WOODWORK | TURNING | TOOL TESTS | FEATURES

May 2023

The Woodworker

& Goodwoodworking

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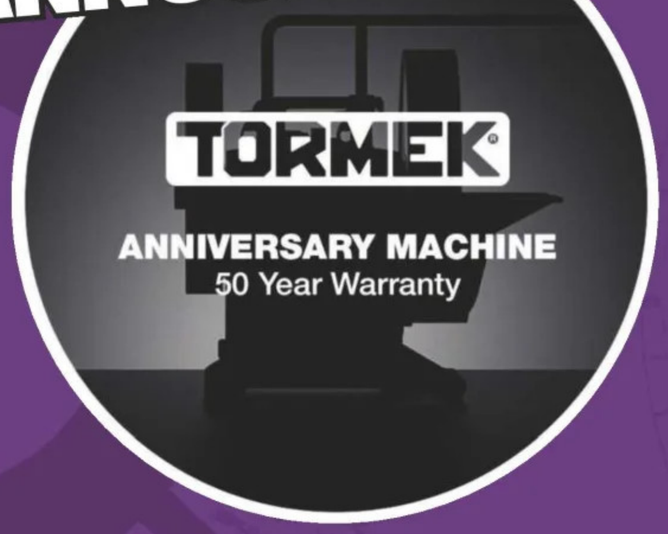

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A display of turned items at the Midlands Show

Makers Central returns to the NEC from 13–14 May

The headstock of my partner's Record Power Model No 0 twin-bar bed lathe. The whole machine is in need of some TLC following 10 years in storage

Welcome

It's been a busy month here at *The Woodworker* HQ, but at least British Summer Time has finally arrived and with it, more daylight hours along with the buds on many trees and shrubs ready to burst into bloom.

The newly-built garden workshop and bike store

New workshop

A big project going on at home has been the building of my partner's new workshop. Taking three days to construct from start to finish, I found it fascinating to watch the structure emerge, starting with the floor, then the walls, insulation, windows and doors, followed by roof and guttering. Choosing to get the professionals in was undoubtedly a wise decision, and despite the entire build being plagued by heavy rain, the job was completed on time and, importantly for me, the boxes of tools and various pieces of kit finally had a home! Once the inside space had dried out, bench tops were put in place followed by tool racks and wall storage.

Restoring a classic

As well as an interest in general woodworking, my partner enjoys woodturning, although a refresher course is definitely needed before he even thinks about putting chisel to wood... Despite having sourced some lovely bowl blanks in readiness, the main stumbling block is that his lathe – a Record Power Model No 0 – is in desperate need of some TLC. To make matters worse, it's been disassembled for around 10 years and living in a shed, so factor in a few house moves over the years and the inevitable scrapes and knocks, and you can imagine the situation. Sadly, a few parts are missing – that we know of – or have been mislaid, including the live centre and chuck. Once it's set up on the bench top, things should become clearer and a full assessment can then be made. Tentatively asking when the lathe had last been plugged in, I was assured that the motor is still operational and does actually work – phew! Following assembly, the twin-bed bars will need de-rusting and painted parts touching up – the vice restoration article on page 79 will prove useful here.

In terms of sourcing replacement parts, a quick online search revealed some good websites with lots of information on older lathes, and the people behind them seem very knowledgeable. Then there's online auction sites such as eBay, where you can buy the exact same model, and either use it for spares, or maybe just admit defeat and have it as a replacement... I'm sure some parts are universal in that a live centre from a similar model may fit, or the best case scenario would be finding someone who stocks these very things. I'll report back on progress, but who knows, maybe next month the lathe may even be re-built and restored... watch this space!

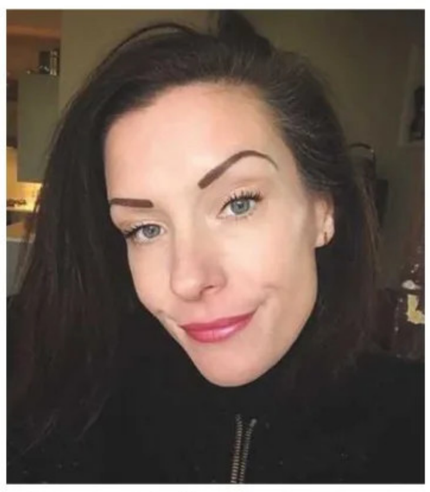
Woodworking event calendar

In terms of woodworking events, it was great to hear that the recent Midlands Show was a success and if feedback from 'Harrogate' is anything to go by, visitor numbers were hugely encouraging with people excited for its return, and importantly, keen to spend money on tools and machinery. There's still more to come this year, so be sure to make a note in your diaries: **Makers Central** and **Weird and Wonderful Wood** both take place from 13–14 May; followed by **Wood Workers Workshop's Tool Show** (10 June), featuring live demonstrations, expert advice and great offers on quality brands; then **Craft Festival Bovey Tracey** (9–11 June); the UK's No.1 branded hand, power tools and woodworking machinery event – '**The' Tool Show**, hosted by D&M Tools – returns to Kempton Park Racecourse from 6–8 October; before **The North of England Woodworking & Power Tool Show** comes back round again from 10–12 November – doesn't time fly?!

But let's get back to the here and now and looking at the new May issue. There's lots in store including two competitions for you to enter, exciting details of Tormek's exclusive limited-edition T-8 Black 50-year anniversary machine, as well as a whole host of projects, technical articles, features and tests. We like to think there's something for everyone, but let us know your thoughts and please do keep showing us what you've been making!

Enjoy!

Email tegan.foley@dhpub.co.uk



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68 MATERIAL & MAKER: CHAIRMAKING – THE WINDSOR WAY

Landing on America's shores in 1985 having made the journey by sail boat from England, Michael Brown built his own timber-framed house before setting up a business making stunning bespoke hand-crafted chairs and furniture, which he continues to do to this day

Double WIN!

COMPETITION 1:
Win 1 of 5 sets of 10 AUKTools Silicone Chisel Guards – courtesy of **Wood Workers Workshop** – see page 19 for details

COMPETITION 2:
Win 1 of 2 MICROJIG Grr-ripper2 Go™ table saw accessories – see page 24 for details

Good luck!

CHISEL RATING

PROJECT DIFFICULTY 1-5

Each project in this issue includes a difficulty rating from 1-5, so you can readily see whether or not a particular one is suited to you. While it's good to try and push yourself and develop skills, workshop safety should always be a main consideration and we urge you not to attempt a project/use specified tools or machinery, if you're unsure how to do so in a safe manner. A wide range of safety information is available online and a good place to start is **www.hse.gov.uk**

1 **Very easy**; only requires basic tools
2 **Simple to make**; only a few tools required
3 **Aimed at beginners-intermediate**; some specific equipment/tools required
4 **Aimed at intermediate-advanced**; sound woodworking knowledge required in addition to a wide range of hand/power tools
5 **Advanced skills/knowledge required**; a wide range of specialist equipment is needed to complete the project

The Woodworker & Good woodworking
MAY 2023

PROJECTS & TURNING

TECHNICAL

REGULARS

FEATURES

ON TEST

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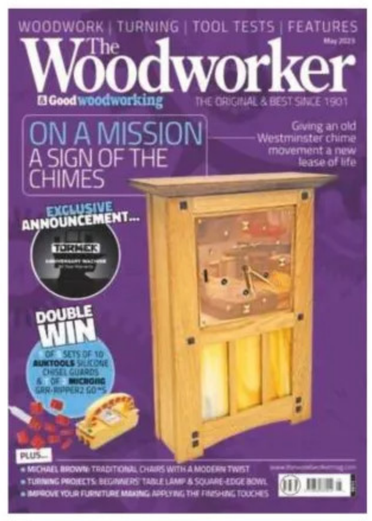

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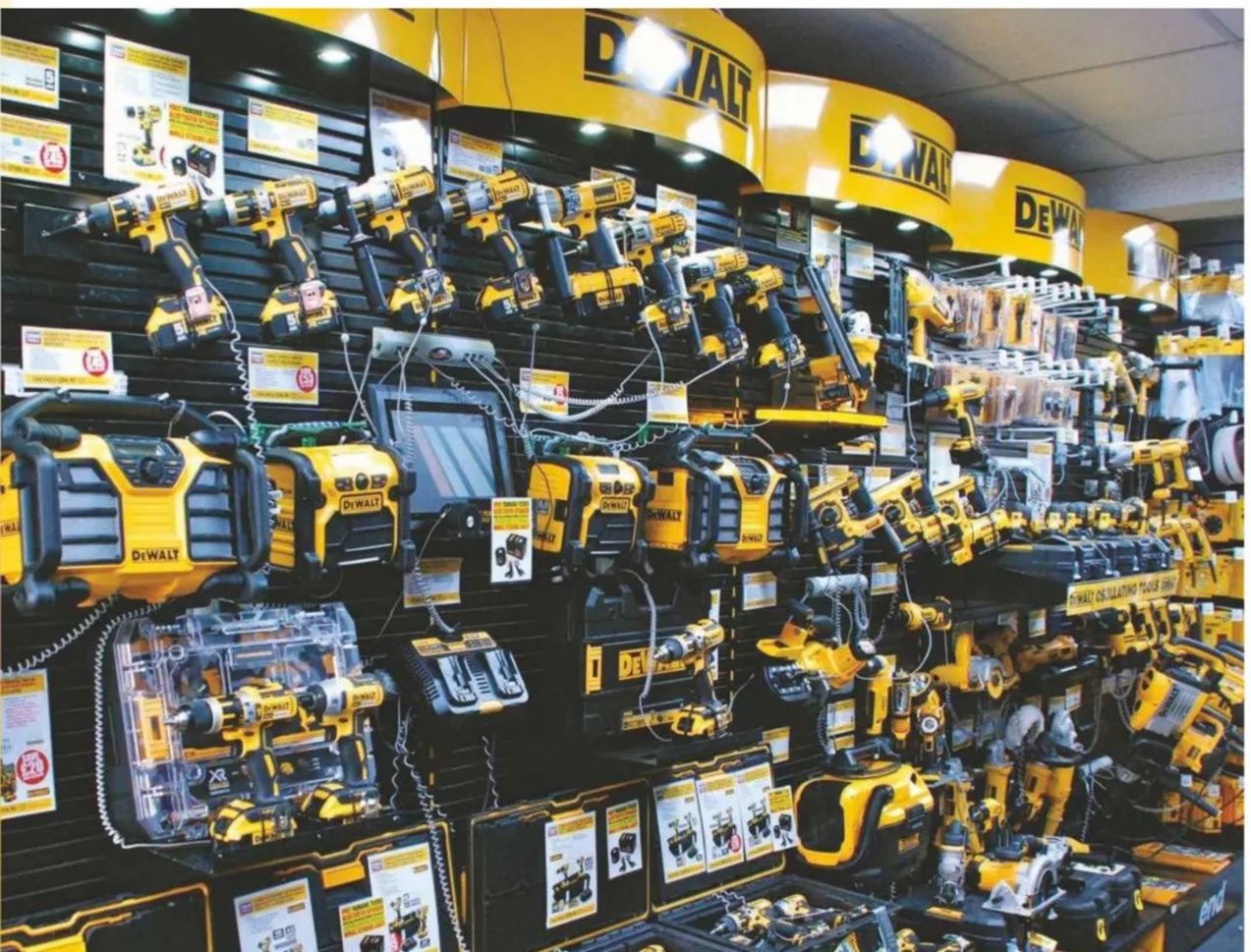

