylic spray sanding sealer
- Acrylic spray matt lacquer
- Acrylic matt black spray automotive paint
- Small brush
- Acrylic artist high build artist paint (copper)
- Small synthetic artist brush
- Soft medium synthetic brush (make up blusher brush)



PRODUCING THE PAPER JOINT BLANK

Take a 250mm diameter x 50mm thick seasoned bowl blank of cross-grain beech (*Fagus sylvatica*) blank. Accurately mark the centre and draw a centreline across the face parallel to the grain and mark a further two 35mm either side of this centreline (see cutting illustration). Cut along these lines using a bandsaw and plane all faces flat. Apply good PVA adhesive to the planed surfaces and glue back together, sandwiching a piece of thick decorator's lining paper cut slightly larger than the cut faces between and clamp tightly together. Here I used a band clamp and two ratchet clamps. Once clamped, set aside the blank for the glue to fully cure as per manufacturer's instructions.



22 www.woodworkersinstitute.com



SAFETY FOR SPLIT TURNING

- Always wear a suitably rated full-face mask and respirator when turning. Turning a split-turned project requires vigilance.
- 2. Always turn at a lower speed than normal to reduce the chance of delamination.
- 3. When producing a split turning, always glue using a highquality wood glue to reduce the chance of delaminating during turning.
- **4.** Always check the lathe speed is low before starting the lathe and stand to one side and out of the direct line of rotation of the blank when possible while turning.
- 5. Always fix/screw plywood securing sections to the blank for extra security against delamination.













1 It is critical that the centre point of the waste section of the blank is accurately marked for mounting and not the centre of the blank from the outside edges as the planing of the two outer sections may have removed more material from side than the other. To mark the centre, measure inside and perpendicular to the planed paper joints as shown in the illustration.

Accurately mark the centre of the blank and mount on a 10mm screw chuck with the ply-supported face towards the tailstock and align the screw holes within the waste central section as described. Bring up the revolving tailstock centre for added support, start the lathe, bringing the speed slowly up to 500rpm as you stand out of the line of the rotating blank. Using a bowl gouge, clean up the outside of the blank with several light cuts.

- **2** Mark the diameter of the spigot for the jaws of your chuck on to the face. Here I am using 55mm C jaws so the spigot will only be turned within the waste section of the blank. Using a parting tool presented on the toolrest with handle higher than the cutting edge presented to the wood plunge cut into the face to a suitable depth, producing the spigot with a wide enough recess to allow the jaws to fit on to the spigot for clamping.
- **3 & 4** Refine the spigot profile to suit that of your chuck jaws if required, cutting with the toe of a small skew chisel presented horizontal on the toolrest in scraping mode. Using the bowl gouge, clean up the front face taking several light cuts. Here I have temporarily removed the revolving tailstock centre support with the lathe speed kept low at 500rpm.
- **5** Mark three lines on the front face using a pencil and rule at 15mm, 50mm and 60mm from the rim. This, when subtracting the waste section, will leave a central area of 60mm to accept the bowl after the blank has been split and glued back together later at process 16 & 17.
- **6** Using the bowl gouge or a spindle gouge create a 15mm wide bead on the face to the 15mm line marked and blend the rim to a smooth curve to approximately halfway down the outside edge.

- 7 Create a second bead on the face between the 50mm and 60 mm lines, blending the inner edge at the waste wood side down into the bead. Finally, convex the surface between the two beads, aiming for a smooth, flowing curve.
 - **8** Create equally spaced grooves approximately 2mm wide by 1mm deep with the toe of a skew chisel presented horizontal on the toolrest in scraping mode, with the handle higher than the cutting edge in contact with the wood.
 - **9** Finish the surfaces with abrasive from 120-320 grit, being careful not to alter the fine detail of the grooves. Make sure here you are using suitable PPE and dust extraction equipment.
 - **10** Remove from the lathe and place down on to a flat surface, protecting the face of the project with a soft cloth. Using a wood chisel and mallet gently split apart the paper glue joints.
 - 11 Place 120 grit abrasive on to a flat surface here I am using a flat section of chip board. Rub each paper joint face of the blank (excluding the waste section) until all the paper and glue has been removed. Be careful not to alter the surface profile of the face, making sure it is kept flat against the abrasive or the faces may not sit together correctly when glued back together.
 - **12** At this point I decided to stain both sections with deep-red water-based wood stain as once glued and clamped the glue will create a line that will be impervious to the stain and ruin the overall effect of the finished project.
 - **13** With the stain fully dry apply a thin layer of PVA wood glue to the face of one half of the two sections and clamp together, being careful to line up the detail on both sides as closely as possible. This was left to fully cure before moving on to the next stage.
 - **14** Mount the project on to a faceplate. To do this I accurately marked the centreline of the glue join from the rim, measuring and marking using a rule and pencil. Check from both sides and to the rim perpendicular to the centreline. I then scribed a circle with a compass a few millimetres larger in diameter of the faceplate. The faceplate was then centralised within this as the screws are slowly tightened using a battery powered drill driver.
 - **15 & 16** Using a pencil and rule mark the rim diameter of the bowl to be turned into the face. Using a small bowl gouge hollow out the bowl, producing a smooth curve from the rim down into the base. Make sure the flow of line is smooth as this will eventually be the focal point of the project and any change in line will be noticeable after final painting later.



















24







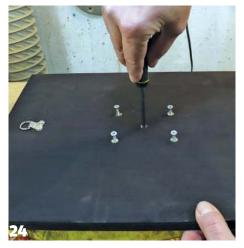












- 17 & 18 Using the toe of a skew presented in scraping mode as in step 8, create a groove around the rim of the bowl as shown in the illustration. Finish the inside of the bowl and clean up the edges of the groove if required with abrasive from 120-320 as before. Remove from the lathe and apply another layer of deep-red wood stain to the inside of the bowl, groove and the rest of the surface of the project and set aside until dry.
- 19 Remove the project from the lathe, seal the surfaces with several fine coats of acrylic spray sanding sealer, making sure you are wearing a suitable face mask, then set aside to fully cure. With a fine paint brush apply a thick layer of highbuild copper acrylic artist paint to the inside of the bowl. Work from the base of the bowl up to minimise the amount of over painting on to the rim. If you do get paint on the rim don't worry too much, just wipe away with a damp piece of paper kitchen towel.
- **20** Using a small natural sea sponge tamp the surface of the paint to create an organic texture over the surface of the bowl. Again, be careful not to get any paint on the rim. Wipe away any paint that may get on the rim with the damp kitchen towel as before and set aside for the paint to fully cure or speed up this process by warming the paint with a hair dryer on a low setting. If required, sharpen the detail of the rim with 320 grit abrasive by gently rubbing away any paint, working from the rim outward away from the painted bowl interior.
- 21 Use a soft bristle brush to add highlights to the surface of the beads, grooves and outside edge of the project. To do this tamp the tip of the brush into the copper paint, thinning it with a drop of water first. With the tips of the bristles evenly coated with paint, gently tamp the bristles on to a piece of kitchen towel until the brush leaves only a trace of paint on the towel. Gently flick the brush bristles over the surface of the project, leaving highlights of copper paint on the surface, and repeat as many times as required until the desired effect is achieved.
- **22** Apply several layers of matt acrylic spray lacquer to the project and set aside to dry.
- 23 & 24 Drill a 3 mm pilot hole 10mm deep centrally into the back of the project using the previously marked centre mark that was used for the mount for the faceplate.. Be careful not to drill all the way through into the painted bowl. Now, prepare the plywood mount and sand all surfaces. Mark the centre on the back of the ply and mark four points 50mm from centre at equal spacing. Drill and countersink the five 6mm on the holes marked. Seal with sanding sealer and spray with matt black spray paint Then mount the project using a 5mm x 20mm long screw screwed through into the centre hole of the ply and align vertically. Screw through to fully secure it. Mark and place a heavy-duty picture frame D-ring for hanging the project at the top section. You are now ready to display it on your wall.



A great day out, full of Demonstrations, Personalities, Trade Stands, Advice & Fun

Advance tickets can be purchased by calling the ticket hotline:

01749 813899

On sale 3rd January 2020

Free parking, Showguide and Raffle

Open hours: 10:00am - 4:00pm Both Days

Entry:

One day £10 / In advance £7
Two days £15 / In advance £12
Under 16's FREE

www.nelton.co.uk

The Decorating Elf



the most versatile texturing tool available - so simple to use



Talk with your Henry Taylor Stockist today!







TURNING KITS, ACCESSORIES, AND MORE









Stoppers









www.stainlessbottlestoppers.com

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

All stainless steel products manufactured from 18-8 FDA food contact compliant 304 stainless steel.

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



Grade 304 Stainless Steel





Premium Quality Tools and Service

www.turners-retreat.co.uk









FIRST FOR...PENS, PYROGRAPHY, TOOLS AND MACHINERY































Experiments in piercing part 2

Richard Findley's Editor's Challenge this month is to make a project which includes piercing



Last month I was challenged by the Editor to experiment with piercing. I was using the Marathon N8 Hi-torque 45K micro drill/ detailer unit, but there are other options available to you. I tried cutting various shapes in 3mm-thick veneer-like slices of sycamore, tulip and walnut. There is something of a learning curve in this so I knew I'd need to use two articles to thoroughly cover the topic. Like all of the articles in this series, I have never done any piercing before and the Editor's challenge is designed to take me out of my comfort zone and test my skills. Having somewhat gotten to grips with the tool and methodology I'm ready to take on a project, but what? I could make a wide-rimmed platter or a small hollow

form and randomly pierce it, but I feel like these have been done before plenty of times in the magazine and I don't feel particularly enthused by them. I need some inspiration.

IDEAS AND INSPIRATION

My artistic friends tell me that inspiration is all around us and it just takes practice to see it. I know I want to make a pattern of some sort rather than just a random cluster of holes, but I need to find a pattern to base something on.

In the original email from John at Woodart Products, where he described to me how to use the tool, he used the word 'filigree' to describe piercing. I'm aware of the term filigree but I've never

associated it with piercing as such. A Google images search certainly provided food for thought.

The actual inspiration for the project though came from much closer to home – my nine-year-old son. He is currently fascinated by ships in general and *Titanic* in particular. Fascinated in that wonderful way that only a child of this age can be; he reads and watches everything he can on the subject, absorbing it all and there aren't many facts he doesn't know about it. He also loves to tell me about everything he has learned, so on one such history lesson he was showing me something in one of his books when a picture caught my eye. Famously, there was a huge glass dome above the first

class passengers' grand staircase with an intricate pattern in the glazing. Something clicked in my head and I sent my son away to find me the best possible picture of the glass dome. Moments later he presented me with a series of fantastic images and I knew what I'd be making.

RESEARCH

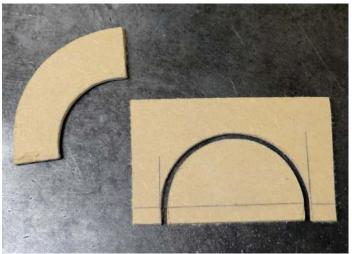
For complicated copyright reasons I can't show you the picture, but a Google images search of 'Titanic dome' brings it up. The repeating pattern is complex – far too complex for me to recreate in wood - but I can certainly use it as a starting point and a base to build my simplified idea upon.

I love the styling of the late Edwardian period, which shows hints of the Art Deco style which was still to come in the 1920s. The two main hardwoods used on Titanic were oak and teak. Oak is no problem but

teak won't really be right. I decided that walnut, which had worked so well in my experiments, would contrast well with the oak and, if all else fails, I can always spray it black to mimic the wrought iron that would have been all around the ship.

My idea then, is to make a tall box or container from oak, with a walnut dome, pierced with a design inspired by the dome on Titanic.

Starting the project – the dome



MDF templates for the dome



Checking with the template



Turning the top of the dome





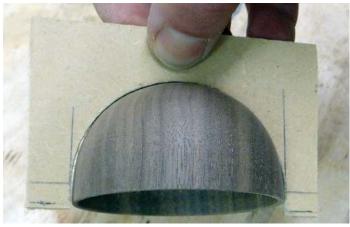
It is mounted over scrap in the chuck

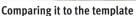
The obvious place to start is by selecting a piece of suitably sized walnut. I have some 75mm-thick stock from which to cut it and I think a true hemisphere will look great, even if the original wasn't quite like this. I decide that a spindle blank will work better than a cross grain bowl type blank as the end grain structure should be stronger once pierced.

I make templates by drawing a semi-circle on a piece of 3mm MDF, which will be the outer curve. I then reset my compasses by 3mm, taking into account the thickness of the wood, and draw another semi-circle for the inner curve. My first challenge will be to turn a perfect hemisphere with an even wall thickness of 3mm all around.

I mount the walnut in the chuck and begin by turning the inside to match the template, initially with my spindle gouge and refining with my curved negative rake scraper, which produces lovely, long, fine shavings on the end grain walnut. Once satisfied with the inside shape I sand to 320 grit and turn it around.

I turn a scrap piece of wood into a rough dome with a stepped base that closely matches the base of the walnut dome, which sits comfortably over it. It isn't a jam chuck - I don't think the final 3mm thickness will stand up to it, but it is a close fit. The live centre is brought up to hold it all in place while I turn the outside of the dome. This shape is mostly based on the template but I also use my callipers, which have a measuring scale on them, to check that the wall thickness is accurate. This will be of vital importance as, once it is pierced, there will be no hiding a thicker section of wall. After checking and adjusting several times I am happy that it both matches the template and has an even 3mm wall thickness.







Callipers confirm a 3mm wall thickness

MARKING OUT

During my experiments I described piercing as being a little like colouring in a picture, in that as long as there is a line to work to, I can lightly work up to it with the tool. This means that marking out the design accurately will be incredibly important if this is to work.

I sketch out a very simplified version of the dome, using the Gothic-type sweeping arches and the oval panes from the original, on alternate vertical lines. I feel this is a nod to the complexity of the original but keeping it - hopefully within my skill level.

I fit my indexer to the lathe and set up to draw the divisions for the windows. My initial sketch suggests that eight panes worked anyway as there needs would work well. I set up the indexer to use the 36 division ring of holes and use every fourth hole, leaving me with nine divisions. I rest the shorter MDF curve template on the toolrest and draw my pencil line along this. Sometimes, by only using the straight toolrest, a pencil line can deviate from dead straight.

I am satisfied with the results so far, although I quickly realise there are more than nine lines. Double checking my setup I see that I have, in fact, used the 48 division ring and using every fourth hole had actually given me 12 divisions. I study it for a moment and decide two things: first that nine divisions wouldn't have

to be an even number if I'm to have the oval pane on alternate verticals, and that, actually, 12 looks pretty good.

Thinking it through as I go, it suddenly strikes me that, although I have a line which shows the centre of the vertical. there needs to be some thickness there. I decide that 3mm would work - this is partly grasped from thin air and partly based on the 3mm wall thickness.

I carefully work over each line with my small steel ruler and a sharp pencil and mark 1.5mm each side of my indexed lines and then re-draw the lines as I had before, using the MDF template as a guide.



A sketch of my idea



Marking out using my indexer



Adding the extra lines

OVAL PANES

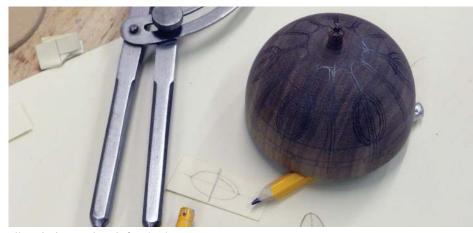
At this point I have my 12 verticals marked out and I need to now add the oval panes. I cut out some thick paper/ thin card as a template. I gauge the size from the walnut dome, settling on 20mm high and 10mm across. With the dome on the lathe I draw the top and bottom lines, 20mm apart to guide where I position the template.

By folding the paper into four, I only have to cut one good curve and, once unfolded, that curve is repeated and I



Marking the ovals with the paper template

have a good oval shape. Another advantage of folding the paper is that I have an accurate vertical line on the paper to line up with the one on the dome, making it reasonably easy to position and hold it while I draw around it. Of course, like the vertical lines, the outline of the template is only a centre line and I find I need to painstakingly work around each of these lines, marking out a 3mm thickness and drawing in a line to cut against. Finally though, the marking is done and I am pleased with the look so far, but after all that marking out I am nervous of just how much work I have given myself with the piercing.



All marked out and ready for piercing

Piercing

Before making a start on the actual dome, I think I should have a practice, so I get one of the thin pieces of sycamore I had left over from part 1 and mark out the tall Gothic arch and an oval and have a go at piercing it. This goes according to plan and gives me confidence that it should all be fine on the walnut dome.

This is the first time I have worked on to a curved surface and while there isn't a great deal of difference in the actual cutting, holding it is a little more awkward. Previously I had worked off a block on the bench but that isn't so practical now. In my chats with John at Woodart he had suggested that some people hold the work on a cushion on their lap. This seems as good a plan as any so I grab from my van an old pillow, which I use to pad things out so they don't roll around, and settle down to work.

I sit on my workshop stool in front of my bench. The power unit is on the bench along with the cradle for the hand piece. Once again I don't use the foot pedal that comes with the unit, and simply flick the power switch as I need it. I sit with the pillow on my lap and everything I need within easy reach. I opt for the 1.2mm piercing cutter that I had gotten on well with last time.

I begin by cutting the oval windows. There's no particular reason for this, it just seems like a good place to start. The cutter easily enters the wood and I cut out a rough central hole, enlarging it in an clockwise direction until I get close to the pencil line and gently working up to it as best I can. I use the pencil line as my main guide but also look at the overall shape I've made and occasionally make adjustments to try to perfect it.

I rest my forearms on the pillow, gently cradling the dome in my right hand, working with the hand piece in my left (I write left handed). The little finger of my left hand helps to stabilise things

surprisingly well. I am cautious of where the fingers of my right hand are so that the cutter can't accidentally touch them as I work. I have an old shaving brush which is useful for sweeping away the dust and shavings that the cutter produces.

With all six of the oval windows cut, I move on to the larger openings. The process is much the same as before - I remove the bulk of the centre and then gradually work up to the lines. This is one of those jobs that can't be rushed, it just takes as long as it takes. Each window takes a little over 10 minutes to cut, a quick sum in my head - which is something I constantly find myself doing as a production turner, working out how many I can make in a certain time period. how long I have left of the job, can I do it faster? - tells me that I have a little over two hours of this left. I find that there are two ways to look at jobs like this - it could be viewed as a little tedious and I could find myself clock-watching to the

end, or I can relax into it and enjoy the process. The latter is always the best way to achieve the best results. It is far better to relax and enjoy the process — time passes easier, results are better and the whole process is more enjoyable, so that's what I do.

This kind of work is more tiring on my hand and arm than writing. The hand piece, while by no means heavy, is heavier and more bulky than a pen, and the movements of cutting and refining shapes are more strenuous on muscles than writing, so I have to take a couple of short breaks to relax my hand and stretch out the muscles in my forearm, all of which feel the work that I am unaccustomed to.

After cutting out each window I use a lollipop stick with 240 grit abrasive wrapped around it to smooth out the cut surfaces and tidy things up a little. I am very careful about this and, despite a little flex in the remaining parts, nothing breaks.