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★★★★★

"**Super helpful team**, phoned in late in the afternoon and said he'd get my order dispatched the same afternoon and like a flash my product turned up super fast! Will be using again very soon!"

★★★★★

"**Brilliant service friendly staff** lots of knowledge of the tool trade. Like the loyalty points. My number 1 tool supplier."

★★★★★

"**D&M tools have gone the extra mile** with there outstanding support, Nothing is to small for there team, sorted out my order, Really quick, will happily buy more gear from them."

★★★★★

"**Service support was excellent** with a prompt and helpful response to my query. Item was as described and keenly priced."

★★★★★

"**Quality products, great price and quick delivery** well done again."

★★★★★

"**Excellent deal best price around.** Dispatch and delivery quicker than expected and exactly as promised. Will absolutely use again."

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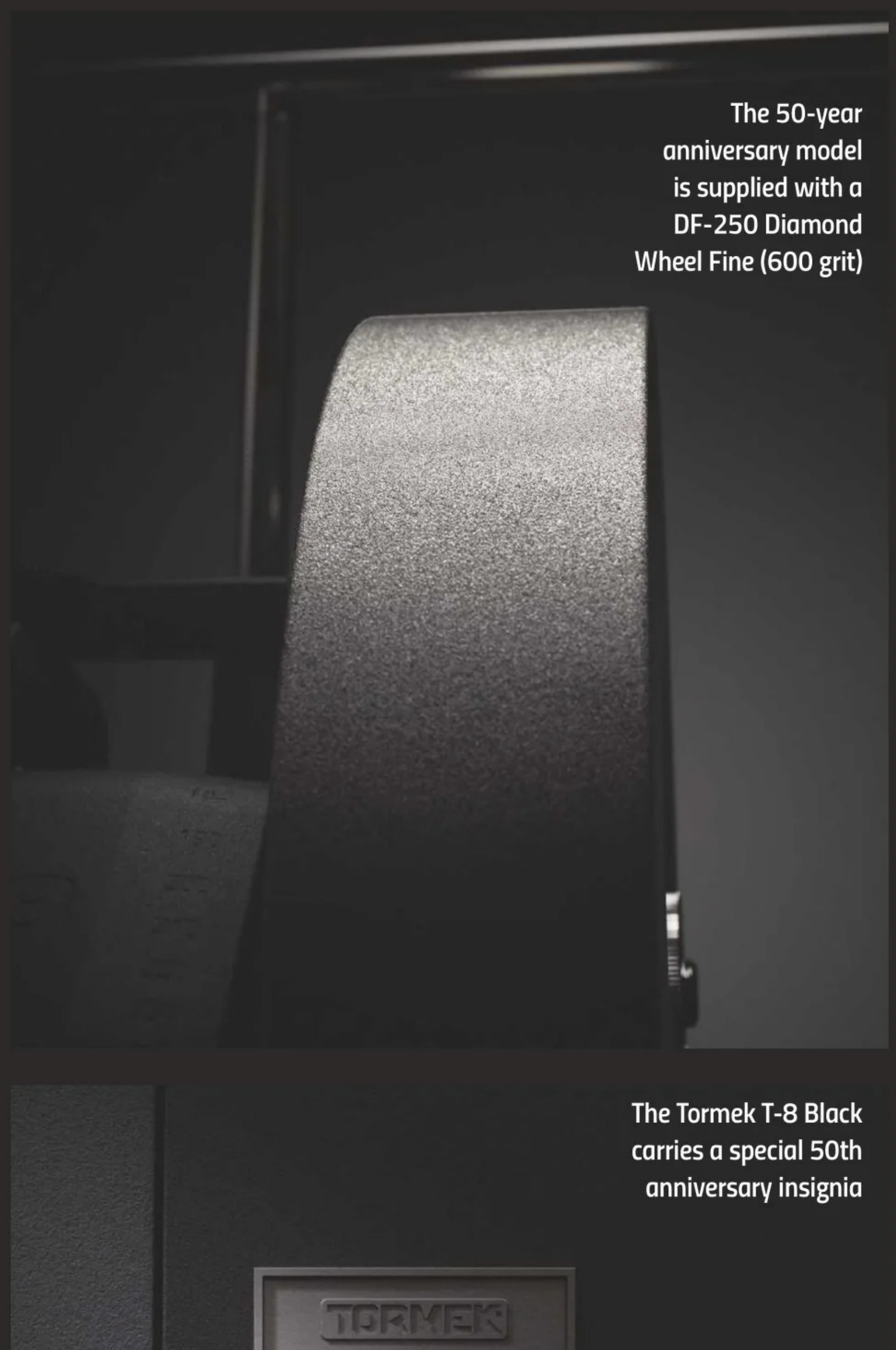
NEWS In brief...

Boasting an intense all-black appearance, the limited-edition model is certain to give any workshop the edge

The 50-year anniversary model is supplied with a DF-250 Diamond Wheel Fine (600 grit)



The Tormek T-8 Black carries a special 50th anniversary insignia

Celebrating **50 years** of sharpness – the TORMEK T-8 BLACK

Tormek was founded in 1973, in response to Torgny Jansson's father – a hobbyist woodworker – not being able to achieve the level of sharpness required on his hand tools. Eager to solve this problem, Torgny went on a mission to make sharpening fast, easy and precise. The first model was powered by a drill, which worked quite well. Over the years, he went on to invent and patent a multitude of solutions and innovations, including a built-in motor, the universal support, along with a wide range of specialised jigs and accessories. One thing remained constant, however, and this was the same simple method of a grinding wheel slowly rotating through water.

Torgny's ingenuity is the foundation on which Tormek proudly stands by today, and all of their customers' Tormek-sharp edges carry his legacy.

Fully kitted out

The Tormek T-8 Black is a limited-edition, 50-year anniversary machine with an intense all-black appearance, which is certain to give any workshop the edge. On top of its bold 50-year warranty, this machine is kitted out with everything required to get your tools extremely sharp with the highest possible efficiency and precision.

- **600 grit DF-250 Diamond Wheel Fine** – sharpens any kind of steel with ease – even ceramic.
- **CW-220 Composite Honing Wheel** – with integrated polish, to quickly remove even the stubbornest burr.
- **ACC-150 Anti Corrosion Concentrate** – prevents the diamond grinding wheel from rusting and coats newly sharpened edges, keeping them in top trim for even longer.

And if that's not enough to whet your appetite, according to Tormek, there might even be a little treat or two inside the box, just waiting to be discovered... Stay sharp for at least 50 years with the Tormek T-8 Black; to find out more, see **www.tormek.com**.

Timber Suppliers Directory – May 2023

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Web: www.aharrisonwoodturning.co.uk

Bennetts Timber (Lincolnshire)
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Web: www.bennettstimber.co.uk

Black Isle Woodturning (Scotland)
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Web: www.blackislewoodturning.com

Brodies Timber (Perthshire)
Tel: 01350 727 723
Web: www.brodiestimber.co.uk

Brooks Brothers Timber (Essex)
Tel: 01621 877 400
Web: www.brookstimber.co.uk

C&G Barrett Ltd, Cilfiegan Sawmill (South Wales)
Tel: 01291 672 805
Web: www.cilfiegansawmill.com

Clive Walker Timber Ltd (West Yorkshire)
Tel: 01132 704 928
Web: www.clivewalkertimber.co.uk

D Emmerson Timber (Lincolnshire)
Tel: 01507 524 728
Web: www.emmersontimber.co.uk

Earlswood Interiors (West Midlands)
Tel: 01564 703 706
Web: www.earlswoodinteriors.co.uk

English Woodlands Timber (West Sussex)
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Web: www.englishwoodlandstimber.co.uk

Exotic Hardwoods (Kent)
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EO Burton, Thorndon Sawmills (Essex)
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Web: www.eoburton.com

Eynsham Park Sawmill (Oxfordshire)
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FH Ives (Essex)
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Web: www.fulhamtimber.co.uk

G&S Specialist Timber (Cumbria)
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Good Timber (Northamptonshire)
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Web: www.goodtimber.com

The Hardwood off cut shop (Essex)
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Tel: 01277 205990
Web: www.hardwoodoffcuts.co.uk
sales@hardwoodoffcuts.co.uk

Horndon Timber Products
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Web: sales@horndontimber.co.uk

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Web: www.sykestimber.co.uk

The Timber Mill (Cornwall)
Tel: 07966 396 419
Web: www.thetimbermill.com

The Wood Recycling Store (East Sussex)
Tel: 01273 570 500
Web: www.woodrecycling.org.uk

Thorogood Timber Ltd (Essex)
Tel: 01206 233 100
Web: www.thorogood.co.uk

Timberman (Carmarthenshire)
Tel: 01267 232 621
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Tree Station (Lancashire)
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Web: www.treestation.co.uk

UK Timber Ltd (Northamptonshire)
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Web: www.uk-timber.co.uk

Waterloo Timber Ltd (Lancashire)
Tel: 01200 423 263
Web: No website

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Two aces in compact class: the new **18V CXS 18** & **TXS 18 cordless drills** from **FESTOOL**

Both cordless drills are impressively powerful and compact

The hero among compact screwdrivers – with 18V battery power

Compact design and impressive performance for the compact class – these are the ingredients that make up Festool's two new cordless drill/drivers – the CXS 18 and TXS 18. Thanks to the powerful brushless EC-TEC motor, these new aces in the compact class can master any assembly task with gusto, no matter how demanding.

As the name suggests, the two compact drill screwdrivers are available in both the C and T design. The unique C-shape, which is typical to Festool, allows for precise work in the drilling and screwdriving axis, while the classic T-shape ensures easy handling and a short distance from the workpiece. Both designs are technically identical, regardless of difference in shape.

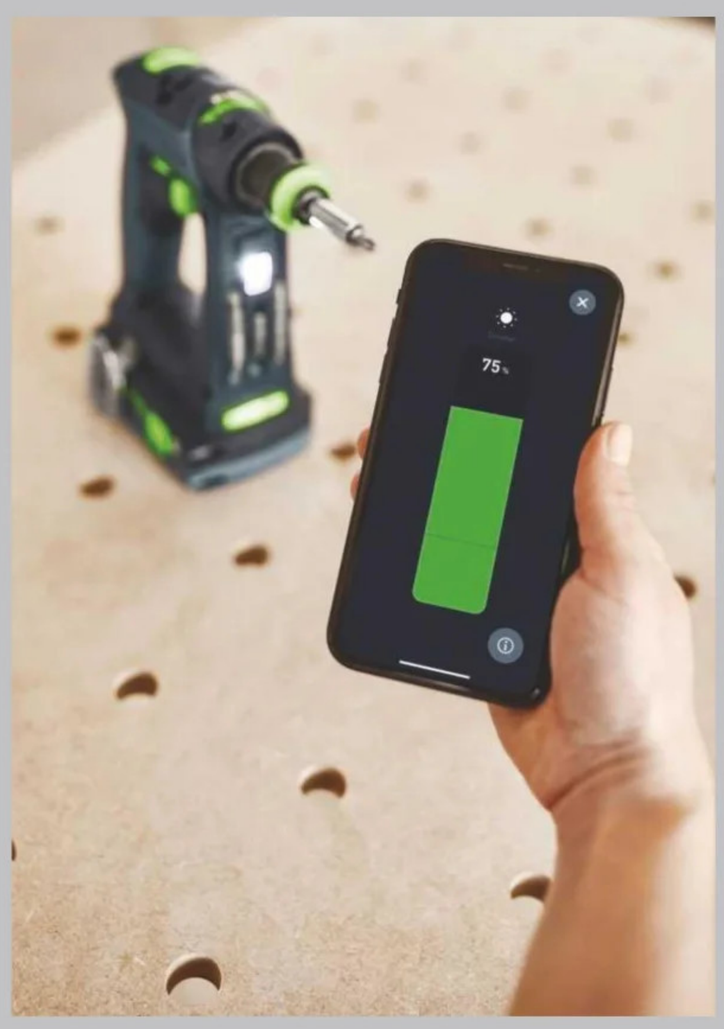
When it comes to ergonomics, both all-rounders are impressive. Fast tool change is secured by the FastFix interface and the CENTROTEC system, and a wide range of attachments can be used with the CXS/TXS 18, thus extending the action radius enormously.

Full battery power – full equipment

The CXS/TXS 18 is optimally equipped with bit garage, LED light control, belt clip and powerful 18V battery, and the motto here is flexible screwdriving and drilling, because all attachments for the current Festool 18V cordless drill/drivers are also compatible with these new models. The CXS/TXS 18 also impresses with its performance during power-intensive work with Forstner drill bits up to 35mm and screws up to 6 × 240mm in softwood – countersunk screw with partial thread. Aside from the Ergotype, all other 18V battery packs fit the CXS/TXS 18.

The integrated LED light allows for precise work even in dark corners, and continuous lighting, afterglow or LED off can be controlled via the easy-to-reach adjusting wheel. Adjusting the torque using this method is also very easy. Afterglow brightness and duration can also be personalised with the Festool Work App – Bluetooth® battery pack required. The App can also be used to easily configure the right-/left-

With the CXS 18 and TXS 18, everything is close to hand in an instant. The belt clip can be positioned to suit both right- and left-handed users



Easy configuration of the right-/left-hand selector switch is made possible with a Bluetooth® battery pack, via the Festool Work App. Also, LED control adjusts the brightness, duration of afterglow and duration of continuous light

hand selector. For left-handed users, the Work App – in conjunction with the Bluetooth® battery pack – can be used to reverse the right-/left-hand selector switch such that it no longer causes disruption by protruding into the handle area during the main application – in clockwise rotation.

Not only is the power tool always at your fingertips, but it also keeps your hands free at the right moment. The belt clip can be positioned for right- and left-handed users and the integrated bit garage offers space for holding several bits, which are magnetically secured to prevent them falling out.

For instantly changing between drilling, countersinking and screwdriving, the tried-and-tested CENTROTEC tool chuck is a chuck and bit holder in one. Suitable for use with numerous Festool CENTROTEC accessories, the advantage being that it's half the size and 80% lighter than a standard drill chuck. With a length of 14cm – (TXS)/15.6 (CXS) – and height of 22.4cm – (TXS)/20.6 (CXS) – including 3.0Ah battery, the CXS/TXS 18 isn't only impressively strong, but also extremely compact.

The CXS/TXS 18 also performs impressively when working with Forstner drill bits up to 35mm and screws up to 6 × 240mm in softwood – countersunk screw with partial thread

Festool's battery-powered universe: There's more to it than 'just' power

"Battery technology and battery-powered devices are a significant trend on the tools market," says Sascha Menges, CEO of Festool GmbH. "We've tailored our strategy to reflect this and are continuously expanding our portfolio. We're not just blindly pursuing a strategy of using battery technology just for the sake of it – we want to take a more purposeful approach to ascertain how this might best serve the application in question. We want to optimise the results so that the products are perfect for their applications, and we want to make work easier, safer and better for tradespeople."

This commitment is embodied in exemplary fashion by the latest additions to the Festool 18V system – in particular, the new CSC SYS 50 cordless bench-mounted circular saw; TSC 55 KEB plunge-cut saw; QUADRIVE TPC 18 cordless impact screwdriver; and the ExoActive exoskeleton, all of which will be released during the course of 2023. For more information, see **www.festool.co.uk**.

Compactness combined with the compatibility of an 18V battery – ideally suited for applications with screws up to 6mm

Walsall College students shine in **LIBERON** woodworking competition

Students at Walsall College have been put to the test by Liberon as part of a carpentry and joinery competition. The woodcare experts called on first year learners, undertaking the college's Level 2 Bench Joinery course, to build and finish a child's stool using Liberon's Wax Polish Black Bison Paste.

Child's stool in yellow pine & tulipwood

Students were handed a specific design by their lecturer and asked to complete the project over a total of 15 teaching hours. Two winning students plus a runner-up were selected from the class by Director of Faculty, Neil Sambrook, and Curriculum Delivery Manager, Nathan Hartshorne. The project incorporated yellow pine for most of the stools with tulipwood used to create the circular seats.

A laser cutter was programmed by the team at the college's Digital Innovation Hub to sear the college logo onto the seats. The two winners and runner-up each received a £25 Amazon voucher, provided by Liberon.

Richard Bradley, Liberon Marketing Manager, commented: "The students did a great job. I understand they're all aged between 16-18 and new to carpentry and joinery. The standards achieved are a real testament to their skills. We'd like to congratulate the winning students and runner-up, and wish all on the course the best of luck in their future carpentry and joinery careers."

Course leader, Paul Underwood, Lecturer in Carpentry and Joinery, added: "All students should be very proud of what they've achieved in this competition. This challenge has showcased and helped to develop their tool-handling skills; their ability to produce both mortise & tenon and bridle joints; their aptitude for setting out and handling a cutting list; and their proficiency in transferring measurements to the timber used. All in all, a great all-round teaching exercise.

"I've been so impressed with the way in which the students have applied themselves to this challenge. I've always been a strong advocate of Liberon's Wax Polish Black Bison Paste, which really brings out the beauty of wood, but this competition has highlighted its attributes even further. I'm hoping we can repeat a similar competition with Liberon later this year."

For further information on Liberon and its range of products, see **www.liberon.co.uk**.

From left to right: Joe Clorley; Jordan Thacker; D'Niero Osagie – joint winner; Jake Duckhouse – joint winner; Hary Quirk – runner-up; Ashley Carroll

MAKITA UK launches new DLX2460TJ Combo Kit

Leading power tool manufacturer, Makita UK, has added a new two-piece Combo Kit to its extensive range of LXT products, to offer professionals a useful set of tools at exceptional value.

A must-have for any tradesperson, the new DLX2460TJ Combo Kit features two of Makita's most popular professional cordless power tools – the DTD153Z 18V LXT Brushless impact driver and DHP487Z 18V LXT Brushless combi drill.