Making my practice cuts



Practice complete, I am ready to move on



Piercing the oval windows



A shaving brush comes in handy



The oval windows complete



Working on the larger windows



Sanding the edges



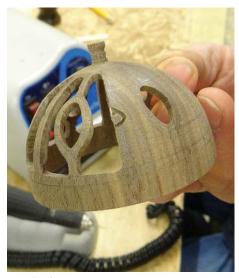
Brushing away dust

WHOOPS

On my penultimate window I have a slight slip up. I'm not entirely certain what happened, whether it was a momentary lapse in concentration or if I removed the cutter from the wood wrongly, but the tip zipped across the surface, crossing my pencil line and cutting about half depth into one of my vertical bars. Once I finish

swearing I have to make a decision – do I scrap it and start again or do I fill it and move on? If this were a commission piece for a paying customer I would scrap it, but as it's essentially a learning and experimental piece I decide to fill it. I use some wax filler stick in a dark brown (I forget the exact colour of it, possibly dark oak). I cut a piece

from the stick and place it over a radiator for a few minutes to soften (as I write this it is December and around 12°C in the workshop). I knead it between my fingers a little and work it into the scar, slicing away the excess with a sharp chisel. I think, under oil it should be barely noticeable, although I will forever know it is there.



My mistake



Filling with wax...



... it should look okay once oiled

Finial

The original dome was actually under a grill on the deck of Titanic, so didn't have a finial, and in the pictures I've studied, there appears to be a glass light fitting hanging beneath the dome on the inside. With this being a box of sorts, I feel it needs something to finish it off and to give something to lift the dome lid off with. At 3mm thick there isn't enough thickness to drill and glue in a tenon, so I decide to drill right through the centre of the dome on my pillar drill with a 5mm lip and spur bit - this was slightly nerve wracking - and make a pair of finials to form a drop finial on the inside. I cut a piece of oak and turn the two finials. The upper finial has a 5mm-diameter tenon, the drop finial has a 5mm hole and the two parts push together around the hole in the top of the dome.





Gluing into place



Fitted to the dome

Box

The body of the box itself is simply an oak cylinder. I consider whether or not some sort of shaping is needed but decide that the focus should be on the pierced dome. I want it tall to give the dome some height, as the original would have had. I settle on just a little over 100mm, which seems to look right.

The next decision is how much to hollow it? The practical side of me wants to hollow it to the bottom to make it useable, but this is never going to be a useable box, so I choose to hollow a hemisphere, which mirrors the dome above it. I work to another template for accuracy. This leaves it heavy, stable and more representative of the oak newels of the grand

staircase and the solid nature of the ship beneath the dome. If I really want to get artsy, I could imagine that the delicate dome represents the fragility of a ship on a huge ocean and of life itself, but that may be getting a little pretentious.

FINISHING

I fit the dome to the base very loosely, so it can be easily removed with fingertips on the finial. The whole thing is finished with three coats of hardwax oil, which I brush on to the pierced dome and take a lot of care to wipe off the excess so there aren't puddles of oil anywhere, and it is finished.



Hollowing the box



Checking the inner shape against another template Oiling the dome



Conclusion

I said in my previous article that piercing isn't really my thing and, although I enjoyed the challenge of this article, I stand by that statement. My artistic friends who use these techniques can rest easy that I won't be any kind of competition to them.

I perhaps made this more difficult for myself than I had to, but these articles are all about being challenged, so I don't really mind that. I am pleased with the end result and I feel it does at least nod to the dome on that infamous ship. Some of the edges of the openings are not as smooth as I might like - I think more practice would sort this out. I have little doubt that this project in the hands of a more experienced artist would turn out to a higher standard, but for a first major piercing project, I am satisfied.



The finished project

34



Olivers Woodturning Little Singleton Oast, Goldwell Lane, Great Chart, Kent, TN26 1JS Follow us

Telephone: 01233 613992 E-Mail: sales@oliverswoodturning.co.uk

Shop: www.oliverswoodturning.co.uk

Opening Times - Monday to Friday 9am to 5pm. Online 24 hours a day, 365 days a year.

As I may be teaching please call in advance if you are visiting for advice.

Open most Saturdays by appointment only.

Visit our webshop at www.oliverswoodturning.co.uk



Midi Pro Woodturning Lathe

- · Big lathe features in a Midi size lathe.
- 1 HP Motor (230 V). 3 pulley range.
- M33 x 3.5 Spindle.
- Swivel head with 14" swing over the head.
- 1" tool post.
- 2MT head and tail stock.
- Strong and stable.
- Tail stock stroke 100mm.
- 5 Year Parts Warranty.

£1200.00

Buy a Midi Pro from us and get a FREE 3 hour Woodturning Basics lesson

nova NOW AVAILABLE FROM





Nova G3 & SuperNOVA2 Chucks come with a set of 50mm Jaws

Available as Direct Thread or choose from a range of Insert Adaptors

Companion Chucks & additional Insert Adaptors also available

Limited Time Offer - Additional Jaws
Nova G3 with FREE 25mm Jaws worth £34.99
SuperNOVA2 with FREE Pin Jaws worth £39.99





New Bowl & Spindle Blanks

- ASH - BEECH - CHERRY - ELM - LONDON PLANE

• OAK • RIPPLED SYCAMORE • SYCAMORE

Introducing...Turner's Edge

Manufactured by ROBUST





Brent English-Owner of Robust Tools and Turner's Edge

Robust

Turner's Edge™ woodturning tools are manufactured by Robust Tools using Nitrided M2 High Speed Steel. What's special about Nitriding? Nitriding is frequently applied to industrial metal cutting tools to improve performance. Not a coating or plating, Nitriding is diffused directly into the metal's surface, increasing the cutting edge hardness to the equivalent of 75 Rockwell. The end result: Longer edge holding

and smoother chip ejection from the polished flute. Currently in stock: 5/8", 1/2" and 3/8" bowl gouges with parabolic flute and 3/8" spindle/detail gouges.

"We design and build woodturning lathes that become an extension of the turner's creative spirit."

It's not easy to improve something as good as our **Sweet 16** lathe, but we listened and made a few changes we think you'll like. Introducing **Sweet 16, Version 2.0**. We've added digital readout and moved the bolts that attach the gap section to a more convenient spot on top. Our improved caster design keeps the casters on the lathe and engage with a flip of a lever. More info on our website.

All Robust products are made in Barneveld, Wisconsin where our skilled craftsman earn a living wage. Their commitment to quality is reflected in the products you receive.



Turner's

Turn diameters up to 32" by removing the Sweet 16's gap bed.



Email: info@turnrobust.com • Phone: 608.924.1133 • www.turnrobust.com

Wooden ladles

Les Symonds makes two versions of this handy lathe-turned vessel



Apart from its size, the crucial difference between a ladle and the formerly made spoons and scoops, is the fact that its handle is offset, rather than in line with the bowl rim, allowing the ladle to be used to pick up and pour out liquids. Having examined several ladles in my own kitchen, it appears that the angle between the handle and the bowl varies considerably from ladle to ladle. This probably can be accounted for by the variety of shapes of the containers that liquids might be dispensed from. For example, a ladle used to 'dip' milk out

of a churn, with a narrow neck, would need its handle set at close to 90° to the rim of its bowl, whereas a ladle used to dispense punch from a widerimmed punch bowl, or soup from a large saucepan, would function quite effectively with a much flatter angle, say about 30° to 40°.

As with the article on spoons in issue 340 of *Woodturning*, I will again be making two items; of one-part and two-part construction. The one-part ladle is going to be quite a challenge for inexperienced turners, so if you

have even the slightest doubts about tackling this, work on the two-part ladle until your skills develop. When you feel ready, make a one-part spoon first, then tackle a one-part ladle.

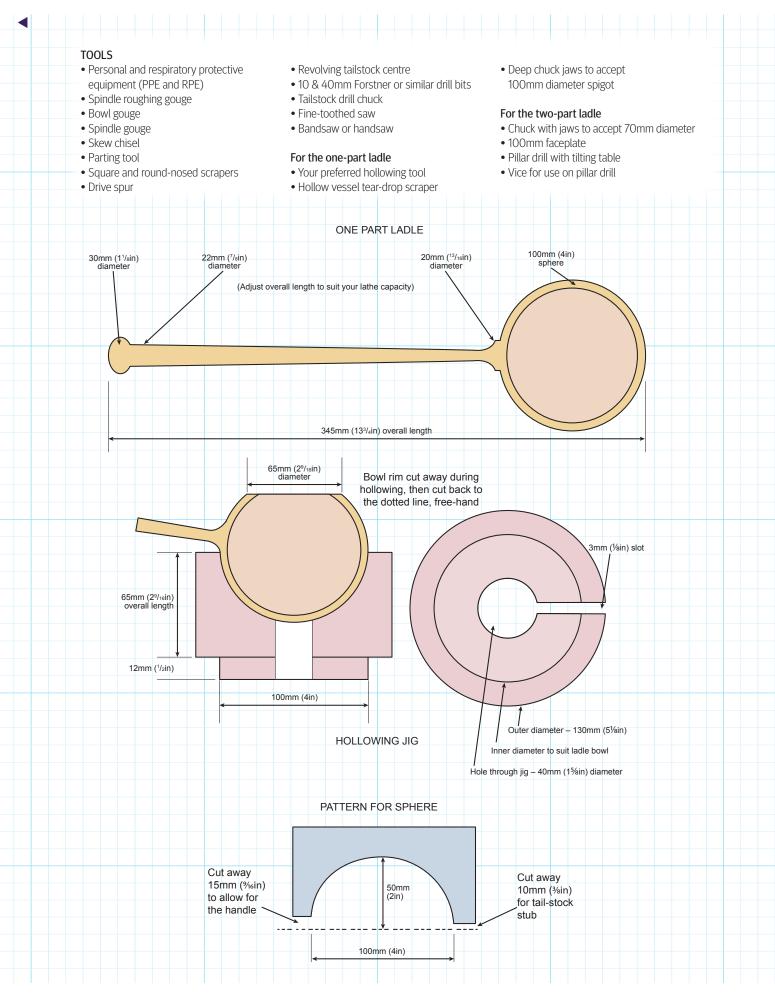
I haven't gone into any great detail with the design of the handles, as this is very much a matter of personal taste, so use my drawings as a guide, but by all means adapt them to your own taste. Furthermore, the overall length of the one-part ladle may well be determined by the capacity of your lathe, so once again, adapt my design to suit your needs.

HEALTH AND SAFETY

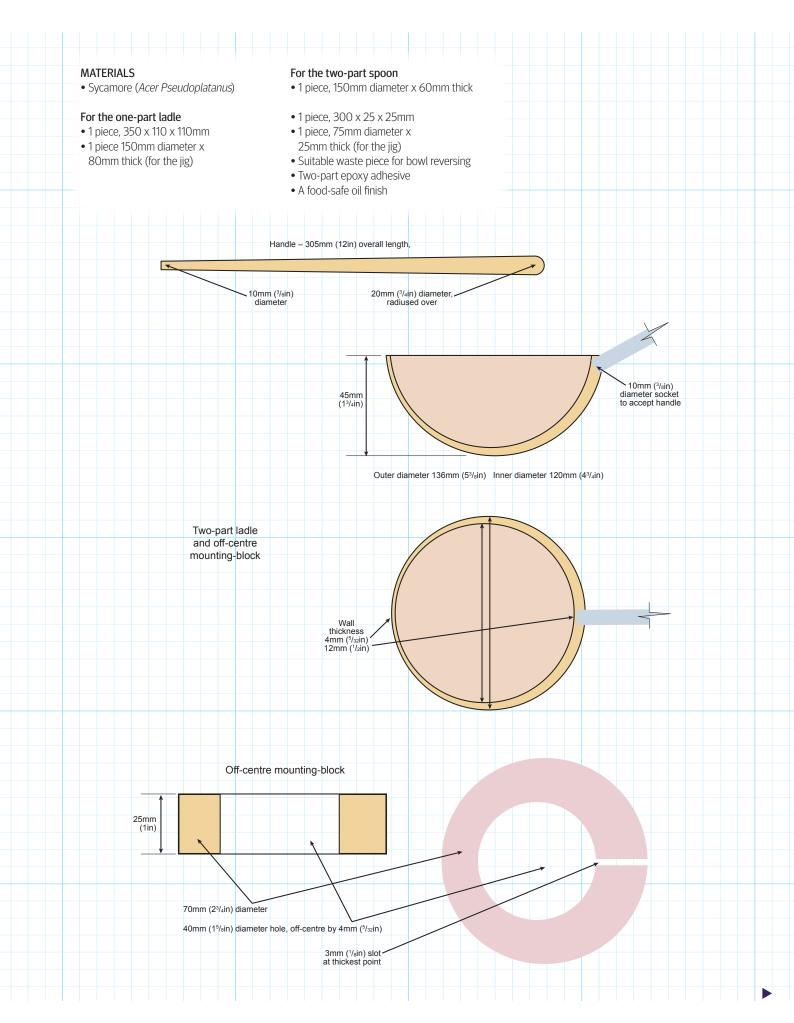
With the one-part ladle, there are obvious safety implications when turning a sideways projection, such as its handle. This will not be visible when rotating, so take precautions to avoid having to move back and forth past the workpiece. Set up a table where you can keep your tools and accessories away from the headstock end. Use a portable light, with its flex secured out of the way, to shine directly onto the rotating handle; this will make it slightly more visible. You can even rig up a few lines of masking tape across the lathe, in front of the workpiece, to act as a strong visual reminder that behind them lies possible danger (see step 25).

Most importantly, if you are not sufficiently skilled or confident, make just the two-part ladle until your skills are more advanced; the one-part ladle uses advanced techniques and skills, so it should not be attempted by beginners.

If you do not feel confident in hollowing out the ladle head with the extended handle whizzing around on the lathe you can hollow out the inside of the bowl off the lathe using a rotary carving tool loaded with a combination of burrs to remove the bulk of the waste, followed by suitably shaped sanding heads/attachments of the right profile to clean up afterwards. It is a slower process but just as effective.



38 www.woodworkersinstitute.com



The two-part ladle

- **1** Select your timber and prepare it for turning, then, starting with the blank for the bowl of the ladle, mount it on a small faceplate or screw chuck, paying due consideration to the length of the screw fixing/s. With a bowl gouge, clean off the outer edge of the blank, roughing it out into a cylinder, then use a shearing cut to achieve a good finish.
- **2** Clean off the outer face, which will become the underside of the bowl of the ladle, leaving it flat and with a small centrepoint established. Cut a chucking-tenon, a little over 40mm diameter and at least 12mm deep. Working out from the tenon and towards the rim, cut the shape of the underside of the ladle bowl to a gentle, continuous curve.
- **3** If you need to, scrape the surface to remove any tool-marks, then abrade to 400 grit and set the bowl to one side, leaving its faceplate (or screw chuck) in place.

THE OFF-CENTRE MOUNTING BLOCK

- **4** Prepare a piece of straight-grained hardwood to a cylinder, 70mm in diameter and about 25mm thick, set it into a chuck and clean up the outer, flat face, establishing a small centre mark.
- **5** Draw a pencil line out from the centre towards the edge (a radius), then make a mark on the line, 4mm out from the centre. I will later refer to this mark as X. Remove the block from the lathe and place it in a vice on the table of your drill-stand, with a piece of scrap wood underneath it.
- **6** Place a 40mm Forstner bit in the drill chuck and, before switching on, bring the drill down to ensure the centre spur lands precisely on the mark referred to above as mark X. Drill a 40mm hole right through the off-centre mounting block, centred on X, into the top face of the scrap wood. Remove the off-centre block from the vice and make a saw cut from the edge across to the hole, where the edge is at its widest, then open the saw cut up to a slot, about 3mm wide.

HOLLOWING THE LADLE BOWL.

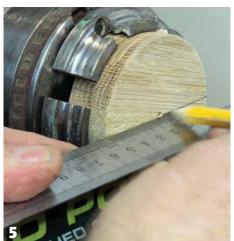
- **7** Return the ladle bowl to the lathe and refine the diameter of its chucking tenon such that the 40mm hole in the mounting block pushes on to it, even if it means you have to spring the block open very slightly but only very slightly, otherwise you risk breaking the jig.
- **8** Remove the ladle bowl from its faceplate and set a chuck on to the lathe, then set the off-centre mounting block into it, with its saw cut/slot lined-up with a gap between any two adjacent jaws. Press the block into place, press the bowl into the block and then tighten the chuck. The block will compress, reducing in size slightly, thus gripping the chucking tenon on the underside of the ladle bowl.

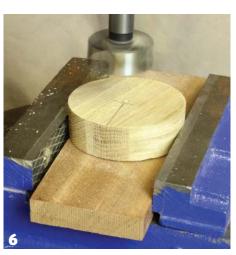




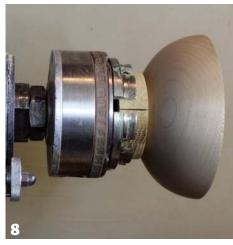












40 www.woodworkersinstitute.com













- **9** Set a toolrest up against the face of the ladle bowl, rotate the chuck slowly by hand until its narrowest point sits alongside the toolrest, place the tip of a pencil 4mm in from the edge and rotate the blank by hand to draw a circle on it. This circle will clearly mark the off-centre bowl of the ladle and will be your guide to work to when the wood is revolving. Hollow the bowl very gently, make shallow cuts so as not to put too much stress on the mounting block.
- **10** Check the chuck iaws occasionally to ensure that the wood fibres in the jig have not succumbed to the jaw pressure and caused the chuck to slacken its grip a little. Also, regularly check the bowl's wall thickness at its narrowest point and check its depth.
- **11** When you are happy that you have made the bowl as thin as you feel confident with, use a scraper very gently to clean its surface, then start abrading with 120 grit abrasive, with the lathe running at a slow speed (about 200rpm). This will allow you to round-over the rim, inside and out, quite effectively. On the outside, at this speed and with gentle pressure on the abrasive, your hand will move in and out to maintain contact as the offcentred wood revolves. Abrade down to 400 grit.
- **12** Make a pencil mark on the rim and the outside of the bowl, where the rim is at its thickest, then remove the ladle bowl from the chuck and its mounting block.

To reverse-turn the bowl so as to remove the chucking tenon, mount a scrap of timber in a chuck, clean its outer face then cut a recess into it such that the ladle bowl sits snugly into the recess with the tailstock engaged in the centre mark previously made (step 2).

- 13 Using a spindle gouge, gently turn away the chucking tenon to a small, central cone, then abrade the remaining surface down to 400 grit. Carefully cut away the central cone with a fine-toothed saw, remove the ladle bowl and its reversing mount from the lathe, set them down on the lathe bed and then use a sharp bench chisel to pare away the remaining stub of the cone, before hand sanding to 400 grit.
- **14** Tilt your pillar drill's platform over to 45° and lock it into place, then clamp the bowl, rim upwards, on to the table, using a few layers of tissue paper beneath it and inside the bowl, where a wooden pad with a gently rounded surface will be placed to take the pressure from a G-cramp, pinning the bowl into place on the table. Set a 10mm lip-and-spur drill or Forstner bit into the chuck and, before switching on, wind it down and adjust the position of the bowl such that it sits squarely to the drill and the central spur of the drill lands on the corner of the rim, precisely at the formerly made pencil mark. Next, switch on and gently lower the drill until it cuts a small socket (mortise) for the handle to be set into. Pay very special attention to how deep you drill this hole.