Housed in a Type 3 Makpac Connector Case for easy storage and transportation, the kit also includes two 5.0Ah 18V LXT BL1850B batteries and DC18RC fast charger, which can be used across Makita's extensive LXT range.

The DTD153Z is an extremely powerful impact driver with 170Nm maximum torque, delivering a no-load speed of 3,400rpm and providing up to 3,600ipm. As such, it can drive screws up to 125mm into timber without a pilot hole and up to 30% faster than a conventional drill/driver.

Makita's compact DHP487Z 18V LXT Brushless combi drill features variable speed control to deliver up to 1,700rpm, 25,500bpm and 40Nm maximum fastening torque for a wide range of drilling, fastening and hammer drilling applications. Weighing up to 1.7kg, the DHP487Z is a lightweight, portable and versatile power tool that can handle a wide range of applications. It also features a single sleeve keyless chuck for quick and easy bit changes with 20 torque settings, plus drill mode for added fastening control.

Kevin Brannigan, Marketing Manager at Makita UK, said: "Our Combo Kits are incredibly popular with many different product configuration options available to suit individual requirements, applications and budget. What's more, these kits offer significant savings when compared to buying the components individually, making these a much more economical purchase for end users. We've added the new DLX2460TJ two-piece Combo Kit to our line-up to offer even more choice, with a premium range of power tools that can tackle a wide variety of jobs on site. Plus, the kit includes two batteries and fast charger, which can be used across our entire LXT cordless platform of over 290 products."

To find out more about power tools and equipment from Makita UK, visit **www.makitauk.com**.

The table will be on display at Rochester Cathedral until 1 March 2024

FENLAND BLACK OAK table's second residency: ROCHESTER CATHEDRAL, Kent

Discovery of the Jubilee Oak in March 2012

A giant 13m long table made from ancient 5,000-year-old Fenland black oak and bronze recently travelled from Ely to Rochester Cathedral for its second public residency.

The tree, which was unearthed in Wissington Fens, south west Norfolk in March 2012, has been made into a table large enough to seat 50 people. Unveiled by The Princess Royal in May 2022, 'A Table for the Nation' was dedicated to Her Majesty Queen Elizabeth II in commemoration of her long reign.

The table was the brainchild of Fenland black oak specialist, Hamish Low, of Kent-based Adamson and Low cabinetmakers – **www.adamsonandlow.com**. Lead craftsman and chair of the project, Hamish has called upon much support over the last 10 years.

This project has been entirely funded by private individuals who've shared the vision along with various charitable foundations and trusts. Full details of sponsors can be found on the project website as well as display panels at the cathedral.

Other support has come from The Building Crafts College in Stratford, London – **www.thebcc.ac.uk** – who granted access and use of workshop facilities as well as encouraging students from their cabinetmaking and woodworking courses to become involved.

The table made its journey – on board an articulated lorry owing to the sheer size – from Ely, Cambridgeshire on 2 March 2023 and installed in readiness for its year-long residency at Rochester Cathedral, Kent.

"The Table has generated a huge amount of interest, and visitors have been hugely engaged by its history and beauty, as well as the skill and craftsmanship involved it its creation," commented The Very Revd Mark Bonney, Dean of Ely.

To find out more about The Fenland Black Oak Project, visit the website: **www.thefenlandblackoakproject.co.uk**.

MIRKA LTD (Finland) celebrates 80 years of pioneering surface finishings

This year – 2023 – sees Mirka (UK) Ltd parent company, Mirka Ltd (Finland), celebrate its 80th anniversary, growing to become one of the world's leading manufacturers in the surface finishing industry.

For eight decades, Mirka has been at the forefront of innovation in abrasives manufacturing, including pioneering dust-free sanding with the launch of Abranet in 2001 in addition to several award-winning power tools, including the DEROS. The company was founded by engineer Onni Aulo in Helsinki, back in 1943, but due to the continuation of World War II, production didn't start until 1946. Headquartered in the heart of rural Ostrobothnia, Finland, Mirka has expanded with a network of daughter companies spanning the entire globe. Established in 1979, Mirka (UK) Ltd was the first of these.

While Mirka is a very different company today, its core vision remains the same: to give customers the opportunity to perform better and achieve the perfect finish. Daily operations continually strive to improve products, added-value services, and training support, to allow employees to fulfil their potential and for customers to continue to be successful.

"The most important element of our evolution has always been to listen to our customers," says Mirka CEO, Stefan Sjöberg. "We're proud of all the milestones we've achieved, but to stay relevant we must also look forward to the next big thing, and here we see lots of potential. The Green Deal in the European Union, and the green transition in the world, in general, are things that'll shape the way we look at our business and how we perform – not only for Mirka, but the entire industry. The company that solves this puzzle will be relevant for many years to come, and looking at our organisation today, I'm confident that Mirka will be here to celebrate its 90th and 100th anniversaries as well."

For further information on Mirka Ltd (Finland), see **www.mirka.com**, and to find out more about Mirka UK, visit **www.mirka.com/uk/uk**.

CRAFT FESTIVAL BOVEY TRACEY champions endangered heritage crafts

Award-winning Craft Festival Bovey Tracey will return to the idyllic parkland setting of Mill Marsh Park, Bovey Tracey, Devon from 9–11 June 2023 for its 19th edition.

NEW: 'Heritage Crafts,' championed by Jay Blades of *The Repair Shop*, will present a collection of makers drawn from the 'Red List of Endangered Crafts'. The feature will celebrate these fascinating skills and throw a spotlight on those which are in decline, but can be saved.

Specialist makers in wallpaper making, willow furniture making, lithography and fairground painting will be offering demonstrations.

"Craft Festival is one of the best attended craft events in the UK with a well informed audience, mindful of the issues of the craft industry," said Daniel Carpenter, Executive Director, Heritage Crafts.

Meet the maker

200 of the finest makers from all corners of the UK, hand-picked for their quality and originality, will gather in the Dartmoor town. Visitors can experience craft demonstrations, a showcase of start-up business, adult workshops, children's activities, film screenings, talks, music and feasting. A brand-new short film – available to watch on the website – offers a bird's eye view of one of the UK's most loved craft events, allowing you to drink in the quality, scale and atmosphere.

"We attract over 500 applicants to exhibit at Craft Festival. It's a challenging and rewarding task for our independent panel to select just 200 to take part," said Sarah James, Craft Festival Director. "The quality of application is phenomenal."

"For 19 years, we've created a retail platform for the finest makers, and a launch pad for new craft businesses in our showcase 'Start-Up.' Craft Festival also features education programmes for adults and children with workshops led by professional makers. The fun, action packed children's programme aims to inspire younger people to get creative, hands on, and try out a new craft skill," she added.

Over 8,000 visitors visited Craft Festival Bovey Tracey in 2022. An eclectic programme of craft workshops for adults and younger people is hosted by professional makers to encourage participation and deeper understanding of making. A free children's craft activity programme encourages creative experimentation led by makers and educators including Jim Parkyn, local schools and inspirational craft organisations.

During Lockdown, Craft Festival launched The Capital of Craft Podcast and Find a Maker, a curated directory of new and established makers, galleries and craft organisations, all chosen for their quality and originality. For further information, see **www.craftfestival.co.uk/boveytracey**.

TRITON TSPL152 1,100W 152MM SURFACE PLANER

A planer is ideal for quickly smoothing rough pieces of timber. Here, **Jonathan Salisbury** takes a look at **Triton**'s **TSPL152** to see if convenience outweighs the noise, dust and piles of shavings

Hand planing the surface of a beautiful piece of timber is one of the most satisfying parts of woodworking, but there are times when the speed of a machine is difficult to resist. I have some old timber in need of a smooth, but my planes aren't going anywhere it!

The Triton TSPL152 is as quick and convenient as a hand-held electric planer, but with greater power to cope with more demanding cuts, and the table makes it suitable for preparing longer cuts of timber for further processing; a curved surface isn't easy to straighten with the relatively short sole of hand planers.

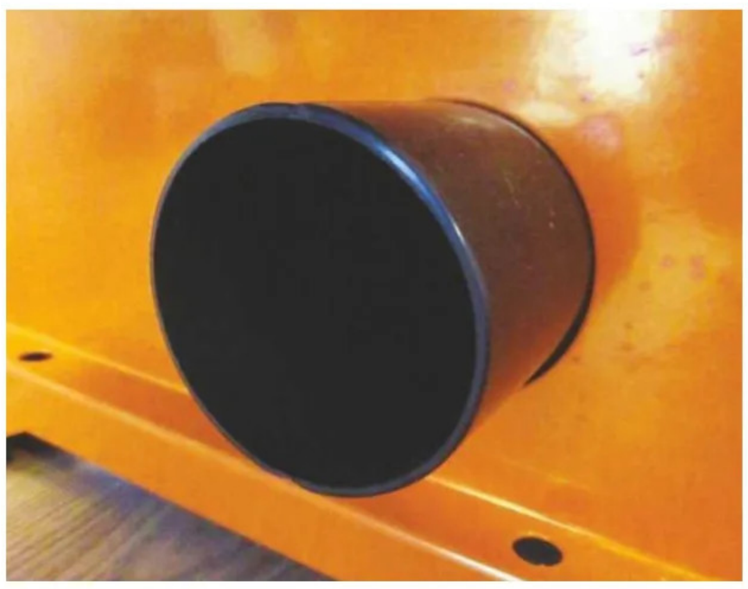
Setting up

Triton has produced a detailed booklet, around eight pages for each of 13 languages, but the writing is tiny and difficult to read. A small but significant amount of assembly is required; I had some difficulties putting the fence together when following the instructions, which aren't very clear for some of the steps and all diagrams and photos are printed on the first few pages, so turning back and forth between them and the text is unavoidable. I advise going straight to Triton's online assembly video, which was much easier to follow; it also explains how to check and, if necessary, adjust the blades. On my test model, the blades were ready to go, but all the screws