TURNING THE HANDLE

15 & 16 This is a simple piece of spindle work and you are free to shape it as you wish. Mount the blank between centres and reduce it to a cylinder. Make two distinct cuts with a parting tool, one directly at the tailstock end, down to about 12mm diameter, the other as close to the headstock as you can comfortably work, also reducing this to about 12mm. This will eventually be reduced to form a 10mm stub tenon to fit into the socket in the ladle bowl. At the tailstock end, use a spindle gouge to radius the end over.

17 Use a skew chisel or a spindle roughing gouge to taper the handle down from the tailstock end to the 12mm step at the headstock end, then use fine cuts to reduce the taper and the stub tenon down to a little full of 10mm.

Abrade to 400 grit and remove from the lathe, cleaning off the stubs and abrading the end of the handle by hand.

18 Finally, test the handle for a fit into the hole, making any slight reductions to the diameter of the tenon with abrasive, if needed, and glue into place with two-part epoxy adhesive, carefully applied into the socket with an implement such as a dental pick or cocktail stick.

The one-part ladle

19 First, please read the health and safety notes about this project. Select your piece of timber and mark the centres at each end, then mark out a sphere for the bowl and a 40mm central spindle for the handle ...

20 ...use these marks to cut away as much waste wood as possible on your bandsaw before mounting the workpiece on the lathe, between centres. This step is not essential, but it will save time and give you blocks of timber to use elsewhere, rather than just another bag of shavings.

21 Reduce the main block to a 100mm cylinder and the handle to a 30mm cylinder. Use a parting tool to clean off the tailstock end, down to a stub of about 15mm diameter, then put a pencil mark around the cylinder, 100mm to the left of this cut. Cut to the left of the second mark with a parting tool and use callipers to check that the overall length of the cylinder has not been cut below 100mm. If you have accidentally reduced the cylinder to less than 100mm length, you must also reduce its diameter to match the length such that it can be turned into a true sphere. Use a 12mm spindle gouge to form the sphere, which is effectively just a large bead.

22 Cut a simple profile pattern out of stout card or thin plywood, noting the cutouts shown in the main drawing – these will enable the pattern to sit precisely on your workpiece. Using a spindle gouge, keep reducing the cylinder to a 100mm bead, stopping regularly to check progress with the card/plywood pattern.



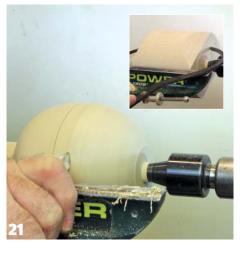










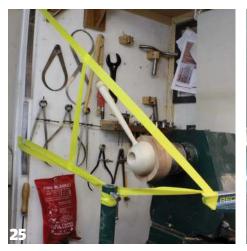




42

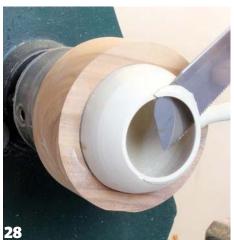
















23 With the sphere completed, turn the handle to your chosen shape and abrade the whole surface down to 400 grit. Remove from the lathe, trim off the stubs at each end and sand the cut ends by hand.

Turning the ladle head

24 Take a piece of scrap wood and reduce it to a 140mm cylinder with a chucking tenon to fit into a deep set of 100mm-wide chuck jaws. Mount it into the chuck, clean-off the outer face and hollow-out the jig to a shape that the ladle bowl will fit into tightly. Drill a 40mm hole through the bottom of the jig then remove it from the chuck and make a saw cut from the outer edge through to the 40mm hole, opening up the saw cut so that it becomes a slot, about 3mm wide.

25 Place the jig into the chuck with its slot lined up with a gap between any two jaws. Press the ladlebowl into place, ensuring that it makes contact with the bottom of the jig. This helps it to sit firmly in place and points the handle forwards slightly. Tighten the chuck firmly to ensure that the jig has a good grip on the ladle bowl. If you are unsure about the grip, place some hot-melt adhesive blobs around the lip of the cradle and ladle head. This is easily removed later when required. Set up a toolrest in front of the ladle bowl and then, as a simple precaution, stretch a few single strands of 25mm masking tape across the lathe, in front of the workpiece. This will give you a very strongly visual guide as to where it is safe to stand and how far it is safe to reach forward. Do not use string for this. It must be something which can easily tear away should it accidentally touch the rotating workpiece.

26 & 27 Draw a pencil line on the surface of the ladle bowl, marking a circle of 65mm diameter. This will be the maximum size of the opening through which you have to hollow the ladle bowl. Hollow out the centre of the bowl to a depth of 92mm, to leave 7mm or 8mm of wood in the bottom of the bowl. You can use a tailstock drill chuck to drill a pilot hole to depth if you want. Hollowing can be done with various tools, but whatever you use, take light cuts and work so the thrust of the tool is working towards the jig. While hollowing above the level of the top of the jig, avoid any cuts which rely on drawing the tool towards yourself. Once shaped, abrade the interior down to 400 grit using a sanding pommel with a ball-shaped end.

28 & 29 With the spindle lock set and the ladle bowl oriented to a convenient position, use a finetoothed saw to cut away the rim of the bowl down towards the handle and then clean up this cut edge. Abrade the surface by hand, rounding off the rim and blending it into the interior and exterior of the ladle bowl.

30 Once sanded, remove the piece from the lathe, check the outer bowl head for pressure marks and, if they exist, sand down to 400 grit. Now oil your ladle with a food-safe oil.

HOPE

woodturning

Introducing the new 200 inc Vat

MIDI-PRO



A small sized lathe with grown up capabilities!!!

- M33 X 3.5 spindle
- -1HP motor variable speed
- -3 x pulley range
- -65kg
- -14" swing over the bed
- -1" tool post stem
- -2 MT
- -Bearing distance for strength 100mm
- -Tail stock stroke 100mm
- -Swivel head
- -Bed ex available



www.hopewoodturning.co.uk

Bottle Imp

David Springett creates an ingenious trick bottle



Let me begin by explaining how the Bottle Imp works. It's all to do with counterbalance and centre of gravity. In the base of the 'bottle' is a weight. In the neck is a counterweight (a piece of nail). At the centre of gravity, about ¾in (20mm) from the bottle's base, the bottle begins to curve irresistibly – causing it to stand upright once the counterweight is removed. The trick is to remove it without your audience observing you (see page 49 for details). Producing the Bottle Imp requires the simplest of turnery. It uses the smallest amount of wood, yet provides a huge amount of fun. The Bottle Imp was devised early in the 20th century, in a much smaller form, and was used to promote whisky sales.

PREPARATION

Cut a block of wood 2% in (65mm) long by 1% in (40mm) square, making sure the ends are cut at 90 degrees to the sides. Most woods are suitable.

Additional tools and materials

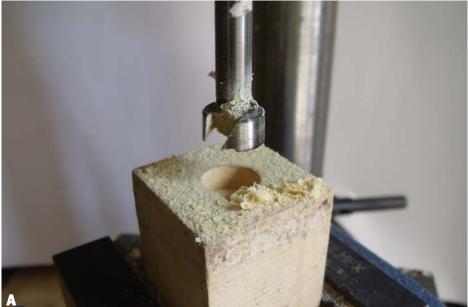
- 4in (100mm) round-wire nail for the counterweight
- Small nut, for the weight in the base
- Epoxy resin glue, to fix the nut in the base
- Small driving dog



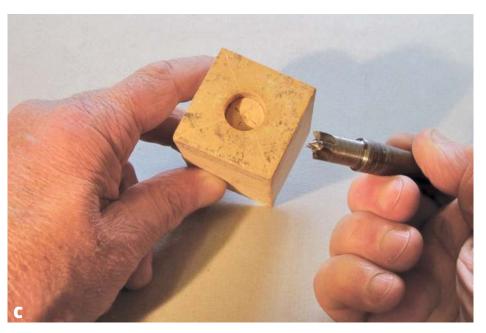
Turning the bottle

1 Mark the diagonals across the ends of the block.

- **2** At one end, on the diagonal intersection, drill a %in (15mm) diameter hole, ¼in (6mm) deep. Check that the nut being used as the weight in the base fits the hole both flush and in diameter. The hole may need to be drilled deeper depending upon the density of the wood used and any change you make in the shape of the bottle. When drilling the hole, the block was held in an engineer's vice (**A**). If you do not have a vice, a G-cramp will give a positive grip.
- **3** Drill the opposite end of the block, at the intersection of the diagonals, to a depth of ¾in (20mm), using a ¾sin (4.5mm) drill. The hole should allow a piece of 4in (100mm) nail to slide in and out, freely but not too freely (**B**).
- **4** Take a small driving dog (**C**). Place the block on a firm surface, with the %in (15mm) hole uppermost. Fit the driving dog centrally in that hole and use a wood mallet to drive it in, making firm contact.
- **5** Fit the work between centres, with the revolving centre held firmly (but not so tight as to split) in the ¾sin (4.5mm) hole. As the small driving dog makes slight contact, the piece needs to be turned quite gently. Too much force will cause the dog to rotate in the hole, causing it to be driven deeper.
- **6** Turn the block round, as close to 1%in (40mm) diameter as possible.

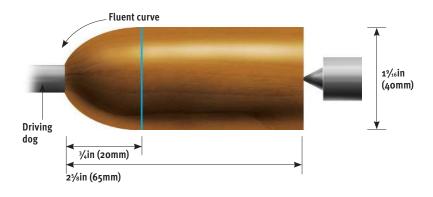








- Measure ¾in (20mm) from the headstock end, and mark with a pencil line. From that point, round over in a fluent curve towards the headstock (**D**). The curve must be fluent, without hesitation and without flats, and it must round over into the hole (**E**). This will ensure that the wooden bottle rolls back upright freely when the trick is performed.
- Turn the neck of the bottle, removing the bulk of material on the tailstock side of the pencil line. This will remove weight from above the centre of gravity (**F**). Leave the top of the bottle at the tailstock end, a little thicker to prevent the pressure of the centre from splitting out.
- Clean up and polish.



CUTTING THE NAIL

- Hold the nail in a metal vice and, using a hacksaw, cut off the point.
- Remove the nail from the vice and push it, cut end first, into the hole in the bottle neck.
- Mark the point where the nail is level with the top of the bottle.
- Take the nail and, holding it in the vice, cut just below the marked point.
- Fit the cut nail counterweight into the bottle. The cut end should be just below the bottle opening. The slightly rough end will prevent it slipping from the hole unexpectedly.

E



■ Fitting the weight in the base 1 Into a block of scrap wood, drill a ¾6in

1 Into a block of scrap wood, drill a 3/6in (4.5mm) hole. Into this hole, fit a 4in (100mm) nail with its head cut off. The turned Bottle Imp can now be slid on this nail with the baseweight hollow showing.

2 Mix epoxy resin glue, then drip a small amount into the base-weight hollow. Push the nut into the glue. Make sure the nut is set level and also flush, or below, the surface (**A**).

3 Leave to dry.

4 If it is felt that the nut in the base should be fully hidden, then mix a little dark powder paint with the glue. This will hide the nut sufficiently. And that's all there is to making this most effective little Bottle Imp.

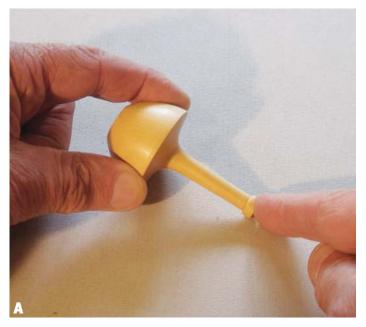


www.woodworkersinstitute.com



CUTTING THE NAIL

For different Bottle Imps, I have used yew, mahogany, sandalwood (what a scent) and lemonwood, plus other plainer woods which I have sprayed with luminous colours. Choose your wood and try it out.









Performing the trick

- Begin with the nail counterweight hidden inside the neck of the bottle.
- Present the bottle with the weighted base in your left hand, and the neck in your right. Hold the index finger over the end of the hole but not too obviously. Gently place it on its side on the table, sideways on to your friend. Do not let go yet.
- Gently coax the bottle to stay on its side (**A**). Maybe you would like to ask the Bottle Imp for help? Tell it to 'stay flat'. Gently let go and it will stay on its side (**B**). The Bottle Imp has done what you have asked.
- You don't want to let your friend grab the bottle, so keep your hands reasonably close. Now, pick the bottle

- up with your right hand, holding the neck between thumb, index and third finger.
- Hand the bottle, base up and base first, to your friend, allowing the nail counterweight in the neck to slide, unseen, into the palm of your hand (**C**).
- Ask your friend to lay the bottle on its side as you have just done. They will not be able to do this, as you have removed (unseen) the counterweight (the piece of nail). The bottle will keep on standing up. Work up a patter to go with the trick. Tell them to ask the Bottle Imp for help. Suggest that the Bottle Imp cannot hear them. Anything to distract them.
- While all this is going on, secretly arrange the small piece of nail neatly between your index and third finger.

- When you are asked to repeat the feat, take back the bottle with the base upwards in your left hand, making some comment that the weight in the end needs to be pressed to make the bottle lay flat. This should distract your friend away from your right hand, which will be secretly sliding the nail counterweight into the neck (**D**).
- Repeat the trick until exhaustion sets in. Show your friend how you can lay the bottle flat and they cannot. Keep the secret for as long as you can. ●

Stiles & Bates

The Woodturning People

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

Tel: 01304 366 360

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



Free 2020 **Mail Order** Catalogue







£1525.00

Nova Voyager DVR Variable Speed **Drill Press**







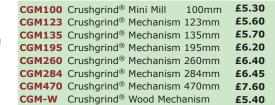


OSC1	Crown Large Octagonal Shear Cutter	£85.00
OSC2	Crown Small Octagonal Shear Cutter	£75.00

CrushGrind® Mills

£1995.00

Nova Saturn DVR Variable Speed





£2350.00

Nova Galaxi DVR Variable Speed



Ouantity discount.

Buy any mix of ten or more Crushgrind® mechanisms for 10% discount. We only sell genuine CrushGrind® mills

milliput

Two-Part Epoxy Putty



MIL-STA	Milliput Standard	£2.20
MIL-TER	Milliput Terracotta	£2.45
MIL-SIG	Milliput Silver Grey	£3.50
MIL-BLA	Milliput Black	£3.65
MIL-SFW	Milliput Superfine White	£4.40
MMIL-TUR Turquoise		£5.95
Buy all six for a 10% discount		

GlassCas

Clear Epoxy Casting Resins Self de-gassing No vacuum chamber needed





£1100.00

Nova 16-24 II **8 Speed Lathe**

GC3-1K	GlassCast 3 - 500g Kit GlassCast 3 - 1kg Kit GlassCast 3 - 5kg Kit	£15.50 £23.90 £83.90
GC10-50	O GlassCast 10 -500g Kit	£15.50

GC10-1K	GlassCast		£23.90 £83.90
CCEO-EOO	ClassCast	50 - 500a Kit	£1 E E O

GC50-500	GlassCast 50 - 500g Kit	£15.50
GC50-1K	GlassCast 50 - 1kg Kit	£23.90
GC50-5K	GlassCast 50 - 5kg Kit	£83.90



£585.00

Nova Comet II Variable Speed



VISA VISA VISA







Comet Current Offer includes FREE Nova G3 chuck

SUBSCRIBE TO Woodturning





WHEN INNOVATION, QUALITY, PERFORMANCE & SERVICE DO COUNT





Revolutionary • Dream Machine
State of the Art • Functional Safety Features

Community news

We bring you the latest news from the world of woodturning and important dates for your diary

We try to give accurate details on forthcoming events. Please check with organisers for up-to-date information if you are planning to attend any of the events mentioned.

2020 SHOWS AND EVENTS

Honolulu Woodturners Symposium

When: 21-22 March 2020 Where: MRC Sand Island, 1041 Puuwai Street Honolulu, Hawaii 96819, US Web: www.honoluluwoodturners.org

The Midlands Woodworking Show

When: 27-28 March 2020 Where: Newark Showground, Lincoln Rd, Winthorpe, Newark, NG24 2NY

Web: www.nelton.co.uk

When: 27-29 March 2020

Where: Seaworld Resort & Water Park, Main Beach, Queensland, Australia Web: www.turnfest.com.au

Totally Turning

Turnfest

When: 28-29 March 2020 Where: Saratoga Springs City Centre, 522 Broadway, Saratoga Springs,

NY 12866, US

Web: woodworker.org/about-totally-

turning

Les Forgaxes Woodworking Festival

When: 24-26 April 2020 Where: Pravia, Asturias, Spain Web: www.forgaxes.com www.tornyfusta.com

Makers Central

When: 2-3 May 2020

Where: North Ave, Marston Green,

Birmingham B4o 1NT

Web: www.makerscentral.co.uk

Woodworks@Daventry

When: 15-16 May 2020

Where: Daventry Leisure Centre, Lodge

Road, Daventry, NN11 4FP

Web: www.tudor-rose-turners.co.uk

AAW Symposium 2020

When: 4-7 June 2020

Where: Kentucky Exposition Center,

937 Phillips Lane, Louisville,

KY 40209, USA

Web: www.woodturner.org

Saskatchewan Woodturners Symposium 2020

When: 17-19 July 2020

Where: Regina Trades and Skills Centre 1275 Albert St, Regina, SK, S4R 2R4,

Canada

Contact: James (Bryan) Milne Email: jbmilne@accesscomm.ca

Turn-On! Chicago 2020

When: 23-26 July 2020

Where: Crowne Plaza Chicago-Northbrook, 2875 North Milwaukee Avenue,

Northbrook, Illinois 60062 US Web: turnonchicago.com

Woodturning Weekender 2020

When: 1-2 August 2020 Where: Orchards Event Venue, New Road, East Malling,

Kent, ME19 6BJ

Web: www.chestnutproducts.co.uk

SWAT 2020

When: 28-30 August 2020 Where: Waco Convention Centre, 100 Washington Ave, Waco,

Texas, USA

Web: www.swaturners.org

Yandles Woodworking Show

When: 11-12 September 2020 Where: Hurst, Martock, TA12 6JU Web: www.yandles.co.uk

WoodFest at Hatfield Forest

When: 4-6 September 2020

Where: Bush End Road, Takeley, Bishop's

Stortford, Essex, CM22 6NE Web: www.nationaltrust.org.uk

AWGB Seminar

When: 9-11 October 2020 Where: Yarnfield Training and Conference Centre, Yarnfield,

Stone, ST15 oNL Web: www.awgb.co.uk

Wizardry in Wood

When: 14-17 October 2020

Where: Carpenters' Hall, 1 Throgmorton

Ave, London, EC2N 2JJ

Web: www.turnersco.com/turning/wiw

Virginia Woodturning Symposium

When: 7-8 November 2020 Where: Expoland, 277 Expo Rd, Fishersville, VA 22939, US

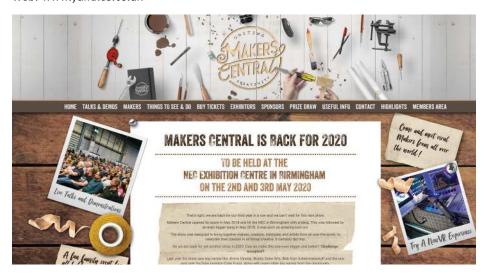
Web: www.virginiawoodturners.com

North of England Woodworking Show

When: 13-15 November 2020 Where: Gear Yorkshire Showground,

Harrogate, HG2 8QZ

Web: www.skpromotions.co.uk



Building a dream

Arun Radysh-Haasis shares his turning experiences with Mark Baker

I was born in Scotland in Royal Deeside and initially grew up in an intentional community, where arts and culture played a central role in my daily life. My parents wanted me to see beauty in education and chose the Steiner School movement for my early years. This included a period of time spent in the New Forest National Park in Hampshire, where I fell in love with the ancient woodlands and majestic trees. Three years ago we moved back to Scotland and found a unique home setting in a remote glen on the southern fringes of the Highlands/Cairngorms.