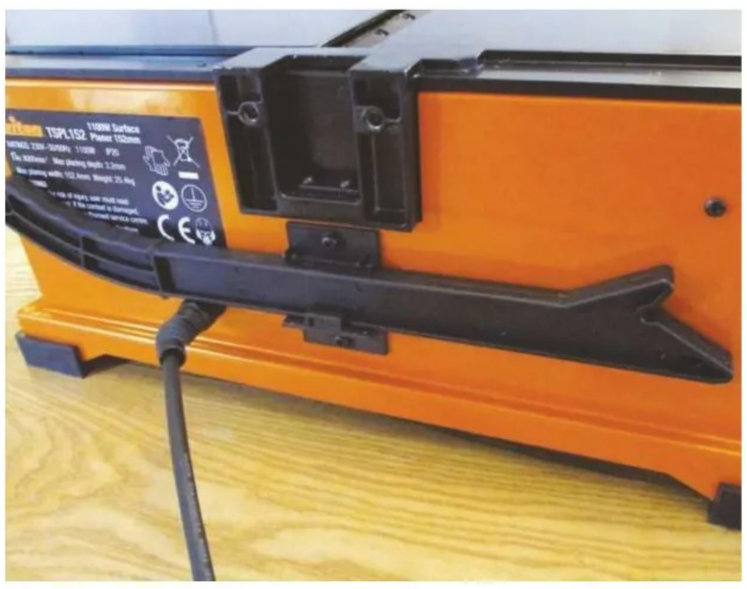
A small but significant amount of assembly is required before you can start planing

The exposed blade drum needs a guard!

Well placed no volt switch and direction of rotation clearly shown

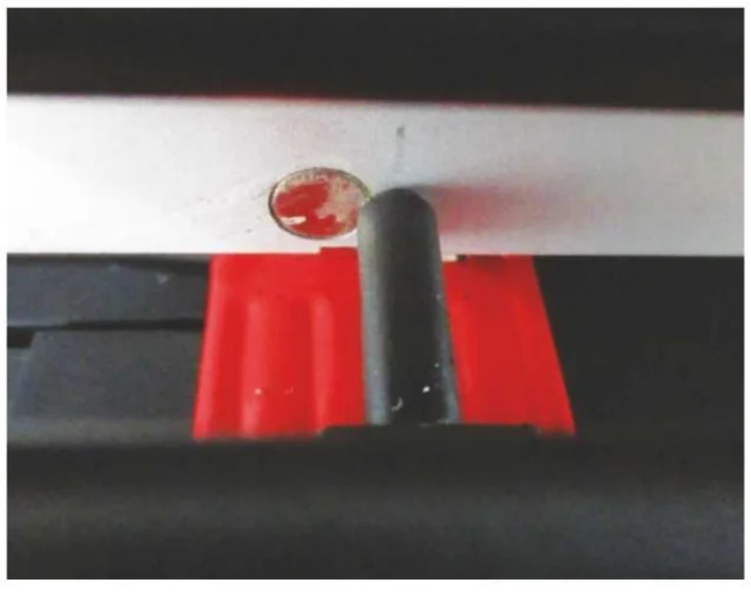


The generously-sized extraction point suggests lots of shavings

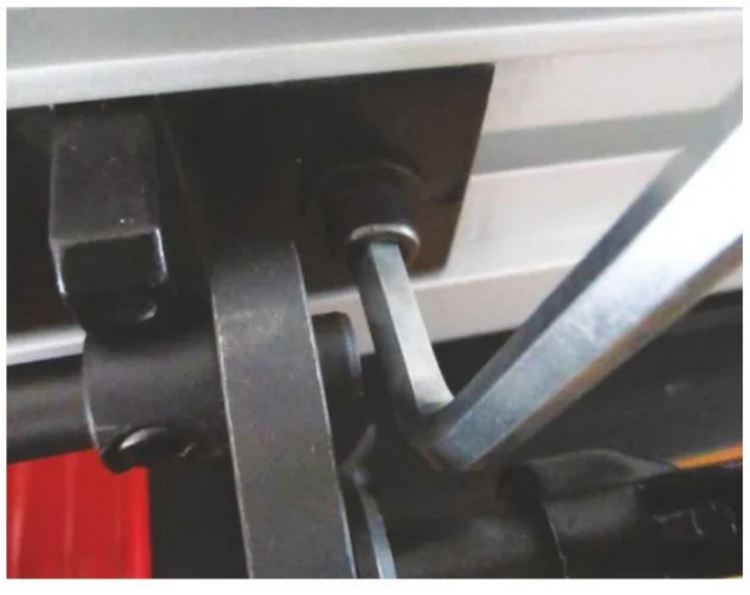


The push stick has its own home

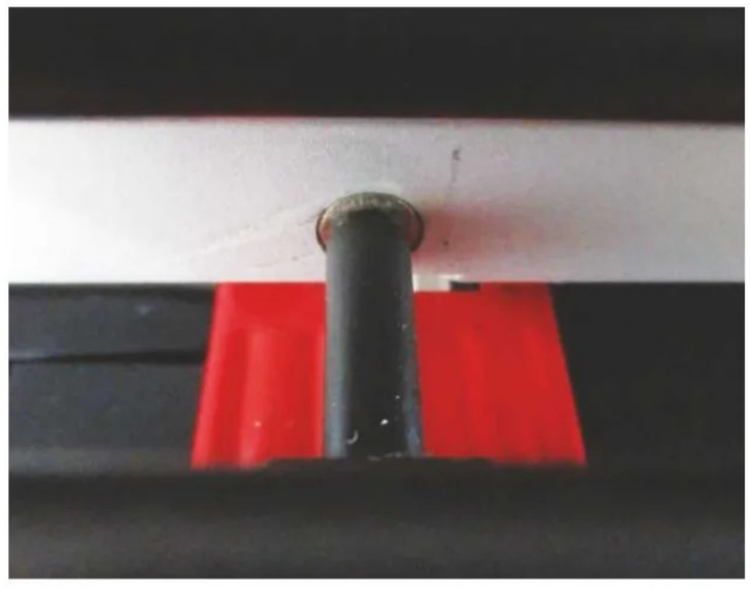
Infeed adjustment shows the approximate adjustment distance



The fence magnet didn't align with the stop



A quick twist of some screws...



This is correct: note the red blade cover located behind the fence

required for the job are easily accessible.

Apart from the assembly instructions, there were two further issues. The first was that the magnet, which keeps the fence in place while it's tightened, wasn't aligned with the stop bar. This just needed a turn of some set screws to release the pre-assembled frame so it could be moved to the right place, but could easily have been overlooked. The second was that the blade guard on this machine isn't centred over the drum when lowered fully; in my experience, they always are. The distance from where it's attached is fixed, so I checked that it didn't contact the blade or drum before switching on. It doesn't, and is therefore 'safe', even if closer than I'd like it to be.

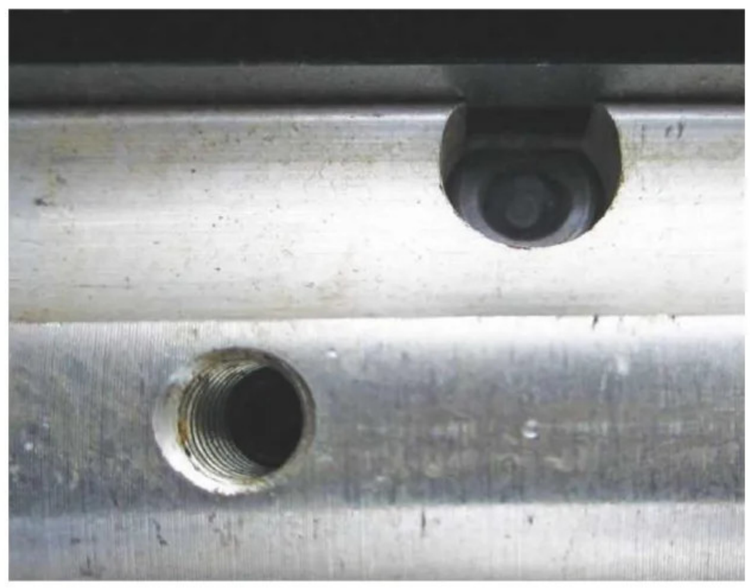
Portability

Once assembled, I decided that I didn't really feel like clearing up any dust and shavings in the workshop, so I took the planer outside for testing. Moving it to the garden was relatively easy thanks to the compact size and carrying handles... Handles? On a bench-mounted machine? Yes! The planer is designed for those with little space, so the handles make it easier to move around and store away. These also prevent it being lifted by other means, such as the adjustment knob.

To fix or not to fix?

Although there's sufficient weight to keep it in place and rubber feet to prevent sliding, the manual states: "Do not use the planer if it has not been fixed to a secure work surface." However, none of the photos or videos on the Triton website featured the TSPL152 being bolted down before use. I couldn't find anyone else attaching it either, so I decided to give this a try. After several careful tests that included the infeed table at its lowest position, I can confirm that the unit does indeed stay in place.

You can't really miss the substantial carrying handles



Blade adjustment screws are easy to access

The painted top of the TSPL152's table is a bit different from the cast steel, machine-surfaced tables I'm used to. I wasn't sure if it'd stand up to having wood scraped across it, but, so far, there's barely a scratch on it. The smooth surface is also low friction, and the wood can be pushed over the blades with very little effort. The instructions recommend frequent reapplication of wax to keep it this way. Other maintenance tasks include cleaning dust and shavings, externally and internally, checking the condition of belt drive and blades, as well as oiling moving parts. The motor brushes also need checking, and replacing when worn out.

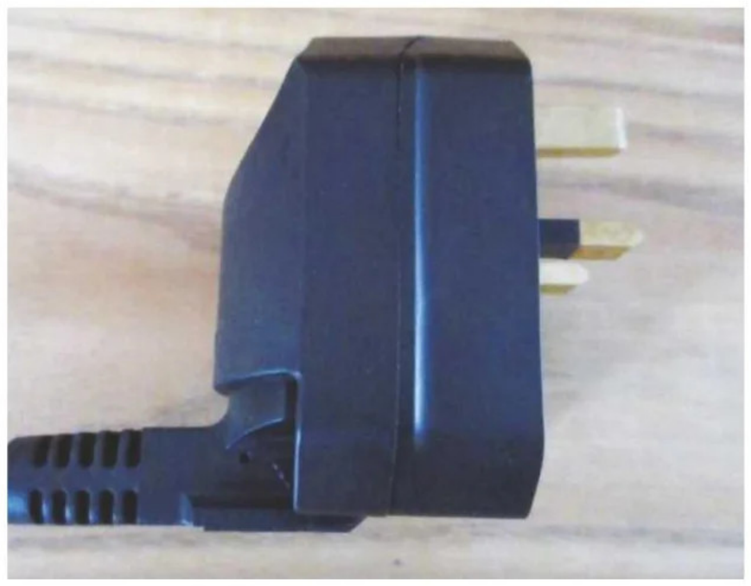
How good is it?

The TSPL152 is a compact and competent planer; the sharp blades and low-friction surface mean that creating a smooth finish is very easy. The supplied push stick and solid push blocks work well and keep your hands away from the cutting edges; but only if you use them! The fence's 90° and 45° stops were in the right place, if my square is to be believed, and they're easy to micro-adjust if required. The first bevel I planed wasn't 45°, though, as I'd forgotten to release the 90° stop lock, which prevented the fence from dropping down far enough. All the clamps tighten up to prevent fence movement, but releasing them to change the angle is a little awkward due to the proximity of the two levers; I scraped my knuckles more than once.

The drum produces quite a draught on its own, which quickly inflated a dust bag I attached. It's better to use an extractor; my small vacuum unit controlled all the shavings and most of the dust, but I was outside; if used inside, it would definitely be sensible to wear a dust mask. The well-positioned no-volt switch prevents accidental starts when first plugged in and the drum comes to a complete standstill in three seconds.

Conclusion

In this test, I mostly used the planer to smooth surfaces. Of course, it would more usually be used to true up one surface and one edge square, ready for thicknessing and cutting to



A standard UK plug adaptor is already fitted

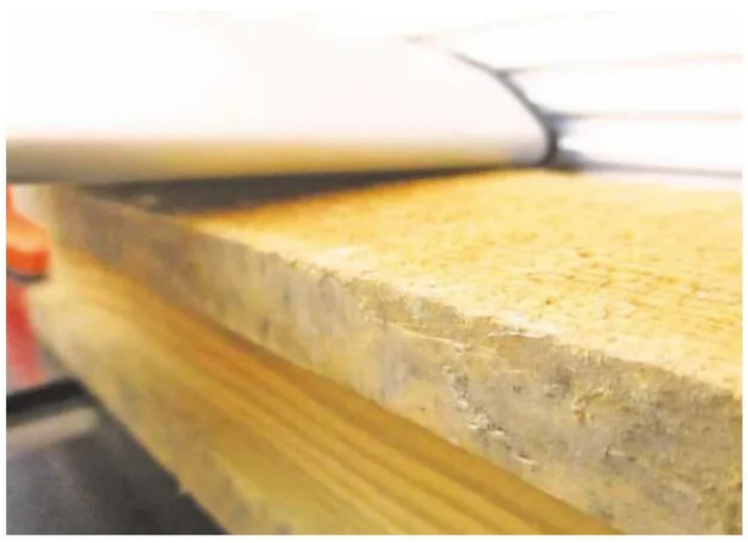
The guard doesn't sit centrally over the drum

Fence adjustment prevents use up against a wall

Triton TSPL152 1,100W 152mm surface planer

90° already set...

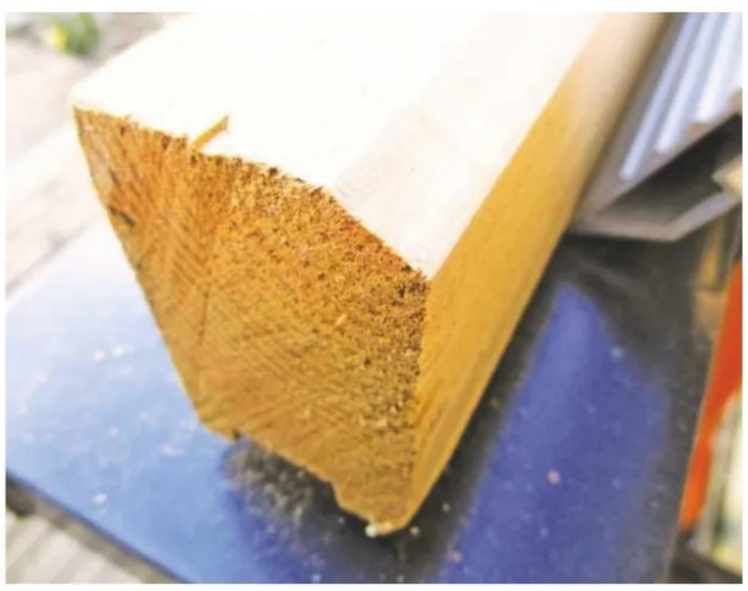
... followed by 45°



From rough-sawn beginnings...

... safely guided with push blocks...

... to a near perfect finish



Bevels are easy, but release the stop for 45°!

A small sample of what remained of the surface

Set up outside, almost ready to go

width. It certainly does this well too, but I'd be happier if the blade guard could be adjusted so it was in line with the drum; there's also a red blade cover to the fence's rear that's supposed to be used when cutting bevels, but the instructions don't make this clear enough and it could be missed by a less-experienced user.

Finally, the dial for the infeed table adjustment states +0.75mm and -0.75mm, but is that per revolution? And there's no mark to align it. The most noticeable feature of the Triton TSPL152 is its compact size. The table measures 780 × 160mm, which makes it ideal for a smaller workshop, even if the adjustment mechanism, which extends a further 235mm behind the fence, prevents it from being used right up against a wall.

Despite the issues, I was impressed with the TSPL152's performance; it's more than adequate for the sort of planing that most enthusiastic home woodworkers would be undertaking, and a useful addition for small professional setups that only need a planer every now and then. Overall, it's definitely a machine that I'd be happy to have in my workshop.

SPECIFICATION

Power: 1,100W
Dimensions (L × W × H): 965 × 505 ×315mm
Weight: 25.4kg
No load speed: 8,000rpm
Planing depth: 0-3.2mm
Planing width: 0-152.4mm
Angle adjustment range: 90°, 45° & 135°
Sound power – LW: 107.3dB
Sound pressure – LP: 94.3dB
Also included: 2 × handles; blade guard and arm; 2 × push blocks; push stick; guide fence; guide fence attachment kit; spanner and hex keys; instruction manual

Typical price: £329.95
Web: www.tritontools.com

THE VERDICT

PROS

- Easy to use; impressively clean results; smooth table allows wood to slide easily; little resistance from the sharp knives; good quality push stick and push blocks supplied

CONS

- Manual and assembly instructions could be better; adjustment levers can be a little awkward to loosen and tighten; some adjustments necessary that might not be obvious to everyone

RATING – PERFORMANCE: 4.5 OUT OF 5
RATING – VALUE: 5 OUT OF 5

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VIDEO

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AUKTOOLS SILICONE CHISEL GUARDS SET

Jonathan Salisbury looks at another batch of accessories and jigs from **Wood Workers Workshop**, the first of which includes this set of handy silicone chisel guards from **AUKTools**

Squeeze the silicone edges to open

The window allows you to check progress

Five sizes are supplied, which are designed to fit most chisels

We're all familiar with the rigid plastic guards that are supplied with new chisels. They seem to last long enough to protect you from coming into contact with the sharp edge before they begin to split, crack or disappear.

If you have a tool storage board or cupboard, the chances are that it doesn't matter too much whether or not chisel edges are uncovered, even after hours of grinding, honing and polishing. If, however, they are kept in a box because you're tight for space and/or move them around a lot, as I do, then it's no bad thing to place something over the end – even if to prevent inadvertent, accidental damage.

Flexible & easy to use

It's possible to buy replacement rigid plastic covers, but why swap like for like if there's a better alternative? And there is, in the AUKTools silicone chisel guards. Formally available under the WoodRiver brand, these bright red silicone caps are flexible enough to stretch and grip the chisel end: simply squeeze the sides to open them up, carefully slide the tool in – the window allows you to check progress – and then let go. Once in place, they stay in place.

Available in five sizes, they're suitable for the most common bevel-edge chisels: size 1 – for 3-7mm; size 2 – for 9-13mm; size 3 – for 15-20mm; size 4 – for 22-27mm; and size 5 – for 27-33mm. Because they stretch in all directions, the guards can also be pushed onto almost all types of chisels and gouges, router cutters, plough plane irons, marking knives, centre punches, awls… I even used one on the end of a rasp to protect my fingers.

Conclusion

I really like these: chisels do occasionally fall off the bench, or get knocked by other tools, and it's always a good idea to cover edges if they're being transported with other tools. The only downside I can think of is that they can't be bought individually, and I need more of sizes 1 to 3 than 4 or 5. Also, the £12.95 price tag seems high, although if you think of it as just under £1.30 per guard, this doesn't seem so bad! The only alternatives available on sale are just like the originals – and not much cheaper – or a lot smaller and unlikely to be as secure; I know which ones I'd prefer to have.