To make the most of the captivating wilderness experience, I decide to embark on home education, following a crafts and nature-based curriculum. We set up a new learning space in a wooded area near our cottage, where I attend, together with my younger siblings, morning lessons for formal learning. However the afternoons are free for crafts and nature explorations and this is what enabled me to truly discover my passion for anything to do with wood.

Admittedly I had a good role model in my father, who is an eco-architect and involved me early on in model making and some of the actual building work on timber-framed structures. This gave rise to the idea of building my own workshop in the glen. I planned it through in detail and my dad helped me to draw it up. Unfortunately, when we started the selfbuild he dislocated his shoulder during the foundation work and so, together with my siblings, I completed the studio within two months during my summer holiday.

It feels pretty amazing to have a space crafted with my own hands to use for my own creative work. After the building work was completed, I was ready to embark on more refined wood work. As part of home education I took on a 'year-project', setting myself the task of developing a new skill in woodwork to the highest standard I could achieve within that period of time.

The beginnings of my woodturning

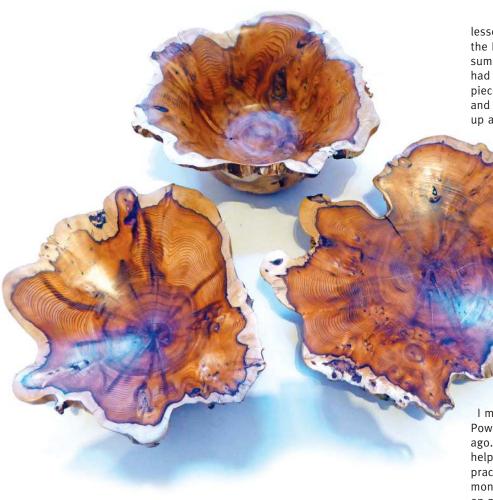
I was searching locally for inspiration and visited a number of fascinating demonstrations by professional wood turners at regional craft and country fairs.

It was an activity I had been curious to try out for many years and when I finally got a chance to have a first woodturning



Arun with an elm (Ulmus procera) charger 780 x 80mm outside his studio

N RAYDYS-HAASIS



Various natural-edge bowls 215 x 80mm, 230 x 60mm and 270 x 50mm



Spalted beech (Fagus sylvatica) platter 470 x 50mm

lesson, I was delighted. It was through the Perthshire Open Studios in late summer 2018 that I met Tom Wallace, who had a variety of unusual and experimental pieces on display and, thanks to his warm and welcoming partner Lorraine, we set up a taster session.

Tom and I had a great time

together and I asked to go again

and again. So a friendship developed and Tom become my mentor. We work hard together and he teaches me many new techniques and tricks of the trade. I really appreciate that he is willing and eager to share his knowledge and skills with me. On Tom's recommendation, I persuaded my parents to allow me to have my own lathe and, with my family's support, I managed to get my own CL3 Record Power lathe for my studio just over a year ago. Tom's regular tutoring and guidance helped me tremendously to learn and practise new skills and within a few months I was working quite independently on my own projects. Now I have almost outgrown my lathe. Over the recent months I have created

FIRST PIECE/ EARLY TURNING EXPERIMENTS

gone to friends and relatives.

a selection of well over 150 beautifully crafted products, many of which have

The first piece I turned with minimal input from my tutor was a beech natural-edge bowl, measuring about 11cm in height and 10cm in diameter. I first turned it green, let it sit for two weeks and then returned to make it into its final shape and design. During the drying process I made a number of tea-lights out of an ash log, which I had collected the previous year in the nearby forest.

BIGGEST CHALLENGES

I soon discovered that
each type of wood is very
different to work with – some
are hard and splinter, others are
soft and easily tear on the end grain. I
also figured that preparing my own wood
blanks for turning is a tricky and lengthy
process. My challenges have been using
wet wood that subsequently cracked and

warped due to the extreme fluctuation in temperature between my studio and the outside storage area, which can be very wet in Scotland. I have now refined my technique in wet wood turning by leaving the bowl chunky to the degree that I am able to return it after it is dry. If it is left too chunky, it is more likely to develop cracks. This fine line between the two takes practice to find a good balance. So far I found adapting to the wood works best for me, as I have no way to control the environment.

INFLUENCES IN MY WORK

The material itself gives me the greatest inspiration and is the most influential factor in my work, especially when I discover unexpectedly interesting patterns in the grain, not visible at the outset of the task. Wood is a living material, it is full of surprises and what I treasure most is that each piece of wood is unique in its own way.

I find other wood artists and their more experimental pieces are a great inspiration to me. I love the books about Tim Stead, With the Grain and Explorations in Wood. Tim lived and worked in the Scottish Borders. I like his Scottish heritage

and there is a deep sense of craftsmanship in his work, but at the same time a huge sense of artistic joy and exploration. Just looking at his work spurs my own creativity, particularly the imaginative ways he used the natural character of the wood and let the final piece be guided by the living forces of the tree. One can feel the wood and be captivated by its qualities. Tim's craft is more a way of revealing what lives in the grain rather than intending to make something. Leaving a natural edge

greatly helps this.

I also enjoy the work of Angus Clyne, a Perthshirebased professional artist I visited during the Open Studios this autumn to see his workshop and some of his pieces in progress. His work



Burr elm natural-edge platter 300 x 50mm



Three oak (Quercus robur) bowls with black rim 180 x70mm and two at 130 x 70mm



Arun in his studio

is clearly very professional, however for me it is more about the creative discovery and the learning that comes with it. The wood artist Gary Stevens has

equally opened my eyes to a new way of looking at wood as a material with seemingly endless possibilities.

> It is just unbelievable how he makes the wood feel almost liquid, like clay or water.

LOOKING FORWARD

I am only at the beginning of my woodturning journey, so there is still so much to learn. In part it is also a matter of increasing my tool selection and machinery in the workshop.

At present I am very grateful to be able to have access to all this specialist equipment through my tutor,

Tom. I realise my learning is really very closely entwined with the support I get from the people around me in a practical way. For me it is about learning through practice – the more I turn, the more ideas I get. I turn what brings me



Off-centre spalted beech bowl 18 x 5cm

joy. I have had the odd commission, but my interest is not to produce for selling purposes. However, as I have so many turned items (my mum comments on the lack of counter surfaces left) I organised myself two stalls at local Christmas fairs and made some pieces I know people will love. In fact I was sold out at both fairs and have received many more commissions.

MOTIVATIONS

Keeping the learning practical, gaining experience and working with others is great. I like the fact that Tom and I are such different generations — if I only turned with other juniors, it wouldn't be the same. Sharing ideas with others is so much more rewarding than just doing it on my own, particularly when a piece doesn't go to plan. Having others join the process of seeing what can work really increases the possibilities and puts a different twist on things one

wouldn't necessarily bother to try out.

For me the setting and access to nature and natural woodland resources are a vital part of my woodturning story – the searching for roots, fallen trunks and branches, the odd noble and burr chunk are all contributing to the experience. Without special raw material, the process would be less enjoyable and artistic.

TIPS LEARNED

Tom always reminds me: don't rush. I have rushed things, but it never enhances the work, so yes, patience is gold. I also learned that unless the tools are sharp and also sharpened the correct way, there is just no chance of getting a refined outcome. The same applies to sanding and finishing – rush it and it might all be spoilt.

Arun can be contacted by email at: arunwoodcrafts@outlook.com



Arun in Tom Wallace's studio



My first piece - a natural-edge beech bowl

Segmented bowls in ash, beech, cherry (*Prunus* spp.) sapele (*Entandrophragma cylindricum*)

Smart Tools, Powerful Solutions



NOVA, a brand of Teknatool®, has been manufacturing innovative tools for the woodworking industry for more than 30 years. Passionate about the development of emerging technology and 'Next Generation' export ideas, NOVA has teamed up with Craft Supplies to bring the UK & Ireland a range of woodturning products that are simply out of this world!

To find out more about NOVA's state-of-the-art drill press, lathes, chucks and accessories, please contact an approved stockist.





New to the UK & Ireland, the world's first smart drill press – an incredible addition to the NOVA range. NOVA Voyager DVR Drill Press is the top selling drill press in its class and comes with a multitude of outstanding features. With no belts to cause vibration, the Voyager has earned a reputation for faster and more efficient drilling.



Saturn DVR Lathe

Combines the best features of larger lathes – power, capacity and capability with state-of-theart technology to make your turning more efficient, fun and safer. Saturn DVR is the most versatile lathe on the market. combining proven technology from its predecessor NOVA DVR XP with some great new features.

Galaxi DVR Lathe

The most versatile lathe on the market. Able to handle a wide range of work from small pens to large 29"/750mm bowls and long spindle work (using optional Outrigger accessory). With no pulleys or belts to vibrate, our unique DVR™ direct drive motor is incredibly smooth.



Comet II Midi Lathe



Perfect for a wide range of woodworking projects. Portable and space saving, this lathe punches way above its weight, delivering the capacity and the rugged stability of larger machines.

1624 II Lathe

Excellent entry level lathe that has enough versatility and power to give many years of turning. 8-speed range – features a low speed of 215 rpm, essential for serious and safe large piece and bowl turning work.



STOCKISTS INFORMATION

ENGLAND

Stiles & Bates Upper Farm, Church Hill, Sutton, Dover, Kent, CT15 5DF Website: www.stilesandbates.c

West Country Woodworking Machinery Beacon Kiins, High Street Village, St Austell, Cornwall, PL26 7SR Website: www.machinery4wood.co.uk

cosiewood Machinery ingdale, Longfield Avenue, ew Barn, Longfield, Kent, DA3 7LA /ebsite: www.poolewood.co.uk

David Biven Machinery Unit 30 Sycamore Trading Estate Blackpool, Lancashire, FY4 3RL Website: www.bivenmachinerysales.co.uk

Interhire Tools Park Road, Ilkeston, Derbyshire, DE7 5DA Website: www.intertoolsonline.co.uk

Turners Retreat

Unit 2 Faraday Close Harworth, Doncaster, DN11 8SU Website: www.turners-retreat.co.uk

Joe McKenna (Limerick) Ltd

W.H. Raitt & Son Ltd Main Street, Stranorlar Co Donegal, Ireland Website: www.whraitt.ie

The Carpentry Store Unit D4, M7 Business Park Newall, Nass, Co Kildare, Ireland

SCOTLAND

MacGregor Industrial Supplies 15-17 Henderson Road, Inverness, IV1 15N Website: www.macgregorsupplies.co.uk

Distributed in the UK & Ireland by



Orbital arc box

In the first of a two-part series, Jason Breach shares the processes for making his signature style of box

This box style is unlike any of the others I have written about in the previous articles. The first major difference is in the material selection – for most of my boxes I use 75-100mm square spindle blanks with the grain running parallel to the lathe bed.

These squares need to be dry and this takes time, I have squares I bought 15 years ago slowly drying. This style of box uses bowl blank material, cross grain and, even better, most can be made from 25-30mm thick board material – easy to get, quick to dry.

With my furniture making, I often get short offcuts that are too good to throw away, but not really thick enough to make a nice bowl from – this allows me to use these offcuts and has opened up a whole new design concept of making a box. The style of box also gave me a bigger finished item – when displaying work in an AAW instant gallery my smaller boxes got lost and overlooked among the larger items around them. The larger sizes of these boxes makes them more prominent within the display; this got me noticed a little more.

I have been asked where the idea came from. 'Not sure really' is not a good answer, but in Dale Nish's book, *Creative Woodturning*, there is a section about making bowls, cutting them and rejoining – this I can remember doing. Stephen Hogbin's style of work also springs to mind. After I made the first one of these, I then spent a few days trying to make some sort of stand, something to hold and support the main box without distracting from the item that I was pleased with. In the end a simple donut-shaped ring worked well.

This box is made up of a number of turned components: one disc, turned to make the two sides; two lids; two lid rings; and the donut. The two lids need to be made the same size so that either lid will fit either of lid ring. The main disc needs to be turned accurately – the aim is to get an even 4mm thickness all the way through this shaped disc. This is important as any variation will show when the disc is cut into two halves. It takes patience – light adjustment cuts and regular thickness checks are important.

To hold the workpiece, I make a carrier disc made from good quality plywood. This disc needs to be turned so it can be held in a set of chuck jaws – the larger the



size the better. I also cut a slot into the side of this toward the centre, allowing access for the callipers to measure the thickness. Turn the spigot to suit the chuck jaws first, hold on this and then drill a 6mm hole through the centre of the disc. Into the back of this I insert a T-nut, which allows a threaded Allen key bolt to be screwed in to hold the workpiece in place. Into the front face of this I cut a small, hollow dish in the very central 20mm, creating clearance for when the box is reverse mounted.

The body of the box and the two lids need to be made of the same material it is possible to use the corner offcuts from cutting the disc out to make the lids. The timber needs to be flat and parallel on both sides so access to a planer makes this easier. Do not machine the blank down to the thickness required. The shaping of the interior is important and needs to be accurate - having more thickness to play with allows any adjustments to be made while leaving enough thickness to complete the disc to the correct thickness. I use a pillar drill to drill a 6mm hole all the way through the blank. This means the hole is square to the base and will line up better on to the plywood carrier. The templates for the interior shape can be made of thin plywood - 4mm is good. I used plastic laminate sheet for this article as it shows

up better in the pictures. These are easily turned to whatever size; this ideally needs a halfway line across the diameter as this makes it easier to measure with.

When cutting the disc into two halves I use a bandsaw with a 6 or 10 tpi blade. A coarse blade leaves a ridged cut, is more aggressive and you risk chipping the work out. If cutting this freehand, feed the work in slowly – the thickness of the wood being cut varies a lot across the disc so the feed force will need to alter. I use a board made to fit and slide easily in the T-slot on my bandsaw. I use two toggle clamps to hold the work, which results in a safer, easier-to-control and more accurate cut, so there is less adjusting after the cut is made.

When gluing up I have played with lots of clamps – G-clamps are too heavy and distort the work, they also twist the work when tightened. I have found simple, heavy-duty spring clamps work best. They are easy to use and allow the work to stand up while its drying.

A 6mm nut and bolt and two washer arrangement will locate into the half holes in the centre of the disc. This makes a simple clamp, but also helps align the two halves as the more accurate these line up the better. As for what glue to use glue it is whatever you trust. PVA works well, but depending on the wood you use, you may need something more specific to suit your timber choice.

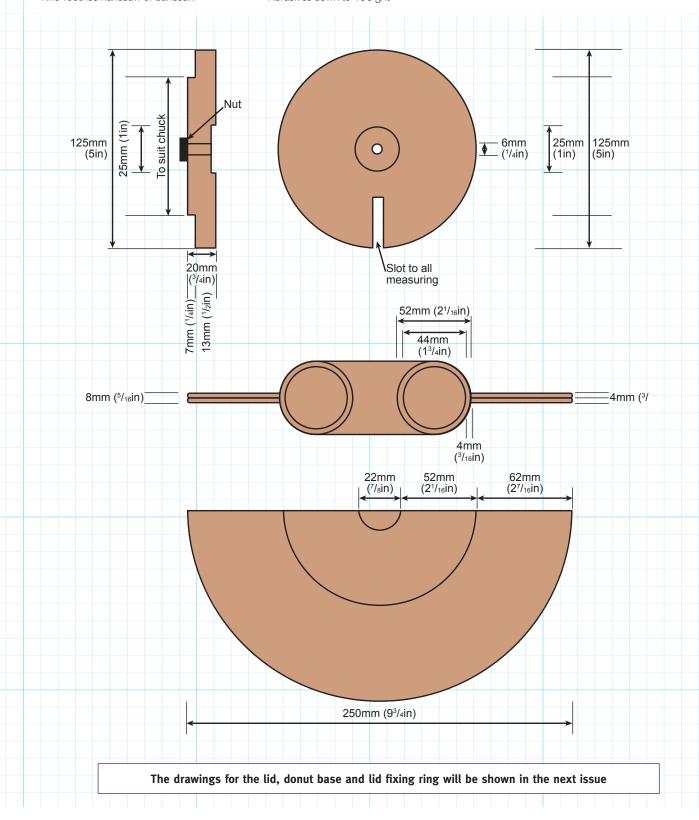
TOOLS & MATERIALS

- Personal and respiratory protective equipment (PPE & RPE)
- Bowl gouge
- Spindle gouge
- Skew chisel
- Parting tool
- Tailstock drill chuck
- Fine Toothed handsaw or bandsaw

MATERIALS

- Plywood carrier 130mm diameter by 20mm thick
- Box body, faceplate oriented grain timber, 250mm diameter x 28mm. Size can be adjusted to suit your lathe and requirements
- Plywood/acrylic template, 50mm square x 4mm thick scrap block
- Abrasives down to 400 grit

- Vernier callipers, dividers
- Adhesive
- Spring clamps x 6
- Masking tape
- Sanding board
- 60mm x 6mm nut and bolt and two penny washers to use as centre clamp
- T-nut and bolt



Template and carrier jig

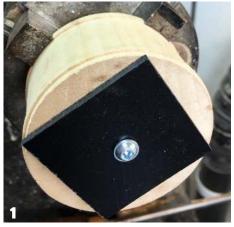
1 You need to make a template disc to give you the internal arc of the box body. It is easily made by drilling a hole in the centre of ply or acrylic, then fixing this to a scrap block carrier held in the chuck with a wood screw. It is worth drilling an accurate pilot hole in the centre of the scrap block. Once secure, turn to the required diameter.

2 The box body is held on the lathe using a plywood carrier, which has a T-bolt fixing in the back to screw the bolt into. Drill a hole through the centre of the timber for the box body to match the diameter of the thread on the bolt. This needs to fit tight.

The internal body form

3 Hold the box body plywood carrier in the chuck, bolt on the timber used for your body of the box. I am using cedar (*Thuja plicata*) burr for the main body of the box. Ensure the carrier is held firmly, check the lathe speed and keep it relatively low. If you have an out of balance piece of timber remember that the plywood carrier is not made of steel, and if run too fast it will pull out of the chuck. Consider using light pressure from the revolving tailstock centre for added support while turning the blank, but you will have to remove this support for the next stages of turning due to it getting in the way. Once the wood is secure, clean up the edges and face ready to shape the hollow interior face.