Although created for use with chisels, these handy guards can also be used to protect rasps, router cutters, punches, awls, gouges and more

SPECIFICATION

- Soft silicone chisel edge guards designed to go on and stay put
- Protect edges against 'hard knocks'
- Fit chisels from 3-33mm
- **The set includes:** 2 × 3-7mm; 2 × 9-13mm; 2 × 15-20mm; 2 × 22-27mm; 2 × 27-33mm

Typical price: £12.95 (for a set of 10)
Web: www.woodworkersworkshop.co.uk

THE VERDICT

PROS

- Flexible enough for a tight fit on most chisels and gouges; provides protection when not in use; safer and easier to use than the originals

CONS

- Only available as a set of 10

RATING – PERFORMANCE: 5 OUT OF 5
RATING – VALUE: 4.5 OUT OF 5

WIN!

1 of 5 10-piece AUKTools Silicone Chisel Guard sets

We've teamed up with **Wood Workers Workshop** once again to give **five** lucky readers the chance to win a **10-piece** set of handy **silicone chisel guards** from **AUKTools**

Made from soft silicone as opposed to the usual hard plastic that's commonly used, these chisel guards are designed to perfectly fit the tool tip, and, importantly, stay put. Those made from rigid material often don't fit correctly or are prone to slipping off, meaning the tool can potentially be damaged, but these clever silicone versions from AUKTools offer the perfect solution.

They're designed to fit well over practically any chisel, and offer unrivalled protection to the tool steel at all times. Once in place, the silicone material provides a secure grip, so there's no danger of it falling off and leaving the tip exposed.

Features

- Soft silicone chisel edge guards go on and stay put;
- Protect edges against 'hard knocks';
- Designed to fit chisels from 3-33mm.

Each set includes 10 chisel guards – two of each in the five most popular sizes:

- **2 × 3-7mm**
- **2 × 9-13mm**
- **2 × 15-20mm**
- **2 × 22-27mm**
- **2 × 27-33mm**

HOW TO ENTER

To be in with a chance of winning **1** of **5** sets of **AUKTools silicone Chisel Guards (pack of 10)**, visit **www.thewoodworkermag.com/category/win** and answer the multiple choice question below:

QUESTION: Name one of the chisel tip sizes included in the set

A: 3-7mm
B: 10-14mm
C: 22-27mm

The winners will be randomly drawn from all correct entries. The closing date for the competition is **19 May 2023**. Only one entry per person; multiple entries will be discarded. Employees of David Hall Publishing Ltd and Wood Workers Workshop are not eligible to enter this competition

For more information on products available from Wood Workers Workshop, visit the website: **www.woodworkersworkshop.co.uk**.

WOOD WORKERS WORKSHOP

Wood Workers Workshop Tool Show June 2023

This free one-day event is an occasion not to be missed! Visitors can enjoy live demonstrations throughout the day, free parking and refreshments, expert advice, as well as show offers on a range of exclusive brands. It's also a great opportunity to check out some new products and try before you buy.

In addition to great offers on quality brands including Armor Tool, FastCap, iGaging, INCRA, JessEm, Micro Jig, Milescraft, Narex, Veritas, Woodpeckers and our own brand, AUKTools, you can also expect amazing deals on a wide range of hardwoods, exotic timbers and veneers.

When
Saturday 10th June 2023
From 10am to 3pm

Where
The Threshing Barn
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Upton-upon-Severn
Worcestershire WR8 0SN

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WOOD WORKERS WORKSHOP

woodworkersworkshop.co.uk

THE WOOD VENEER HUB – ULTIMATE & COLOURED WOOD VENEER PACKS

The Ultimate pack features a varied selection of veneers, in a range of sizes

If you're looking for a way to transform a mundane substrate into a stunning piece of work, take a look at these two veneer packs from **The Wood Veneer Hub** – both offer a great introduction to veneering and are ideal for use on a variety of small projects

This simple box is a good candidate for small veneer packs such as these

It's amazing how a paper-thin piece of timber can transform a mundane substrate into a stunning piece of work. Indeed, if you fancy trying your hand at the fine art of veneering, these packs from The Wood Veneer Hub are a great way of buying a variety of materials to get you started.

Veneer pack options

Depending on personal preference and requirements, the Coloured Pack option contains 11 high quality coloured tulipwood veneers in various sizes, while the Ultimate Timber Pack has 18 high quality veneers with a minimum of eight different species included. Although both packs are promoted as more suited to marquetry, these are also ideal for smaller projects, such as jewellery boxes, etc. As each pack contains decent-sized veneers, with a fair few in each at around 210 × 297mm – A4 – there's ample opportunity to create a nice sized piece of your choice.

A small (125ml) bottle of good quality PVA glue is also provided to get you on the road; it won't be sufficient to complete the entire pack, but it'll certainly get you started, especially if you go for the marquetry option rather than a larger veneering project.

Veneering a simple box

I happened to have a small, simple box, which can be described as something of a 'work in progress', that seemed a perfect candidate for a bit of a makeover using the two veneer packs. I've used coloured veneers on the box interior, choosing some with spectacular grain patterns for the outside. If you haven't used veneer before, a self-healing cutting mat is useful here, plus a sharp knife along with a straightedge, which is essential for cutting the individual pieces.

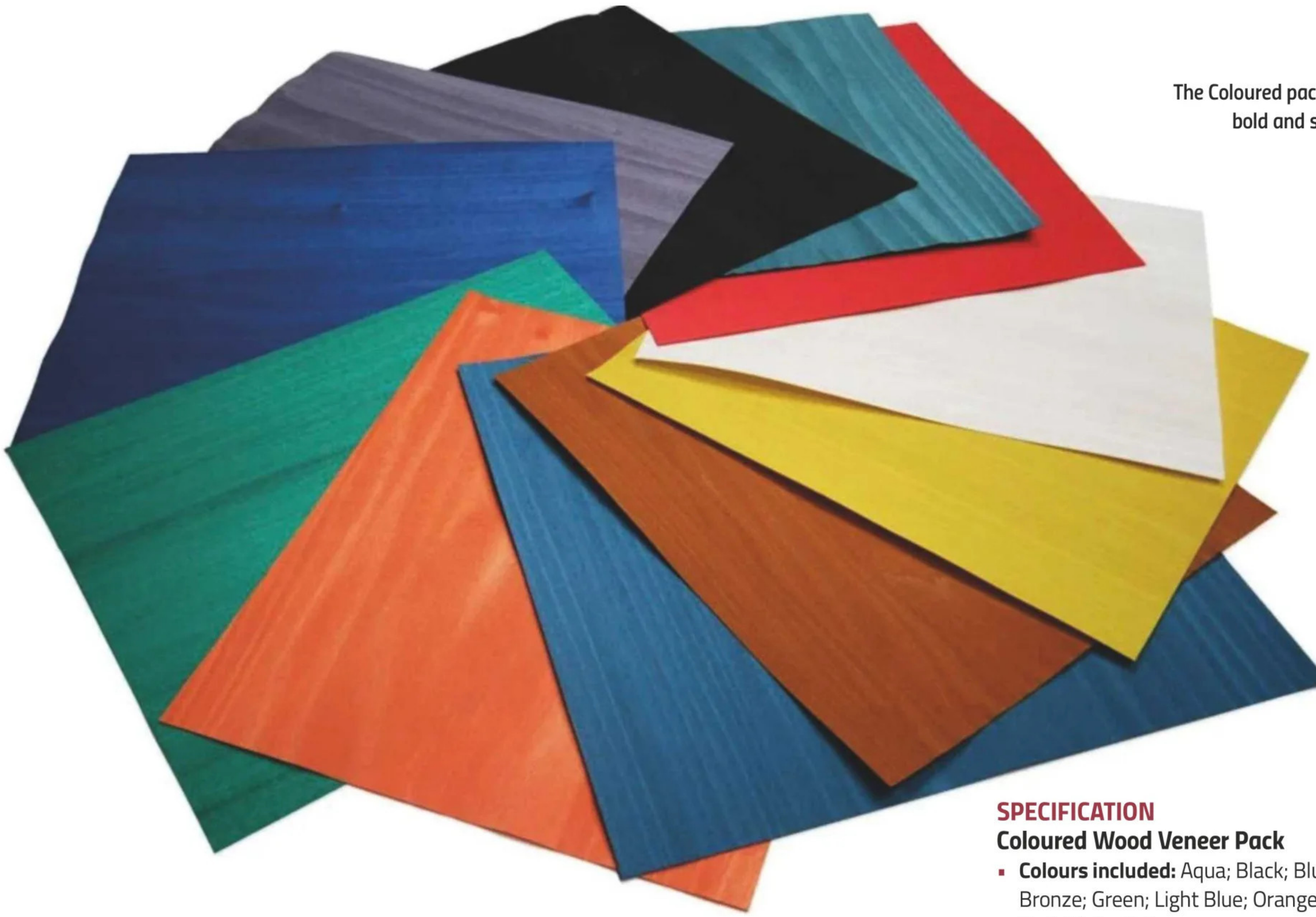
The coloured veneers are completely dyed all the way through, which works well in helping to pick out a joint line against a more mundane timber. On my box, I intend to put a coloured sheet on the lid and box intersection, which will make it stand out against the main veneer.