- **4** Using a 2mm parting tool, cut a groove about 4mm deep with the parting tool resting on the outer edge of the T-bolt head. This groove becomes the measuring point.
- **5** Using dividers mark the first measurement of 4mm from the edge of the parting tool cut, then set the dividers to the diameter of the template and scribe this measurement from the 4mm line. This marks the width of the section to be hollowed out.
- **6** Remove the waste between the scribed lines using a 6mm bowl gouge. The gouge flute should be presented at about the 2 o'clock position when cutting the left-hand diameter of the arc and the 10 o'clock position for the right-hand side of the arc. Do not remove the scribe lines, aim for the semi-circular hollow shape.
- **7** Once cut, stop the lathe and check the depth of the frist cut semi-circular depression using the template. Sight across the flat, holding the template on edge, as at this point it will not fit within the hollowed shape. The aim is to be just short of the centre hole of the template, half a circle.
- **8** Refine the shape using a negative-rake round-nosed scrape taking very light cuts, and stop regularly to check the shape using the template. I use a light source from below to highlight the problem areas as the template needs to fit accurately. This part takes time; the better this is the fewer problems later. Once you have the right shape, sand the hollow only at this point.

































The extended box wings

- **9** Level the outer flat surfaces using a suitable negative-rake scraper. This is less aggressive than using the bowl gouge. The face of this needs to be dead flat and level, and in line with the centre of the template. The 4mm section near the centre will also need to be levelled. Check this with a steel straightedge.
- 10 Using a bowl gouge, adjust the outer edge to the required diameter size and ensure it is at 90° to the face cut in step 9.
- 11 The key to getting an even thickness and good accuracy is in transferring the measurements accurately. Set up the dividers to 4mm less than the width of the face surface, set the ring callipers to half the template diameter plus 4mm.

The extended wall form

- **12** Reverse the work on the carrier, set up the ring calliper measurement on the outer edge, then use a bowl gouge to remove the waste and trim to the correct width. Use callipers to check for an even thickness across the diameter. Leave a stub of wood in the centre wide enough to ensure strength where the bolt holds the work in place.
- **13** Using the outer edge as the measuring point use the dividers, as set up in step 11, to scribe the required diameter of the outer wall location.
- **14** Using a bowl gouge, remove the waste. This is best done using a pull cut with the flute positioned at the 9 o'clock position, pulling from the centre outward, leaving the area inside the scribe line untouched.
- **15** With the bulk removed, the thickness of the flat rim area can be refined. Use a 6mm bowl gouge working from the outer edge towards the centre and work in short sections of about 20mm to refine the work to the required 4mm thickness. Check with callipers as you progress.
- **16** In the centre cut a 4mm-deep groove, level with the outer diameter of the bolt head, using the 2mm parting tool. Then measure the width of the remaining timber and mark the halfway position.



17 Using the 6mm bowl gouge, shape this raised section to match the curve of the hollowed interior. Aim to create a half circle profile, light refinement cuts can be done with a skew chisel used like a scraper.

18 & 19 The slot in the carrier allows access to measure the thickness of the half circular section. The aim is to get an even 4mm thick, when happy with the thickness sand the this to a finish, the outer edge of the rim is best sanded to a bead shape, Trying to cut this with a chisel will result in chipping or breaking the edge.

Cutting and joining the body form

20 & 21 To mark the halfway line I use masking tape on the workpiece. I look at the grain pattern as I like the box to look even from both sides. I have a table that fits into the toolrest banjo that I can set up to position the pencil at centre height, allowing me to mark the line across the box.

Before this is cut into two halves, it is worth ensuring that the surfaces to be glued together are flat. Use a sanding board to sand the back and level the surface This should not need much work and the scribble lines will show when everything is flat.

22 With the half way line drawn, cut the disc into two halves this is best done on a bandsaw, I used to do this free hand but now use a simple board that fits into the T-slot on the bandsaw table, Two toggle clamps hold the work in place, this results in a accurate cut meaning less cleaning up later.

23 Before gluing together, do a dry run to see how everything fits. I use a nut and bolt and two washers to help clamp things together. With the dry run practised, glue together – the aim is to get everything to line up evenly inside the hollow tube. The spring clamps provide firm pressure and support the work while drying.

In the next issue we will finish the project















ULTRA-SHEAR Moodpeckers®



Woodpeckers*
ULTRA-SHEAR
PARTING TOOL-Ci
Use Inserts 20130, 20131

Never worry about sharpening your parting tool again with Ultra-Shear's Parting Tool-Ci.

Woodturners love narrow parting tools because they allow

you to get more turning from less stock, they cut with less resistance and they open up other design options (like the grooves of a honey dipper). The problem is, the thinner parting tools get, the harder they are to sharpen. The Ultra-Shear Parting Tool-Ci changes all that by eliminating sharpening altogether. Instead, the cutting edge is a nano-grain carbide insert, ground on computerized equipment, polished to a razor-like edge and replaceable in seconds.

As if a thin-kerf carbide parting tool wasn't enough, we also fluted the insert, creating a profile that makes an incredibly clean entry cut on even the trickiest woods; from open-grained softwoods to ultra-dense tropicals...they all cut cleanly. If you need a perfectly flat bottom, there's an optional fully-square carbide insert.

We also designed the blade holder to keep the inserts where they belong. Ultra-Shear's re-designed geometry improves the wedge-theory with a profiled feature that grips the insert securely, even at odd approach angles.

If you're looking for a parting tool that cuts clean each and every time you pick it up, and never needs sharpening, Ultra·Shear's Parting Tool-Ci is for you.



Platter with Coloured Textured Rim

WITH STEWART FURINI



1 Turn the outside of the platter and spray the rim with Ebonising Lacquer. When dry, use a burr in a rotary tool to add texture to the inner half of the rim.



2 Once the texturing is complete, add colour using an airbrush or a normal brush. Any colours can be used, in this instance Green Spirit Stain has been added first, then Blue, allowing the two to overlap.



3 Allow the Spirit Stain to dry and seal with the aerosol Acrylic Sanding Sealer. Lightly cut back then add two or three coats of Acrylic Gloss Lacquer to protect the colours and make them shine.



4 Remove the centre of the platter, sand carefully and finish the inside. Use Cut'n'Polish to smooth and seal the inside; being more controllable this avoids the risk of damaging the decorated areas.



5 Finally, apply a coat of Microcrystalline Wax to the centre for a brighter, harder wearing finish. This platter was awarded a 'Highly Commended' prize in British Woodturner of the Year 2019. Well done, Stewart!!

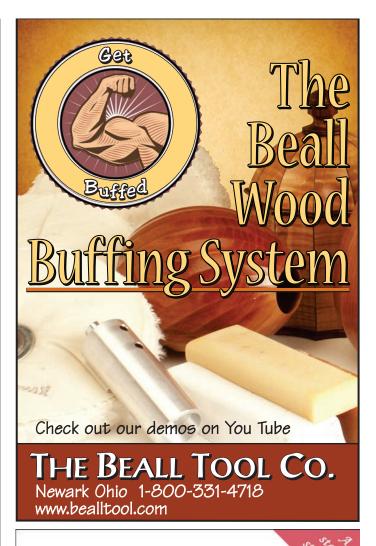
See our YouTube channel for more tips! More information available from your local stockists or contact us at:

PO Box 260, Stowmarket, IP14 9BX Tel: 01473 890118



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





HOW TO MAKE A CHILD'S WINDSOR CHAIR

The chairs in the book are completely new designs of Windsor chairs for children 4 to 12 years. (Windsor side chair and Windsor chair with arms) by Peter E Judge



The book's 378 pages are packed full of useful diagrams and colour photos on how to make these Windsor chairs from start to finish. Every part is explained in easy language, and in a step by step format. In the woodturning chapters, the beautifully shaped legs, stretchers and upper chair spindles can be created easily using the step by step guide for beginners. See selected pages on the website.

Also on the website, see Book 2. Alternative Assembly Procedures

These special procedures are an alternative way to assembling the chairs shown in 'How To Make A Child's Windsor Chair' - using precision techniques.

View a selection of pages from the books at website www.makewindsorchairs.co.uk

Order through PayPal on the website, or please contact Peter by calling 0121 705 2196, email: peterejudge@gmail.com or write to Peter E Judge, 21 Somerby Drive, Solihull, West Midlands B91 3YY, UK

Add delivery to the book price: Europe £12 P&P | America and Canada £18 P&P | Australia £19 P&P

Just another pen kit?

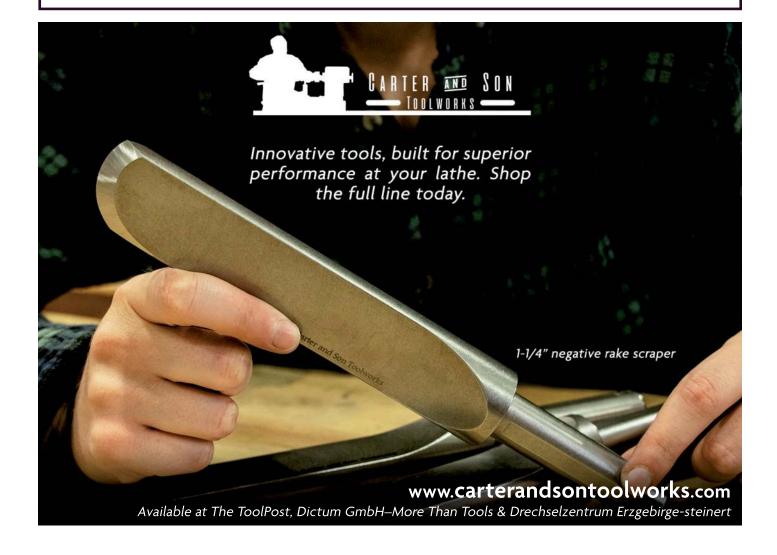
"Not only is the Sirocco aesthetically pleasing, well balanced and comfortable to write with, the mechanism is smoother in operation than any other single barrel pen kit I have ever encountered" Bob Ellis

Think
again!

The Sirocco ballpoint kit from Beaufort Ink is now available in 7 different plating options







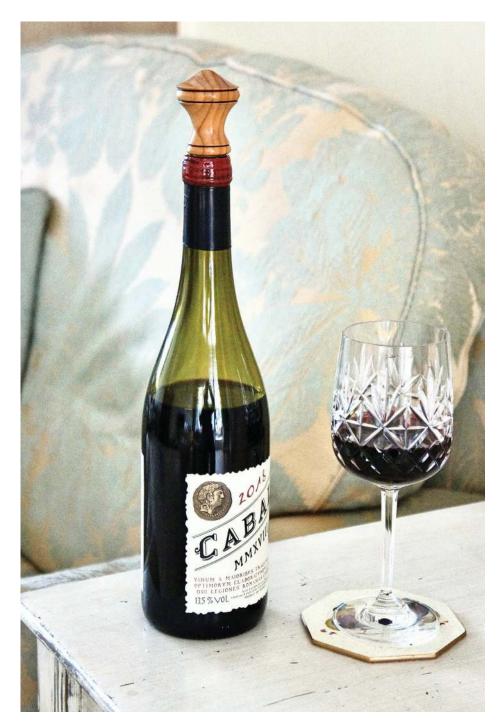
Bottle stoppers

lan Woodford creates a craft stall favourite

Continuing with my experience of selling at craft events, I was always bemused by the number of bottle stoppers that sold. I nearly always joked with those who bought one that I hardly ever had to use one because the bottle seemed to empty quite quickly.

I made two types of stopper, one using the metal insert and the other a silicone insert. There was a vast difference in price between the two due to the fact that silicone inserts were so much cheaper to buy from online sites than the metal versions. This inevitably led to a difference in sales, with the silicone selling more, but they both do the same job. Personally I prefer the aesthetic look of the metal stopper, but making pieces that sell well takes priority.

I shall guide you through my process of making those with silicon inserts and, as with my previous articles, I invariably made them on a semi-production basis as this reduces time.

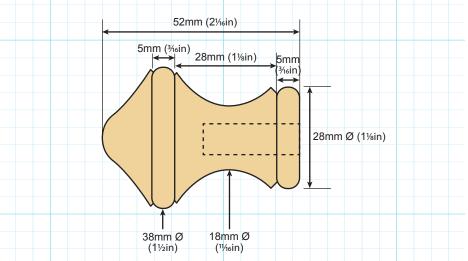


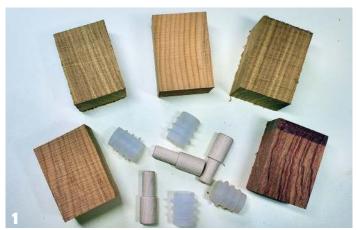
TOOLS AND MATERIALS

- Personal and respiratory protective equipment (PPE & RPE)
- Chuck
- Spindle roughing gouge
- Spindle gouge
- Thin parting tool
- 10mm drill bit
- Tailstock drill chuck
- Vernier callipers
- Burning wire with toggle hand-hold at each end

MATERIALS

- Bottle stopper inserts
- Abrasives down to 400 grit
- Sealer and melamine or similar finish
- Adhesive

















- 1 A mixture of blanks together with the dowels and silicone sleeves. You can turn the dowels, but I find it more economical to buy them since they are very cheap and it saves time and a lot of wood wastage. The blanks are made from close-grain local woods such as laburnum, yew, maple, beech etc. They are cut to 60mm long by 45mm square, with the grain running the length.
- 2 When ready, mount the timber blank in the chuck. You can hold the square section in your chuck jaws. Once secure, drill a hole in the centre to a depth of 25mm with a 10mm diameter drill.
- **3** The next job is to start rounding off the blank at the tailstock end with a roughing gouge, then face off the end with a spindle gouge, but make it slightly concave so the dowel will sit flat when glued in. Mark out the various intersection points for the shape – this photo shows the shaping in progress with a spindle gouge and the drilled hole is also clearly visible.
- 4 With most of the shaping done, the intersections can be burnt with wire to add interest and crispness. Sand to 400 grit and part off close to the chuck jaws. Repeat this process with all the prepared blanks before each blank needs the top profile turned. I put the dowel in place to make sure it sits flat.
- **5** With waste wood in your chuck turn a dowel so that the stoppers can be tightly jam chucked to finalise shaping the top section. Sand and seal, then I put on a couple of coats of melamine, or similar, to protect from moisture. Repeat with all the other part-formed blanks.
- **6** With the turning and finishing complete glue the dowels into place and let them dry firmly. Slip on the silicon sleeves and the project is complete. The sleeves fit firmly but can be removed if cleaning is required.
- **7** A small batch is complete and ready for sale. These are yew (Taxus baccata), laburnum (Laburnum anagyroides) and one in bubinga (Guibourtia demeussi).







nilesbottlestoppers.com



Signed. Sealed. Delivered.

ProDesign Woodturner's Smock with custom name embroidery just £45.60*



Made from extra heavy duty, breathable pure cotton fabric.

With elasticated, velcro cuffs. Large rear storage pockets. Durable leather elbow patches. Double-ended heavy duty zip. Comfort collar featuring a low front and a high back, with soft padded lining. Twin sleeve pocket for your trusty pen and pencil.

Available in chest sizes 32-50 in.; 54 in., 58 in. and now 66 in.

The ToolPost

Unit 7 Hawksworth, Southmead Industrial Park, Didcot, Oxon. OX11 7HR 01235 511101 • www.toolpost.co.uk

sharing expertise

Dealer enquiries welcome, UK and export

*VAT inclusive price, correct at time of going to press. Price shown excludes shipping.

Kurt's clinic Kurt Hertzog gives some answers to readers' questions

Pen tubes

Question: I am having some of the tubes in my pens breaking free. Sometimes this happens when I am turning them or. occasionally, after they have been assembled. It doesn't seem to follow any pattern. Any ideas on what I can do to prevent this?



A good bond to the tube requires some tooth. If needed, scuff the tube with a coarse grit sandpaper to remove the drawing lube, oxidation, and provide some tooth

Answer: There are three things that come to mind with a problem such as this. The cause could be as simple as poor adhesion to the bonding surfaces. Virtually any adhesive you might use likes surfaces with a bit of 'tooth' to bond to. As such, your tubes need to be free of oxidation, drawing lube, and have a scuffed surface on the brass. Many kit suppliers are finally providing pre-scuffed tubes. Also, the hole needs to be properly drilled. If you've burnished the inside of the hole by excessive speeds and feeds or a dull drill, you leave behind a surface that is difficult to bond to. Speaking of holes, the correct clearance is important. This is particularly important based on your adhesive choice. Too much gap and the adhesive can't work well and too little may squeegee off the necessary adhesive as you insert the tube. Trying to get



The clearance between the tube and the hole in the blank is key to a good bond. Different clearances are optimum for different adhesives

thin cyanoacrylate adhesive (CA) to fill gaps is fraught with problems. With the correct clearances, any fresh adhesive, whether CA, epoxy, or polyurethane should work well. There needs to be sufficient adhesive over the entire tube to wet the inside of the hole, providing for complete coverage of the tube and drilled hole to obtain maximum strength. Too much adhesive and you'll have a clean-up issue with your glued-up blanks and too little will leave the bond weak and subject to failure under stress during facing, turning, assembly, or in final use. Properly done, your glue bond should easily hold up to the stresses involved during creation and use. Check on these items and you'll likely find you have room for improvement in one or more. Getting these items in order should minimise or completely eliminate your problems.

Natural edges

Question: When I turn natural-edged bowls, I have a difficult time keeping the natural edging intact. Sometimes pieces of it are broken off during turning or when handling completed bowls. How can I re-attach the pieces or keep them there to begin with?

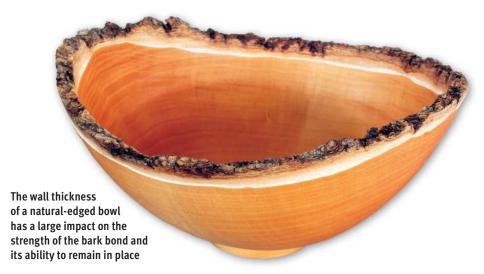
Answer: The easiest way to fix breakage is to avoid it altogether. By avoiding very thin walls you leave additional strength in the bond. Very thin walls are usually impossible to keep the natural edge intact over the life of the bowl. If you succeed in turning it, someone will be careless in handling it down the road and break off pieces. By designing and shaping to a bit thicker, you may be able to retain that edging longer. There are ways to strengthen and repair this bond. Many turners, for example, will use CA adhesive to try to strengthen the bond. Running



The bond of the bark is said to be better when the wood is harvested during the dormant season. Also, proper storage will reduce the degradation of the bond

thin CA along the seam will often add some strength. This can also be used to bond broken pieces back into place should they be broken. Reattaching is more successful with medium or thick CA in my experience. While my expertise certainly isn't dendrology, I'm told - and it makes sense - that the time when the tree is harvested can make a difference. When a tree is in the growth portion of the year, the bond between the bark and the inside isn't as strong as when it is in the more dormant portion of the year. For my geographic location, that means trees harvested in the winter yield a better bond than those harvested in the summer. Someone with more expertise may be able to better acknowledge or debunk this, but you can certainly experiment with your selection of woods and harvest times to see if there is any merit. You can also be

cautious of the storage of your blank prior to use. Drying, checking, and cracking of the ends can certainly have an impact on the bond, so properly preparing and storing your harvested wood can only improve your results.



Revolving tailstock centre

Question: I've seen a revolving tailstock centre with the point removed. What good does taking the point out do? Is it something I should undertake?

Answer: Removal or withdrawal of the centrepoint back on a revolving tailstock centre – if it is removable, as some are – offers two advantages to the turner. First, it allows for safe mounting of the work without poking a hole in the wood. That hole, or holes should you shift your mount during turning, separates the wood fibres and will require cutting away to remove the work-mounting damage. Sometimes this is unnecessary or unimportant but, for most turnings, removal makes for a better appearance. There are often marks left from the revolving tailstock centre ring, but these are less damaging and easier to remove.

More valuable to most is that the removal/withdrawal of the back of the

centre point in the revolving tailstock centre allows for repeated repositioning of the revolving tailstock centre without the issue of the point-damaged wood. If you want to slightly reposition the revolving tailstock centre, a separated fibre point hole diminishes your ability to make small adjustments. The point simply pushes the newly separated fibres into the other position and your 'micro adjustment' doesn't take hold.

The turners who usually are keen to make repeated and small adjustments are those repositioning a bowl for figure appearance or balancing the peaks and valleys of a natural-edge bowl. Of course, there are others taking advantage of

repositioning needs but those two uses are common. I find that removing the point is difficult if you've used the adjustable centre extensively.

Whether you should remove the centre pin or not is a function of safety. Is it safe to do so and does that centre-pointless revolving tailstock centre bring benefits to your turning needs? The point gets securely seated and really takes some effort to remove. If you can afford to, have two revolving tailstock centres, one with the centre point and one where It can be removed and possibly allow extra inserts to replace the point for more functionality. That allows you to quickly select the one that you need for your current application.



I find use for both a revolving tailstock center with a point and with the point removed or withdrawn



There are a host of aftermarket points available for special needs turning projects





Quality Wood Turning Accessories Made in the UK by Planet

Drive and Live Revolving Centres for the discerning Wood Turner.



Tel: 023 8026 6444 Fax: 023 8026 6446 sales@planetplusltd.com www.planetplusltd.com

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



Now available in the Glenn Lucas range of products

M42 Stay Sharp HSS

M42 Turning Tools

Stay Sharper - Longer

Now available: 1/4"; 3/8"; 1/2" Bowl Gouges; 3/8"; 1/2" Spindle Gouges with red-ferruled ash handles, or unhandled, at prices you can afford

Live The Dream - Talk to your Hamlet or Henry Taylor Stockist - TODAY!

OUR CONTRIBUTORS



ANDY COATES

Andy is a professional woodturner and has a workshop and gallery in Suffolk. He makes one-off pieces, smallbatch runs, antique restorations and other strange commissions. He also demonstrates and teaches.

cobwebcrafts@ btinternet.com cobwebcrafts.co.uk



CHRIS WEST

Chris has spent a good deal of his time designing, turning and writing on the subject of salt and pepper mills. He has also published a book, Adding Spice to Woodturning: 20 Salt, Pepper & Spice Shaker Projects for Woodturners.

www.westwood turnery.co.uk



IAN WOODFORD

Since retiring from the pharmaceutical industry lan has enjoyed concentrating on his love of woodturning. As well as belonging to two Hampshire clubs he has written articles for both *Woodturning* and an American magazine.



IASON BREACH

Jason started turning at the age of 12 and has built up a reputation as a tutor and demonstrator that has taken him around the world. He produces a range of items, but is best known for his unusual turned boxes. jasonbreach@hotmail.com



KURT HERTZOG

A professional woodturner, demonstrator and teacher, Kurt writes for various woodturning and woodworking publications in the US. kurt@kurthertzog.com kurthertzog.com



LES SYMONDS

After a career in teaching, Les developed his hobby of woodturning into a career. He is on the Register of Professional Turners and has a small shop and gallery in Bala in the Snowdonia National Park, where he displays and sells his work.

www.facebook.com/ pren.bala



MARK SANGER

Mark pursued woodturning full time in 2004, making one-off sculptural pieces that include colour and texture as well as pure woodturned forms. He demonstrates and teaches in the UK and abroad.

www.marksanger. co.uk



RICHARD FINDLEY

Richard is a full-time production turner specialising in small production runs, oneoff commissions and turning for furniture and restoration work. richardfindley.uk



PAT CARROLL

As a builder/carpenter,
Pat has always loved
working with wood.
In 2002 he took a
woodturning class and
was very quickly hooked.
He is keen to explore the
combination of texture
and colour in his work.
slievebhui
woodturning@
gmail.com



PETE MONCRIEFF-JURY

Pete learned turning in school and, when made redundant 12 years ago, became a full-time woodturner. He focuses on making for high-end shows. He also demonstrates and teaches.

bodrighywood@ bodrighy.co.uk



WALTER HALL

Walter is a woodturner who has specialised in making pens and pencils. Based on the Northumberland coast in the UK, Walter sells his bespoke pens and pencils through local craft centres and via his website. walter@ walterhall.co.uk



Quality Tools and Timber to match our Service



G&S SPECIALIST TIMBER

The Alpaca Centre, Snuff Mill Lane, Stainton, Penrith, Cumbria CA110ES. Telephone: 01768 891445. email: info@toolsandtimber.co.uk

www.toolsandtimber.co.uk

you can order online now

ADD A NEW DIMENSION TO YOUR WORK WITH

Visit our Online Store Today!

metal craft

Easy to use tools that do not require heat or power









Ideal wherever wood and steel can combine to make stylish...

- Furniture
- Clocks
- Signs
- Frames & Decorative Panels
- and so much more

Call today for our free Catalogue and if you quote the promo code "MWT20" we will send you our new demo DVD free of charge

J & CR Wood Ltd, Dept MWT20, 66 Clough Road, Hull HU5 1SR 01482 345067 | info@jandcrwood.co.uk

www.metal-craft.co.uk



Suppliers of Quality Exotic & Native Hardwoods

Bowl Blanks Turning Squares Pen Blanks Lumber Slabs / Logs Large selection of numbered blanks, so when ordering online what you see is what you get !!

Slabs / Logs
Australian Burls
Rare one of a kind pieces,
Orders cut to size

A Family run business with over 20 years experience in the exotic wood trade. Well renowned for our second to none customer service and great prices. Based in the village of Upper Hulme at the foot of the famous Roaches.

VISIT OUR ONLINE SHOP www.woodwiseuk.co.uk

Fast and efficient mail order (including EU countries)

OPEN 7 DAYS Customers are very welcome to visit our Mill, (appointment only)

07792 565 661 woodwiseuk@yahoo.co.uk Upper Hulme Mill, Upper Hulme, Nr Leek, Staffordshire,ST13 8TY







Woodturning April issue 343 on sale 19th March



Richard Findley's Editor's Challenge is to try airbrushing on turned work

Les Symonds explores using the parting tool

Andy Coates takes a look at useful jig and fittings for turners

Colwn Way explores what you need to know about casting and turning resin

TO SUBSCRIBE, VISIT WWW.GMCSUBSCRIPTIONS.COM OR CALL (0)1273 488 005

Editor Mark Baker E: markb@thegmcgroup.com Editorial Assistant Karen Scott T: 01273 477374 F: karensc@thegmcgroup.com Designer Oliver Prentice
Illustrator Mark Carr Chief Photographer Anthony Bailey Advertising Sales Executive Lawrence Cooke 01273 402841

lawrence.cooke@thegmcgroup.com Advertisement Production Production Controller Amanda Hoag Tel: 01273 402807 E: repro@thegmcgroup.com Publisher Ionathan Grogan Production Manager Jim Bulley Subscriptions T: +44 (0)1273 488005

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 £24.30 (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.

Paul Howard Woodturning

www.paulhowardwoodturner.co.uk

Fluting Jig

Routers from 42mm to 65mm can be fitted as standard or other tools with a parallel collar from 65mm down can be fitted with a simple ring adaptor

£159.00 plus P & P

Index System

Index plate 60 48 36 14 hole pattern spindle sizes to suit most lathes. Unique position clamping system. £55.00 plus P & P





Spheres up to 300mm
Diameter depending on capacity of lathe.

Suitable for flat bed and dual round bed bar Lathes.

Riser Blocks for Lathes from 125mm to 250mm spindle height included. Additional risers can be fitted

Carbide Cutter for consistent results.

Self centring with disc or centring plate fitted

Tel 01621 815654 Mob 07966 188559

TaylorsMirfield.co.uk

Unit 49b, Holmebank Business Park, Station Road, Mirfield, WF14 8NA



A family run business specialising in quality pen turning kits. Established in 2014.



The Shakespeare, the only pen kit manufactured in the UK

We also supply:

Finishes and polishes including Yorkshire Grit, Chestnut Products and Hampshire Sheen · Project kits · Bowl Blanks · Pen Blanks



The VB36 Bowlturner Lathe and steinert Woodturner's Oil available in the UK & Ireland from:

The ToolPost · www.toolpost.co.uk · phone (UK) 01235 511101

HOTOGRAPHS BY WALTER HALL

Art Deco-style skeleton clock

Walter Hall takes time out to make a clock



For as long as I can remember I have been fascinated by clocks and clockwork mechanisms. One of my earliest memories is of being taken to visit my mother's uncle Tom, who was a clockmaker. I must only have been about three or four years old as I have no recollection of great-uncle Tom himself, but the mental image of the sights and sounds of his workshop full of clocks in various states of repair, the shiny parts, the moving pendulums, the racks of tools and the ticking of myriad assorted clocks has stayed with me throughout my life.

Being able to see the moving parts moving was therefore an important part of the design process for this clock project. Since I can't afford a Patek Philippe skeleton watch or an exquisitely made antique mantel clock, I decided to make a poor man's

version, and this was easily achieved with a readily available and inexpensive quartz insert mechanism.

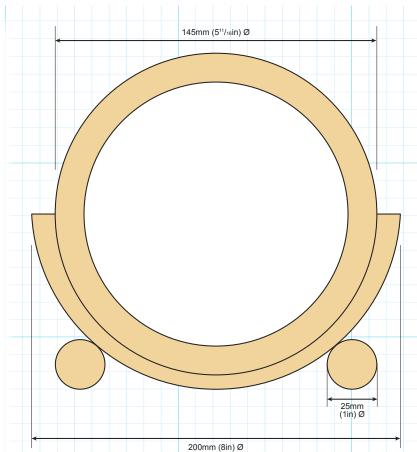
As for the rest of the design, that is a personal choice to get away from the standard 'cut out the middle and make it into a base' or 'stick it on a pedestal' versions that are the standard fare for this type of clock. Nothing wrong with those designs but I wanted something different. I like Art Deco design – it has a certain elegance that appeals to me, having been brought up in the 1950s and 1960s in times of brutalist concrete architecture and the near destruction of parts of city centres that would nowadays be given listed building status. Or perhaps I just watch too much *Poirot* – anyway, Art Deco influenced it was to be.

TOOLS AND MATERIALS • Personal & respiratory protective equipment (PPE & RPE) • Spindle roughing gouge • Bowl gouge • Beading and parting tool • Thin parting tool • Scroll chuck with Cole jaws (or Longworth chuck) • Revolving tailstock centre • Bobbin sander (or pillar drill with sanding drum) • Disc or belt sander • Dividers or compass • Boring system (or similar homemade jig)

MATERIALS

ClampsCordless drill

- Oak (Quercus robur) bowl blank
- Walnut (*Juglans regia*) bowl blank
- Walnut spindle blank
- Wood glue
- Abrasives 120-300 grit
- Finish of choice
- 100mm skeleton clock insert



NB: Cradle is cut from section.
The inner diameter is 12mm off centre from the outer diameter.
(Inner 145mm, outer 120mm)

NOT TO SCALE

1 Mount the walnut blank on the lathe. I find the most convenient way to do this is between centres rather than using a chuck or faceplate as it allows access to true up both sides of the blank. I used a large steb centre as the drive and supported the blank with a 60° revolving centre.

- **2** True up both faces of the blank and turn it to your chosen external diameter. The centre is going to be cut away, so you don't need to true up more than the outer 40-50mm of each side. If you find it easier to work from the 'front' of the blank this holding method makes it easy to reverse, so you can work on either side.
- **3** Once the blank is trued up, remove it from the lathe and mark the exact diameter required for the insert on both sides of the blank with dividers or compass. The size will vary from one manufacturer to another so check and measure carefully there is very little margin for error.
- **4** Re-mount the work on the lathe and carefully firm up your marked line with a thin parting tool. Reverse the blank and repeat on the other face. Double check measurements.

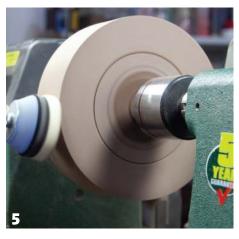








80 www.woodworkersinstitute.com

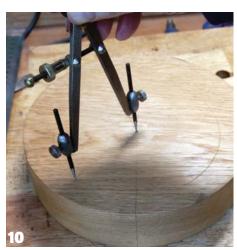
















- **5** Now sand the prepared areas of the blank through the grits to a finish as it will be difficult to re-mount the blank to do this at a later stage. A cordless drill with sanding pads will minimise radial or annular scratch marks. Do not apply a finish at this stage as it may inhibit the effectiveness of the wood glue later in the project.
- **6** Using the beading and parting tool start to cut away the waste from the centre of the blank. Once you get about halfway through, reverse the blank and work from the other side. This will prevent break-out at the back of the piece. Accuracy is important but erring on the side of too small is recoverable whereas too large is not.
- **7** Because the waste is supported on both sides the cutaway section will remain captive on the lathe when you break through the centre. As you approach this stage, which you will be able to tell by the changing sound of the cutting tool, lightly hold the outside of the blank to prevent it from hitting the tool post or other parts of the lathe as it is released.
- **8** Any waste remaining in the centre of the work can now be turned or sanded away using the methods shown at step 12, before checking the insert for fit. If it is too tight then remounting on Cole jaws will allow for minor adjustments.
- **9** Now mount the oak blank on the lathe in the same way as for the walnut blank. True up, turn to the external diameter as per the drawing and sand through the grits to a finish as before.
- **10** Remove the blank from the lathe and mark up new centres. Carefully mark out the offcentre waste area from the new centres, taking care to match both faces exactly. The remaining section must fit the prepared walnut clock surround exactly, so measure from your work rather than trusting to stated measurements.
- 11 Remount the blank on the new centres. Make sure everything is tightly secured and turn down the speed. The piece will now be significantly out of balance, so gradually turn up the speed until you reach a point at which you and the lathe are both comfortable. Take light cuts and work slowly. A midi lathe I am using for this project is nearing its capacity with a large blank this much out of balance.
- **12** When halfway through, reverse as for the smaller walnut blank and finish the cut from the back of the work. Any waste remaining can be removed by mounting on Cole jaws. Remember to mount using the cutout, not the outside of the now off-centre blank.

- 13 The fit between the outside of the walnut clock surround section and the outer part is critical, so carefully sand the inside to remove any traces of the waste or other irregularities. A bobbin sander would be ideal for this but a poor man's version can be made with a sanding drum and pillar drill.
 - **14** With the clock mechanism inserted and the surround fitted to the outer section, carefully mark the position for the part that will be removed. This should be on the centreline of the clock face.
 - **15** Cut to the lines on the bandsaw or by hand to create the cradle in which the clock surround will sit. Please note that my fingers are much further away from the bandsaw blade than it appears in the photograph. When bandsawing freehand always keep your fingers well clear of the blade.
 - **16** True up the ends of the cradle section on a disc or belt sander. They can then be sanded through the grits by hand to a finish.
 - 17 The completed components can now be glued up and clamped, taking care to align the figure of the two pieces in the way that appears most attractive. I used my favourite Titebond adhesive, but any good wood glue will do. Leave the clamped work overnight to fully cure.
 - **18** The final part of the job is to make and fit the feet. You could turn these from a single walnut spindle blank but I used offcuts from two nicely figured pen blanks. First turn to a cylinder between centres.
 - **19** The feet are held in place with dowels. Drill the holes in the feet using a jig such as the Sorby precision boring system or, if your budget doesn't run to that, then a homemade jig would be easy enough to make. The key to accuracy is ensuring that the drill bit is accurately aligned on the centreline of the lathe.
 - 20 The holes in the body are also drilled using the same jig with the work mounted on a scroll chuck. Take care to mark the hole positions carefully. I used masking tape to avoid pencil marks on the finished work. Once the feet are glued in place using 6mm dowels cut to length the finish of your choice can be applied. I used Natur-Öl finishing oil from Drechseln und Mehr. ●







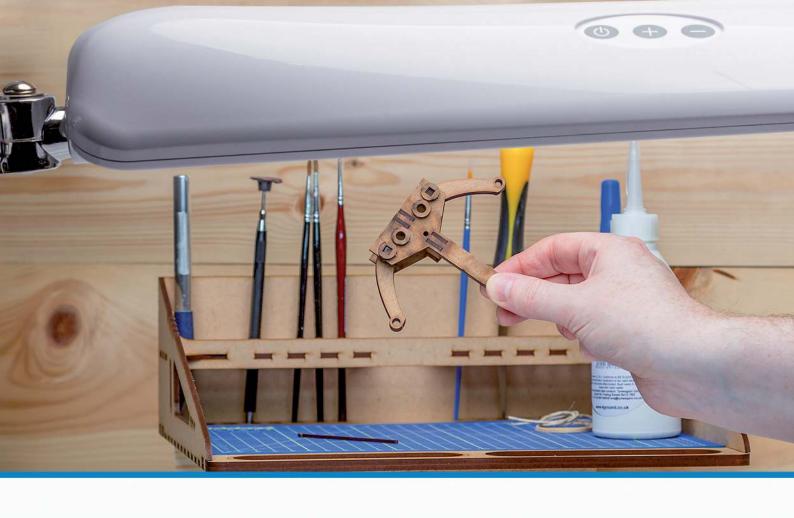












LightCraft

Daylight, anytime.

For lighting & magnification solutions that will keep your work in focus this winter.



www.light-craft.co.uk

Our range of affordable quality lighting is designed for the hobbyist and provides efficient, shadow-free light with up to 90 CRI for accurate colour rendering.

LC8017LED

Professional long reach task lamp with slimline design and swivel head

- 90 white SMD LEDs
- 6000 7000K light
- Improved colour rendering with 90 CRIEnergy efficient, using only 14w
- LEDs never need replacing
- · Shadow-free, cool light







THE FOLK SCHOOL CHANGES YOU.



Engaging hands and hearts since 1925. Come enjoy making crafts and good friends on 300 natural, scenic acres in western North Carolina.

JOHN C. CAMPBELL FOLK SCHOOL folkschool.org 1-800-FOLK-SCH BRASSTOWN NORTH CAROLINA

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

Nature's perfection

Mark Baker explores the ways in which nature continues to inspire and influence our designs



Cappadocia, Turkey 11 Jan 2019: Dried calabash, sponge gourd and bottle gourd hanging outside a shop in the street

Whether we realise it or not we are all influenced by nature in our daily lives, whether in the materials we use to make things or the designs of the things we make.

From when I started to craft and make things at school I have always been fascinated by nature and how it informs and helps us with our designs. I had some good teachers who made the world of design and creation come alive. They also told me to be curious and explore. The journey has, to say the least, been frustrating at times, but alongside that it's been fascinating and joyous and I continue to explore making things to this day, having never lost that curiosity I had as a child.

The humble bowl

Two areas that I continually explore and try to learn more about are those connected with the humble bowl and hollow forms. Both bowls and hollow forms have millennia of history, and some are more than 18,000 years old.

I think I can say that with ease the earliest vessels were no doubt created from items found in nature. Consider the calabash, bottle gourds, squashes of many kinds and other hard-skinned vegetables. Suitable items would either be cut and the contents scooped out and eaten or discarded then the skin would be hardened, or they would be dried whole then cut and the dried inner contents removed to make functional bowls, scoops and other utensils.

Bottle gourds and calabashes are two good examples of these types of vegetable and are still used functionally today to hold and store liquids and food items. The bowls and scoops they make are invariably round bottomed. They are simple and perfect for their intended purpose. Functionality and longevity of use are two wonderful reasons for things to be continued widely used to this day.

Ancient Roman architect Vitruvius thought that, when designing a building, three things should be paramount: durability/strength, functionality and aesthetics/beauty. These items qualify on all counts, well, the beauty might be a bit debatable to some, but I think they are beautiful, and they are durable and perfectly functional.

WOOD AND OTHER MATERIALS

As people developed further their ability to craft and create things and explore new materials, we see that wood and stone was used extensively to create tools and other utilitarian items such as storage vessels. Many bowls, other storage vessels in wood and the earliest forms of pottery bowls were round bottomed.

The rounded-bottom vessels made perfect sense. The very early peoples in ancient times lived a nomadic/seminomadic lifestyle where round-bottomed items worked perfectly well for holding in the hand or lap, placing on sand, earth, rugs, cushions or in string or rope cradles and so on.

Over time we see the introduction of more refined pottery skills and the use of glass and metals to make things, in tandem with people creating settlements and moving away from the nomadic lifestyles. This meant that, gradually, tables and other hard surfaces appeared on which to place things, so there were big changes in the designs of bowls and storage items.



Asian brown calabashes for water containers



Simple scoops

As a result of this change in lifestyles we see the introduction of flat bottoms, loose rings, tripod stands, integral feet and pedestals on bowls, storage vessels and plates etc., to provide stability. We also see handles appearing more often on vessels designed to be lifted regularly.

In addition to this, as craftspeople mastered their materials more, we see



Mate gourd – yerba mate vessel made out of a calabash

a wider variety of items being created, larger forms such as amphorae, as well as the integration of numerous decorative effects to create more ornate items with various adornments, but they are still perfectly functional items that all give a nod to their origins and cultural heritage.

Nature really has so much more to offer than the materials to make things with.



Umeke palewa, a traditional vessel from Hawaii derived from the shapes of calabash gourds, by Emiliano Achaval

86





Umeke bowl by Emiliano Achaval

Ancient Greek jugs with rounded or pointed ends supported by a hollowed out stone dock



Display of work in the Istanbul Archaeological Museum. Ancient Greek household items, ceramics and jewellery found on the territory of modern Turkey



Athens, Greece, September, 2016. Cycladic pottery in museum of archaeology

NATURAL WONDERS

Cultures from around the world have long recognised sequences within nature. The Fibonacci series and golden ratio are commonly used within making and designing things and the mathematical aspects of this are found/derived from that which is seen in nature. Flower seedheads. some vegetables, tree branches, leaves, spiral shells, the human body and many more things within the natural world exhibit these patterns and sequences. The beauty and functionality of some of these are simply stunning. Look closely at nature next time you go for a walk – we often see but do not necessarily observe things closely.

To this day I continue to be inspired by nature's beauty and mathematical proportions and things created and realised in past civilisations as well as current. These inspire all of our work whether we realise it or not, and we strive to develop the perfect item.



ABOVE: Sunflower seeds and petals – look at the spiral of seeds. It correlates to the Fibonacci series BELOW: Various items ready for final finishing inspired by the past and following the Vitruvian principles







RELEASE THAT HIDDEN CREATIVITY YOU ARE ONLY LIMITED BY YOUR OWN IMAGINATION

WWW.TURNERSTOOLBOX.COM

We are here to help you in your new-found interest in the craft of working with wood and whether you are a beginner or those who are already established, our aim is to be able to supply you with High Quality Woodturning – Woodcarving and Woodworking Tools, Machinery and Accessories, and at a reasonable price. With most items readily available for next day delivery. If there is something you need, and you are unsure and require more information, call or email our office and a member of our team will answer your questions or simply give you some friendly advice



For more information or to place your order visit www.turnerstoolbox.com Order online Open 24hrs All at the click of a button and delivered straight to your door: Or place your order over the telephone:

T: 01873 831 589 - M: 07931 405 131 - E: sales.turnerstoolbox1@outlook.com



Next day delivery service (UK) & We deliver



Lathes. Gouges. Carving Chisels. Waxes. Polishes. Pen Kits. Books. Carving Blanks. Drive Centres. THE. Bowl Blanks. Work Holding. Abrasives. Power Carving. DVDs **ALADDIN'S**. Measuring and Marking. Chucks. Sharpening. CAVE. Grinding. Coring Systems. Spindle Blanks. CBN Wheels. FOR. Exotic Timbers. Bandsaws. Wood Threading Kits. Tool Bags. WOODTURNING. Framing Chisels. Hand Tools. Honing Kits. AND WOODWORKING. Tool Storage. Hollowing Systems. Polishing Systems. Live Centres. Extractors and Respirators...

The ToolPost

Unit 7 Hawksworth, Southmead Industrial Park, Didcot, Oxon. OX11 7HR 01235 511101 • www.toolpost.co.uk

sharing expertise

Community letters

Here are some letters the Editor has received from readers

Praise where it's due

Hi Mark, it's often necessary to complain and take issue, otherwise things won't improve, but I feel we should also give praise where it's due. I treated myself to a new lathe last year - I turn purely for enjoyment, just to make things round and create a lot of sawdust. Recently needing to replace the drive belt, I found it impossible to remove the shaft from the bearing to do so and had to contact Record Power. It sent a courier to collect the head stock unit, which was picked up at 5pm on Thursday and fixed and returned Monday pm. I thought the service I had was faultless and should be noted. Often when we buy tools and equipment it's not always the after-sales service that's a factor in our decisions. Keep up the good work.



Irregular-shaped work Mark, I read with interest Frederick Hills' article in the

November issue on holding irregular-shaped work. The photo shows one I made earlier using a doughnut chuck and a bag of polystyrene granules. Both are made from brown mallee and measure 45x23 and 32x17.

> Iohn Whitelev Ryedale Woodturners

Nigel Alway

From the forum

Here is this month's selection of postings and work from the Woodworkers Institute:

www.woodworkersinstitute.com

A LITTLE OAK BOWL

https://www.woodworkersinstitute.com/forum/a-little-oak-bowl_topic22348.html

Neil Lawton posted: About 43/4"x11/2" with chestnut finishing oil. C+C welcome.

Les Symonds responded: A remarkable piece of oak, Neil... glad you kept the form quite simple.







Arizona Woodturners Association

Patricia Jones talks about what her local club is doing to share and grow so future generations can enjoy turning

The Arizona Woodturners Association (AWA) in Phoenix, Arizona, US, is a proud chapter of the American Association of Woodturners (AAW) started in 1989. Our chapter has 186 members who range in age from 16 to 87. We are dedicated to training, preserving and inspiring the art of woodturning. The club is all about volunteers working together for the good of expanding the work and knowledge of woodturning.

Having fun, learning and sharing seem to be the high points of our club. The members get together each month for work share (Instant Gallery), Show 'n' Tell, President's Challenge (a woodturning challenge by the club's President), demonstrations and talk/share/tell stories of woodturning adventures. The AWA club does not have its own building – each month we transport our club lathe and set up in a community centre. The club has two Nova lathes along with a Rikon and Delta mini lathes.

Members of the AWA range from beginners to expert professionals. Each meeting, in the Instant Gallery, members show some unique woodturning. They share with each other their trials and tribulations with their turned pieces, which might include hollow forms, piercing, carving, burning, specialised segmented bowls, how that bowl got so thin, urns that amaze you, pewas in bowls, turquoise inlay vessels, platters, off-set turnings, mobiles, pottery illusions, one-handed pepper grinders, natural-edge bowls, salt cellars, ornaments, boxes, skilful finials – just to mention a few.

AWA is actively involved in demonstrations: AAW-sponsored events, local woodturning store demos, festivals, three county fairs, Arizona State Fair and school demonstrations. The fair demonstrations highlight spindle and basic bowl turning, encourage new turners to attend meetings and get involved in the AWA, and spinning tops are made for children. Giving the tops away, seeing the joy on children's faces is a fun part of demonstrating at the fair. Turning Pens for



the Troops is a sponsored demonstration to turn pens and give to the troops each year.

Activities

Beads of Courage (www.beadsofcourage. org) is the October President's Challenge each year. This project gives boxes to hospitals and children's homes to keep their beads in. Through this programme children receive unique beads that represent procedures or treatments during a serious illness. For example, they might receive a red bead for each blood transfusion, a yellow bead for each night in the hospital, a star bead for surgery or a white bead for chemotherapy. Their collection of beads becomes a tangible record of their journey.

92







Demonstrations are also done in high schools to encourage future woodturners. Through our monthly Shorty raffle, money is raised to buy turning tools for the schools. Our raffle fundraiser each month makes money for the Shorty Fund (named after Clarence 'Shorty' Hart due to his good character, honesty, always teaching and educating about woodturning).

Although 'Shorty' has now passed, his guidance and helping other turners made an impact. Going into the schools and educating the next generation is important to the AWA.

Several members of AWA actively teach in a local programme/school for autism. Seeds for Autism (www.seedsforautism. org) is a school for young adults with vocational teaching and social development. The school has six lathes and students are taught daily the art of woodturning.

Twice a year we host all-day professional demonstrators, who also teach three days of hands-on classes for our members.

Among the demonstrators we have been able to see over the years include: Cindy Drozda, Kelly Dunn, John Lucas, Jimmy Clewes, JoHannes Michelsen, Bonnie Klein, David Ellsworth, Stuart Batty, Mike Mahoney and Carl Jacobson.

These demonstrators have taught and inspired our members to try new adventures in turning. This past year the club has had two 'remote' demonstrations, which were very successful. Mike Mahoney and Lyle Jamieson had two different styles in their remotes. Both were very interesting and the members enjoyed interacting with the turners via the internet and seeing demos through the large-screen monitors.

The club continues to change and grow with the times. The remote demonstration trial run was a success. The AWA is expanding its mentor programme and having in-home group sessions to teach new turners. There is a new 'discount incentive' programme for members to sign up electronically for business discounts. And the newest programme addition is a 'tool disposal' committee, formed to help someone who may have lost a loved one or inherited woodturning equipment and needs help disposing of the equipment.

Arizona Woodturners Association is in the top 10 clubs for size in the United States and the AWA board is always looking to bring new ideas to the members. Learning from others through their mistakes and successes is what makes us all better woodturners. Wherever you live, woodturners are the most sharing of their craft and want to see the future generations carry on this art.

Web: www.azwoodturners.org

Arcs with inlay

Christ West produces some off-centre inlaid arcs



This article is about techniques, it does not include a project. This is about producing a decorative, circular, 50mm-diameter inlay which can be inserted into whatever you choose.

The inlay consists of two 3mm-wide arcs. One will be filled with white Milliput and the other with black.

The main point here is that by using Milliput in this case, one single piece of wood can be used. The result can be seen in the main image.

Other types of inlay filling could be used – powders, crushed shell and stone with resin or adhesive, a mixture of metal powders and cyanoacrylate adhesive and metal wire such as copper an be used. The diameter chosen for the walnut (*Juglans regia*) circular inlay disc is 50mm but you can choose any diameter you wish. The arc diameters can be proportioned accordingly.

I made a decision from a safety point of view to turn the arcs using a rectangular piece of wood. From the drawing you can see that you will be cutting 100% of the wood, while if you started with a 50mm Ø disc and managed to draw the arcs on to it, only 40% of the wood would be turned – for the other 60%, you would have been turning air.

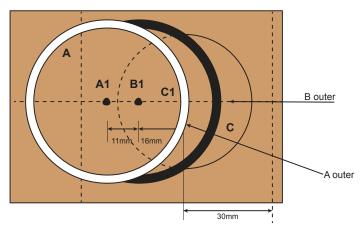
ARCS

If you spend a couple of minutes looking at the drawing you will be able to see how easy it is mark out the arcs. The rectangular piece of wood, which I call the inlay canvas, will be first set up with a live centre aligned with A1 and, after cutting arc A, it will be moved to line up with B1 to cut arc B.

A 3mm wide parting tool or Bedan tool will make the task of turning so much easier. I use a homemade tool made from HSS tool steel which is readily available on a well known Auction site. Details on making the tool is shown in the tools section.

Inlay canvas = 100 x 70 x 7mm

Saw through 70 x 70mm square indicated by dotted lines when complete



A outer = $60 \text{mm} \varnothing$ B outer = $60 \text{mm} \varnothing$ C = $50 \text{mm} \varnothing$

PHOTOGRAPHS BY CHRIS WEST

Tools and equipment Special tools

• 3mm Bedan tool

Scrap block

• As shown below

Regular tools

- Flat skew chisel
- Spindle gouge

Other items

- Personal and respiratory protective equipment (PPE & RPE)
- Faceplate/chuck
- Revolving tailstock centre
- Two pieces of waste wood block
- Screws
- Strong, double-sided adhesive tape for fixing carpets, 25mm x 50mm.

3MM END SCRAPER TOOL

The 3mm end scraper tool is formed from 6mm square x 300mm tool steel (HSS). Personally I don't have the machine shop equipment to grind away the steel not required. A fixed bench grinder/belt grinder and a rotary carving tool with a small grinding bit were used on a 1mm flat surface, which can be seen in the diagram. This is to avoid any side cutting of the arc's recess.

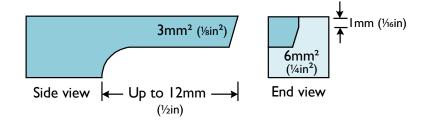
SCRAP BLOCK

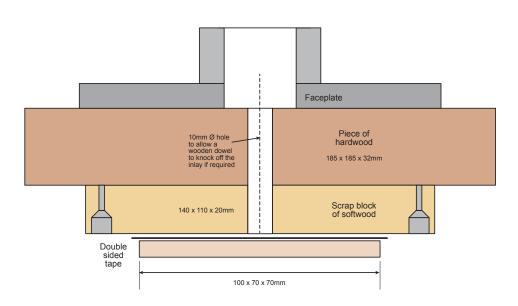
A scrap block is required for this inlay. It is straightforward to make and can be used in future inlay projects.

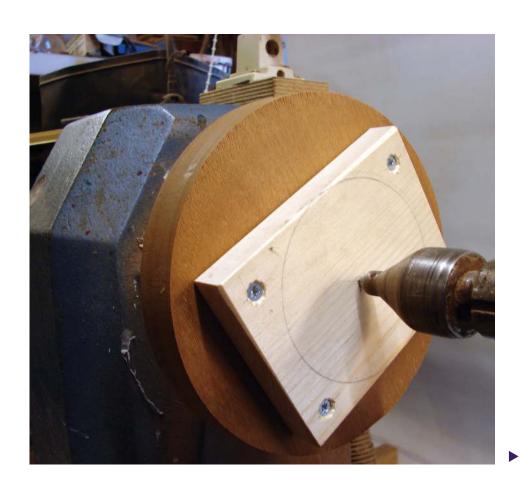
A piece of 180 x 180 x 25mm hardwood was screwed to the 6in faceplate. It was then turned down to 175mm Ø. From the drawing you will see that a scrap block 140 x 70 x 20+mm was formed, its centre punched and four screw holes drilled. Both sides of the scrap block should be parallel.

The scrap block is now screwed centrally to the turned 175mm disc.

Double-sided tape is applied to the scrap block to cover the area where the rectangular inlay blank will be fitted.





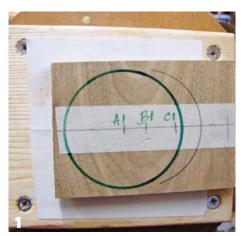


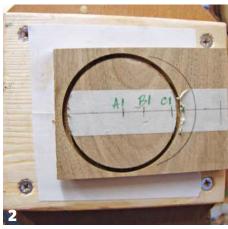
Arcs

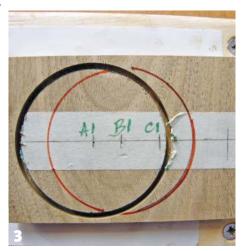
- 1 The first step is to mark out the inlay canvas as shown in the diagram. Next, place the inlay on to the scrap block. A live centre is placed in the tailstock. Line up point A1 with the live centre and slowly wind in the tailstock. Note, the live centre should not touch the inlay. As they come together and are lined up, the inlay is pressed with your fingers against the double-sided tape.
- ${f 2}$ Shown is the 100 x 70 x 7mm inlay blank stuck to the double-sided tape. The centre of the green line is A1. The cut will be made on the inside of the outer line of the circle A using a 3mm end scraper, 5mm deep. Before starting to cut the groove, check the work is secure and, once happy it is, select a low lathe speed then cut the groove. The 3mm scraper and how to make it was shown in *Woodturning* 339.
- **3** The inlay is carefully levered off the scrap block using a wood chisel. The doubled-sided tape is replaced if necessary. The centre of the red line is B1. The cut will be made on the inside of the outer line of the circle B using a 3mm end scraper.
- **4** The two arcs have now been formed and the green circle is the shape of the final inlay. The job of filling the arcs with epoxy putty is the next step.

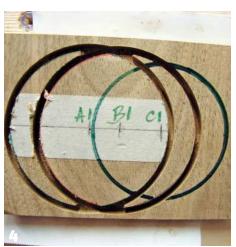
Preparing the two-part epoxy putty

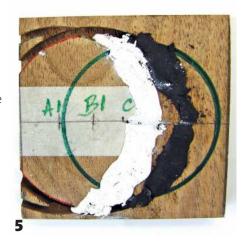
- **5** Cut off a 20mm length of each of the supplied rolls of Milliput. It is suggested that nitrile gloves are worn to keep your hands clean. Start kneading and rolling the two rolls together for approximately five minutes, by which time no streaks of lighter colour should be seen. Pack the recess with the Milliput. Allow a minimum of four to five hours for it to dry overnight is best if you have the time. Not a pretty sight. A 70 x 70mm square has been cut prior to the filling with the two Milliput colours.
- **6** The 70mm square has been placed on to the scrap block, lining up the centre with C1. The diameter was taken down to 50mm before being further faced off to remove the excess putty and to give an overall thickness of 6mm. See tip. The inlay is now ready to be inserted into whatever your chosen project is.













TIP

I initially used a piece of ash as the inlay canvas. This exposed a potential problem of contamination between the black Milliput and the light, open-grained ash. This was caused by sanding the ash and dry putty on the lathe. To overcome this I found that the wooden inlay is best sanded to 400 grit before the putty is inserted into the inlay. When the putty is dry, use a $^{1}/_{2}$ in flat skew on its side as a negative scraper to lightly remove the excess putty. If possible no wood should be removed. Alternatively, the inlay can be carefully held flat on a belt sander to remove most of the excess putty with the rest removed by sanding, using a sheet of sandpaper on a flat surface.

If you are interested in designing and turning further inlay projects I would suggest you keep this issue handy for details on the faceplate scrap block and the 3mm bedan tool. lacktriangle



NEW CONTENT | NEW STYLE | MORE PAGES





DESIGN AND INSPIRATION FOR FURNITURE MAKERS

FOR CRAFT ENTHUSIASTS

ON SALE NOW FOR £5.99 IN STORES, ONLINE OR BY CALLING 01273 488005 (PLUS P+P)

GMCSUBSCRIPTIONS.COM/WOODWORK

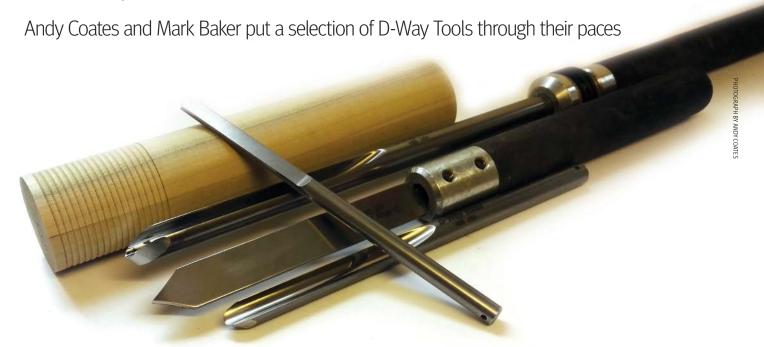
Kit & Tools

A collection of press releases and tests showing the latest tools and products on the market

All prices are correct at time of going to press but are subject to change without notice. Products from US & overseas to UK are subject to shipping & taxes

D-Way Tools

ON TEST



Comments from Andy Coates

received a parcel of D-Way tools to test with some excitement. The package of contained unhandled tools and included a ½in detail spindle gouge, ¼in bead tool, ¼in STD parting tool, and ¾in (½in UK size) bowl gouge, and found they fitted very well in a variety of interchangeable handles I had, so was able to start using them immediately. I have used the imperial/inch measurements because being made in the USA they use the inch measurements and that is what they are bought in.

he D-Way tools are all made from heat treated M42 HSS and are sold pre-sharpened and ready for work. The items received were sharp and ready for use. When I buy a new tool I generally put my own grind on before work, but none of these tools seemed far away from the grind I would put on, so I left them as supplied. The 5% in bowl gouge was supplied perfectly sharp and, on wet and dry wood it performed without issue, capable of fast roughing cuts removing

a prodigious amount of wood very cleanly and quickly, and them more refined finishing and shaping cuts using the nicely swept wing of the tool. The flute is a U-shaped parabolic curve, which I prefer on the whole, and as such is a perfect all-rounder, equally good for hogging out and cutting cleanly at the bottom of bowls. Edge holding seems on a par with the very best of the other brands of tool I have, and honing between re-grinding worked very well. It is a lovely tool to use.

The detail spindle gouge performed equally well, the relieved heel proving a sensible and useful modification. Both the bowl and spindle gouges have polished flutes which help to produce the extremely sharp cutting edges, and this is reflected in the quality of the cuts both tools are capable of.

I wasn't expecting too much from the parting tool; it's a parting tool after all, but it was a surprisingly nice tool to use. It's a pretty standard-pattern parting tool, but does seem to have a very sharp cutting edge, and cuts incredibly well

on both parting cuts and rolling small beads. What was apparent was just how rigid this tool is. The tool steel is very hard; again it is M42 HSS (Cobalt) and has a ½in tang, which all helps to produce a remarkably strong tool, with no discernable flex. Without question a tool I will immediately buy for my own use.

The last tool, a 1/8 in beading/beadforming tool, is the only tool I wouldn't
have previously considered buying for
my own use, however, using it was a
dream. Its only function is to cut small
1/8 in beads, other sizes are available and
without question it does just that, and
does it incredibly well. Obviously results
will vary depending upon wood species
and presentation of the tool, which can
take some practice, but it does cut very
clean, repeatable beads; so if you are fond
of using beads as a decorative feature this
tool will make short work of them.

None of the tools proved a problem for re-grinding, even the bowl gouge grind was repeatable using a Wolverine jig, although it would not bother me to have to grind it to my usual pattern, and



%in and ¼6in bead-forming tools, diamond tool – aka tear-drop tool and a thin ¼in tapered parting tool

same was true for the spindle gouge. The parting tool is no different to grind than any other standard tool and the bead-forming tool was best sharpened with a diamond honing card. So there is no reason why the grind styles and sharpness cannot be maintained for the life of the tool.

Conclusion

What stands out with this range of tools is the design of the tools; they have clearly been designed by turners for turners, and as a result they perform beautifully.

The tool steel is very high quality and the finish on the tools is flawless.

Second opinion from Mark Baker

The tools I tried were a %in and 1/16in bead-forming tools, diamond tool – aka tear-drop tool and a thin 1/6in tapered parting tool.

The 1/16 in parting tool is 210mm long and machined from 3/4 in high by 1/4 in wide bar. The 1/2 in wide tang is machined, as is the main shaft of the parting tool

to create the 4in long tapered section of the tapered, from bottom to top, to create the main profile of the cutting section and is tapered to minimise binding during the cut. In use it is exceptionally rigid, holds a very sharp cutting edge and cuts like a dream. The beauty of the cutting edge being only 1/8 in wide is it removes minimal timber and it can also be used to create delicate, thin recessed shoulders and recesses.

he beading/bead forming tools are machined from %in diameter round bar and are, in my opinion, easy to use. Due to the grind on the end, they can be used horizontally to the work for delicate cuts, or the handle can be held low so the tool is pointed more upright into the oncoming work for a more aggressive, but not too aggressive cut. The machined flutes are precise and even. And regarding sharpening, honing is the best way to go with these tools, but if you damage one of the wings of the flute by dropping the tool on the floor, they can be ground on a bench grinder with ease. I found these tools easy to use, but as Andy says in his comments, the quality of the bead is dependent on the timber used. Dense, close-grained timbers are best especially if you very fine delicate beads.

The diamond tool threw me a bit. Looking at the D-way website, there is a video which shows it in use to cut beads and such like. It is more versatile than that. It can be used to roll beads, but it can also be used to cut V-grooves, shear cut curved surfaces as well, so is a handy clean up tool for some shapes.

All of the tools performed well and with ease. The cutting edges lasted a long while and there was nothing to find fault with regarding these tools. Well made and totally fit for purpose.

Prices from: \$40 Contact: D-Way Tools Web: https://d-waytools.com

HAMPSHIRE SHEEN

Starting at the end of January Hampshire Sheen is introducing food contact and toy safe compliance on its High Gloss and Microcrystalline Wax products. They now comply with food contact and toy safe regulations in the UK, Europe, USA, Canada, Australia and South Africa.

Price: At the time of going to press

to be confirmed

Contact: Hampshire sheen Web: www.hampshiresheen.com



Advertisers Index

AWGB International Woodturning Seminar	2
Axminster	IBC
Beaufort Ink	67
Carter & Son Toolworks	67
Chestnut Products	6
Chestnut Products	66
Craft Supplies USA	27
Creative Welsh Woodturning	89
Crown Hand Tools	84
Easy Wood Tools	12
G & S Specialist Timber	76
Hamlet Craft Tools	74
Henry Taylor Tools	26
Hunter Tool Systems	84
John C. Campbell Folk School	84
Laguna Tools	18, 19
MDI Woodcarvers Supply	70
Metalcraft	76
Nelton Exhibitions	26
Niles Bottle Stoppers	70
Nova	59
Olivers Woodturning	35
Oneway Manufacturing	70
Osmo	70
Paul Howard Woodturning	78
Peter E Judge	66
Planet Plus	74
Record Power	IFC, 1
Robert Sorby	OBC
Robust Tools	36
Shesto	83
Simon Hope	20. 44
Stainless Bottle Stoppers	27
Steinert	78
Stiles & Bates	50
Taylors Mirfield	78
The Beall Tool Company	66
The Toolpost	71, 90
Turner's Retreat	28
Wivamac	52
Woodpeckers	65
Woodwise UK	76
	, 0









WOODTURNING MAGAZINE BINDERS

Keep your magazine collection in order with this stylish and durable binder

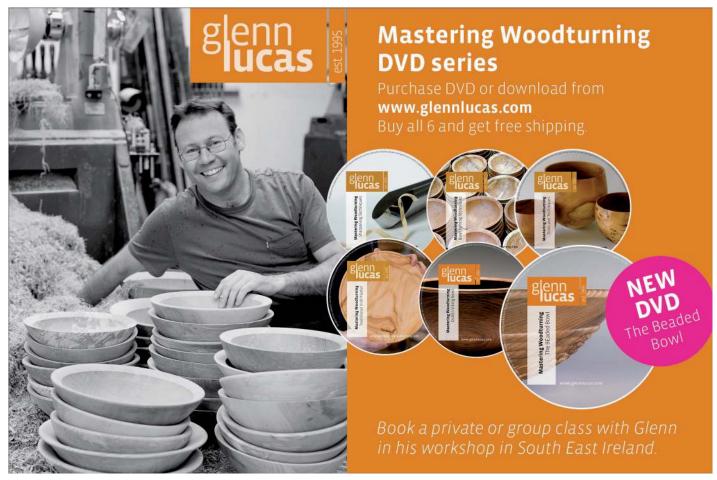
Holds a year's worth of issues

£8.99

Visit www.thegmcgroup.com or call +44 (0) 1273 488005





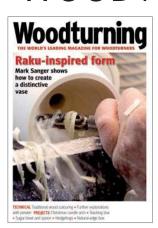


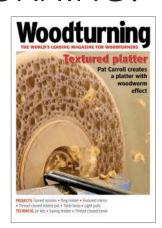


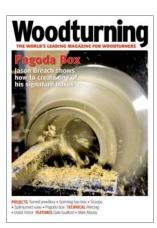


MISSING A BACK ISSUE OF WOODTURNING?









Order back issues direct from us for only £5.50 in the UK and £6 overseas (includes P+P).

CALL OUR SALES TEAM ON +44 (0) 1273 488005 OR VISIT WWW.GMCSUBSCRIPTIONS.COM



Allan Calder's Ltd Sandpaper Supplies

Unit 2B Churnet Works, James Brindley Road, Leek, Staffordshire ST13 8YH



We are supplying top quality brands of sanding abrasives for all types of wood turners.

Web: www.sandpapersupplies.co.uk

Email: sandpapersupplies@yahoo.co.uk Tel: 01538 387738

LINCOLNSHIRE WOODCRAFT **SUPPLIES**

Specialist in High Quality Turning Blanks The Old Sawmill, Burghley Park, London Road Stamford, LINCS. PE9 3JS

Open 9am to 4pm - Monday to Friday 9am to 12:30pm - Saturday

Please call beforehand if coming from some distance Tel: 01780 757825 Mobile: 07808 319280

www.lincolnshirewoodcraft.co.uk

Retirement Sale 20% off non-Paypal sales 20% off sales over £20

WOODWORKING SUPPLIES

Barkers Lane, Snainton, Nr. Scarborough, North Yorkshire Y013 9BG

TEL: 01723 859545

Open Mon-Fri 9.00am - 5.00pm www.snaintonwoodworking.com Saturday 9.00am - 4.00pm Sun + Bank hols CLOSED

£249

£299

OPEN DAY 4TH APRIL

10.00 AM-3.00 PM FREE ADMISSION
RECORD POWER, CHARNWOOD, GMC PUBLICATIONS,
LAGUNA, MIRKA ABRASIVES, ROBERT SORBY
STEVE FEARNLEY (PYROGRAPHY), DAVE LOWE (RPT) WOODTURNING
SUE HARKER (RPT) & GRAHAM HARKER (RPT) WOODTURNING

STOCKISTS OF Arbotech, Beber Carving Tools, Crown,Flexcut, Hamlet, IGaging, Microplane, Proxxon, Simon Hope, Shogun Saws, Stubai Chisels, Tormek, Trend CHESTNUT
Buffing System
Large range of finishes in stock
CHARNWOOD
W815 Mini Lathe £189 W814 Midi Lathe £376 W813 Lathe From £425 1624V V. S. Lathe & Bed Extension Ex Display £1515 BD15 Belt/Disc Sander Package BD46 Belt/Disc Sander 4" x 6" Package

BD610 Belt/Disc Sander 6" x 10" Package IEW BS410 10" Bandsaw SS16F Scroll Saw CHUCKS AND ACCESSORIES
CharmwoodW810 2" 3 Jaw Mini Chuck
Charmwood Viper 2 Chuck
Charmwood Viper 3 Chuck
Charmwood Nexus 3 Chuck
Charmwood Nexus 3 Chuck NEW Record SC1 2" Mini Chuck Req Insert £69.99
NEW Record SC2 2 1/2" Mini Chuck Direct Thread £79.99 £69 99 Record RP2000 Scroll Chuck
Record SC3 Geared Scroll Chuck Package
Record SC4 Geared Scroll Chuck Package From £69.99 LAGUNA BFLUX1 Extractor 14/12 Bandsaw

18/36 Revo Lathe

PEN MAKING Large range of pen making accessories RECORD/CAMVAC DML250 10" Mini Lathe DML305-M33 Midi Lathe DML320 Cast Midi Lathe 1HP

£599 CL3 Lathe Ex Display Collection only From CL4 Electronic Variable Speed Lathe £924 Coronet Herald Lathe Inc. Leg stand NEW Cornonet Envoy Lathe Package £1599 NEW Cornonet Regent Lathe Package £1999 £99 DX1000 Extractor £129 BS250 10" Bandsaw £299 BS300E 12" Bandsaw £279 £599 BS350S Premium 14" Bandsaw £749 £999

£139 BS400S Premium 16" Bandsaw Sabre 350 14" Bandsaw £999 Sabre 450 18" Bandsaw £1499 Startrite SD31-PK/A Planer/Thick Ex Display £1599 £1499 Large range of machines, tools, and accessories **ROBERT SORBY**

6 Pc Chisel Set 67HS Free Delivery UK Mainland £149 ProEdge Basic ProEdge Deluxe Free Delivery UK Mainland £287 Free Delivery UK Mainland £355 **SHEPPACH**

SM200AL 6" Bench Grinder BG200AL 8" Bench Grinder £1299 DecoXL Scroll Saw £169 £2499 OSM1000 Bobbin Sander

SUBSCRIBE TO OUR EMAIL/NEWSLETTER

It's free to join @ www.snaintonwoodworking.com Keep up to date with offers, new products & demonstration days

THE WOOD SHED III Lowtown Road Temple Patrick Co. Antrim BT39 0HD 02894 433833

www.wood-shed.com

The Wood Shed

native and exotic woods woodturning tools accessories • finishes

• SIP

• Fox

woodturning courses for all abilities

LEEDS D.B. Keighley Machinery Ltd

Vickers Place, Stanningley, 0113 2574736 0113 2574293 Fax: Mon - Fri 9am - 5pm Open:

Website: www.dbkeighley.co.uk

- Jet
- Sheppach
- Microclene
- Sedgwick Charnwood
- Startrite Record

ABCDMPW

Woodturning

magazine is the best platform for reaching your target market

To advertise contact Lawrence on 01273 402841

Lawrence.Cooke@thegmcgroup.com

Suppliers of quality blanks,

spindles and boards in native hardwoods and exotics. Also abrasives and finishes. We will cut to customers requirements. Visits to clubs welcome. Mail order available.

The Craft Units, Tredegar House Newport NP10 8TW Mob: 07854 349045 www.iscawoodcrafts.co.uk iscawoodcrafts@yahoo.co.uk

My name is Pete and am a hoarder Pete Moncrieff-Jury is planning to get on top of his burgeoning offcuts pile



I am sure we have all watched a programme at some time about the person who has a house so full of things that they are in danger of being submerged. My workshop gets a bit like that. I often get asked questions such as 'what is your favourite wood?' or 'what wood is actually of no use?' and the simple answers are 'any' and 'none'. I jokingly say that if the wood becomes too small it becomes a keyring, but recently I have had to stand in my workshop and ask myself just how many keyrings I actually think I am going to make and sell. Yes, I make a lot of things that need smaller pieces of wood and yes, those offcuts come in handy for making jam chucks.

Okay, that wood has a nice grain so would be handy for brooch pins and I can't throw that bit of ebony away, it's far too nice. And... stop Pete and stand back a bit. I have done my last show for the year and have no tuition, demos etc. for the rest of the year, so this is a good time to stop and take stock - literally and be a bit ruthless. In searching though the shelves of offcuts and bits that got tossed on to them I find wood that hasn't been moved or looked at for years, as evidenced by the thick coating of dust. Perhaps the fact that I need to vacuum it to discern what type of wood it is tells me that it is indeed a good time to be ruthless and throw a lot into the fire basket. To be honest (I am trying here) just how many pieces of wood 250mm long and 20mm square do I need? Sure, they are useful for the spindles on earring stands, brooch pins and various bobbins but do I really need this many? Why have I got lumps of pine at the back of the shelf? I never turn pine.

I am sure this scenario is familiar to many of us and no doubt there is that nagging feeling that if we throw anything away we will need it before long, but there does come a time when, for me at least, enough is enough. For me it is when I realise that having so much 'stuff' is not conducive to a good, safe working environment, especially when teaching. It also means that I am left with little or no room for new, decent wood which,

sad though it is, I have to buy in for said teaching. All well and good, that lump of oak with a few splits and knots could make an interesting bowl, but it's not really material to teach a novice bowl turning with.

I see images online of turners with immaculate, clean, dust-free workshops that look more like surgical operating theatres and are often the size of aircraft hangars and I wonder how they do it. Some apparently even have separate spaces as wood stores. I envy them.

I do have a slight disadvantage. Well, several to be honest. I am very disorganised by nature and, try as I might and however good my intentions are initially, eventually I will end up in chaos. I also truly hate waste (interpret as hate throwing anything away). I have been known to remove wood from the log basket as I stoke the fire, wondering why I put it in there in the first place. As the new year begins, I am determined to make 2020 a year when I am more disciplined, cleaner, tidier... who am I kidding? I will no doubt be saying the same thing this time next year and I'm sure I am not alone.



PETE MONCRIEFF-IURY





"Excellent set of jaws very well made."

SK100 Dovetail Jaws Type C

£34.96 Inc.vat Code 410161

British manufacturing at its best

Take your turning to the next level with a set of unrivalled super precision jaws. These are uniquely designed and manufactured by those who truly understand the craft of woodturning. Design innovation, best quality materials and exceptional manufacturing all come together to produce a range of British woodturning jaws without equal.











"As a beginner this additional piece of kit provided the accuracy I lack when drilling pen blanks."

SK100 Pen Jaws

£59.95 Inc.vat Code 103670

"Usual high class engineered excellence from Axminster."

SK100 O'Donnell Dovetail Jaws – 50mm

£69.95 Inc.vat Code 211354



"Fit really snugly onto the chuck and feel and look beautifully made."

SK100 Expanding Pin Chuck Jaws

£69.95 Inc.vat Code 810067





"I wish I had bought this sooner, makes finishing previously turned green wood bowls so much easier."

SK100 Button Jaws – 250mm

£79.96 Inc.vat Code 340956

All Axminster jaws are precison-made from high grade stainless steel. They bolt onto the accessory mounting jaws which are supplied with each Axminster chuck.

Prices may be subject to change without notice.

Catalogue available – order online



To see the quality of these products, **visit one of our stores**, search **axminster.co.uk** or call **0800 371822**.

For the complete Axminster experience and to keep up with Skill Centre courses, events, news and much more, browse our website or follow us on social media.

See us at the Midlands Woodworking Show in Newark 27 & 28 March 2020

Axminster • Basingstoke • Cardiff • High Wycombe • North Shields • Nuneaton • Sittingbourne • Warrington