The veneer cuts easily so it doesn't take long to get things ready to go before gluing, but of course, moisture from the glue can cause any veneer to wrinkle or buckle, so you need to be ready with weights, clamps and cauls as required. If using light and dark veneers or contrasting colours from the colour pack, you need to ensure that the dust from each veneer doesn't bleed into the others while sanding, so masking up or sealing each piece

The veneers cut easily with the aid of a sharp knife and straightedge

Apply PVA glue and spread thinly over the entire surface area

Once in place, you'll need to apply suitable pressure across the veneer to prevent flaws



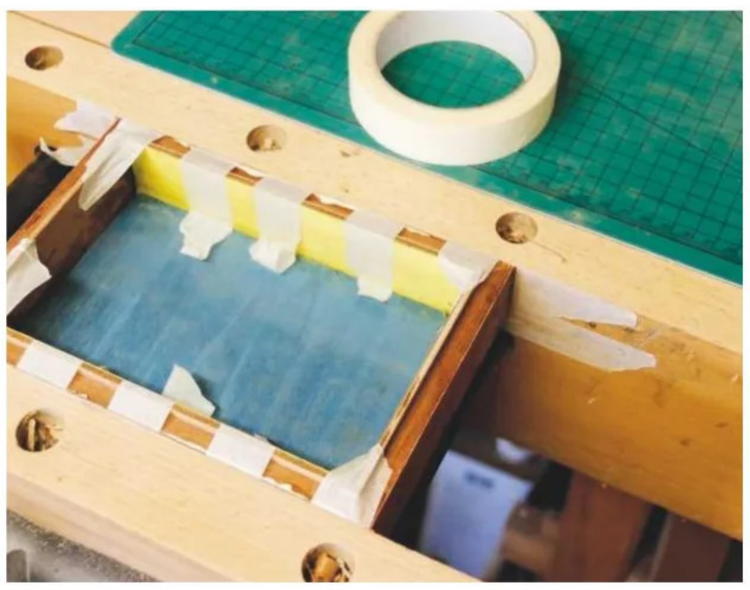
The Coloured pack contains very bold and striking veneers

before switching to a different colour is beneficial in order to keep things crisp.

Conclusion

Although my box isn't entirely finished, the outer edges and lid are. Even as bare timber the transformation looks great, but after sanding with 400 grit and applying Hardwax Oil and buffing, the grain jumps out beautifully. Both packs offer a great solution for allowing your work to look as though it's made from a high cost timber, or equally for imitating the appearance of a contemporary coloured piece. Both options are especially suited to smaller projects.

I found that masking tape works brilliantly for edge clamping veneer



You can use the bench vice to apply additional pressure if required

After sanding with fine grit abrasive, the wax starts to bring out the grain beautifully

A quick buff and the grain soon picks up a lustre

SPECIFICATION

Coloured Wood Veneer Pack

- **Colours included:** Aqua; Black; Blue; Bronze; Green; Light Blue; Orange; Purple; Red; White; Yellow
- Contains 11 high quality coloured tulipwood veneers in various sizes. Sheet size does vary but the minimum guaranteed width is 15cm long × 20cm high
- Perfect for marquetry, craft work, restoration, model making and veneering projects
- From The Wood Veneer Hub's factory in Valencia, Spain – a modern veneer peeling and slicing plant. Made using the highest quality dyes

Ultimate Wood Veneer Pack

- Contains 18 high quality veneers with a minimum of eight different species
- Perfect for marquetry, repair work or any other woodworking needs
- The pack is made up of offcuts, so sizes do vary. Minimum sizes can't be guaranteed, or inclusion of a specific veneer. If you have any preferences, The Wood Veneer Hub ask you to get in touch before ordering

Typical prices: Coloured Wood Veneer Pack – £14.99; Ultimate Wood Veneer Pack – £14.99
Web: www.thewoodveneerhub.co.uk

THE VERDICT

PROS

- Great for small projects; a good way to try your hand at veneering

CONS

- You'll need more glue in order to make use of all the veneers

PERFORMANCE: 5 OUT OF 5
RATING – VALUE: 5 OUT OF 5

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Clarke 10" EXTENDABLE TABLE SAW WITH STAND

£189.98 EXC.VAT
£227.98 inc.VAT

- 0 -45° blade tilting for bevel cutting
- Max cut depth of 45° / 90° (50mm/72mm)

CTS17

Clarke 4" BELT/ 6" DISC SANDER

CS4-6E

- Dust extraction facility
- 4" x 36" belt tilts & locks 0-90°
- 225mm x 160mm table, tilts 0-90°
- 370W, 230V motor

PRICE CUT
£124.99 EXC.VAT
£149.99 inc.VAT
WAS £152.39 inc.VAT

BEST SELLER

"Excellent machine, very solid and exactly as described. Very happy with the purchase"
See www.machinemart.co.uk

Clarke 10" TABLE SAW WITH EXTENSION TABLES (250mm)

CTS14

- Ideal for cross cutting, ripping, angle and mitre cutting
- Easy release/locking mechanism for table extensions
- 0-45° tilting blade
- Cutting depth: 72mm at 90° / 65mm at 45°

£149.98 EXC.VAT
£179.98 inc.VAT

SHOWN WITH OPTIONAL LEG KIT CLK5 £0.00 EXC. VAT £0.00 INC.VAT

Clarke TURBO FAN GAS HEATERS

Offering low cost, efficient heating

DUAL VOLTAGE 230v 110 VOLT
IN STOCK FROM £224.40 inc.VAT

FROM ONLY £94.99 EXC.VAT
£113.99 inc.VAT

PROPANE GAS FIRED

MODEL	MAX OUTPUT kW	exc.VAT	inc.VAT
Little Devil II	10.3	£94.99	£113.99
Devil 700	14.6	£119.98	£143.98
Devil 900	24.9	£159.98	£191.98
Devil 1600	36.6	£189.98	£227.98
Devil 2100	49.8	£269.00	£322.80
Devil 4000	117.2	£479.00	£574.80

Clarke ELECTRIC HEATERS

DEVIL 7003

DEVIL 2850

PRICE CUT NOW FROM £42.99 EXC.VAT
£51.59 inc.VAT
WAS £52.79 inc.VAT

MODEL	VOLTAGE	HEAT OUTPUT	exc. VAT	WAS inc.VAT	inc. VAT
DEVIL 2850	230V	2.8kW	£42.99	£52.79	£51.59
DEVIL 7003	230V	3kW	£69.98	£92.39	£83.98
DEVIL 7005	400V	5kW	£97.99	£118.79	£117.59
DEVIL 7009	400V	9kW	£149.98	£183.59	£179.98
DEVIL 7015	400V	15kW	£219.98	£275.98	£263.98

Clarke GARAGES/WORKSHOPS

MASSIVE
PRICE CUT NOW FROM £259.00 EXC.VAT
£310.80 inc.VAT
WAS £346.80 inc.VAT

SAVE UP TO £360 inc.VAT

LENGTH UP TO 40'

BRIGHT WHITE INTERIOR

- Ideal for use as a garage/ workshop
- Extra tough triple layer cover
- Heavy duty powder coated steel tubing
- Ratchet tight tensioning

ZIP CLOSE DOOR

Model	size (LxWxH) m	exc.VAT	WAS inc.VAT	NOW inc.VAT
CIG81212	3.6 x 3.6 x 2.5	£259.00	£346.80	£310.80
CIG81015	4.5 x 3 x 2.4	£279.00	£370.80	£334.80
CIG81216	4.9 x 3.7 x 2.5	£329.00	£430.80	£394.80
CIG81020	6.1 x 3 x 2.4	£349.00	£466.80	£418.80
CIG81220	6.1 x 3.7 x 2.5	£399.00	£514.80	£478.80
CIG81224	7.3 x 3.7 x 2.5	£499.00	£646.80	£598.80
CIG1432	9.7x4.3x3.65	£1099.00	–	£1318.80
CIG1640	12x4.9x4.3	£2899.00	£3838.80	£3478.80

Clarke 1" BELT/ 5" DISC SANDER

- Includes 2 tables that tilt & lock

PRICE CUT
£93.98 EXC.VAT
£112.78 inc.VAT
WAS £116.39 inc.VAT

CBS1-5B

- Quality Induction 250W motor

Clarke DUST EXTRACTOR/ CHIP COLLECTORS

CWVE2

CDE7B

FROM ONLY £99.95 EXC.VAT
£119.94 inc.VAT

- Powerful 1100W motor
- 50 litre bag capacity
- Flow rate of 450M3/h

Model	Motor	Flow Rate	Bag Cap.	exc.VAT	inc.VAT
CWVE2	1100W	183 M3/h	50Ltrs	£99.95	£119.94
CDE35B	750W	450 M3/h	56Ltrs	£199.98	£239.98
CDE7B	750W	850 M3/h	114Ltrs	£219.98	£263.98

Clarke 8" TABLE SAW

CTS800C

NEW

- 500W motor
- 200mm Blade Dia.

£89.98 EXC.VAT
£107.98 inc.VAT

Clarke PLUNGE SAWS

CPS160

FROM ONLY £69.98 EXC.VAT
£83.98 inc.VAT

INC. 2X 700mm GUIDE RAILS

Model	Motor	exc.VAT	inc.VAT
CPS85	550W	£69.98	£83.98
CPS160	1200W	£129.98	£155.98

Clarke BELT SANDERS

CBS2

Makita

- Ideal for surface removal, sanding and finishing

ABRASIVE SANDING BELTS IN STOCK

FROM ONLY £44.99 EXC.VAT
£53.99 inc.VAT

* WAS £125.99 inc.VAT

Model	Motor	M/Min	exc.VAT	inc.VAT
Clarke BS1	900W	380	£44.99	£53.99
Clarke CBS2	1200W	480	£94.99	£113.99
Makita 9911	650W	75-270	£99.98	£119.98

Clarke 4" BELT/ 8" DISC SANDER

- Includes two tables
- 550W 230V motor

PRICE CUT
£205.00 EXC.VAT
£246.00 inc.VAT
WAS £250.80 inc.VAT

CS48

Clarke 6" BELT / 9" DISC SANDER

CS6-9D

- 1100W motor
- Use vertically or horizontally

DUST PORT

£349.00 EXC.VAT
£418.80 inc.VAT

BELT/DISC TABLE ADJUSTS 0-45°

INCLUDES STAND

Clarke CIRCULAR SAWS

- Great range of DIY and professional saws
- Ideal for bevel cutting (0-45°)

FROM ONLY £54.99 EXC.VAT
£65.99 inc.VAT

NEW

AVAILABLE IN 230 & 110 VOLT

*Includes laser guide

CON185B

Model	Motor	Max Cut 90/45 (mm)	exc.VAT	inc.VAT
CCS185C	1200W	65/44	£54.99	£65.99
CON185B*	1600W	63/43	£69.98	£83.98

Clarke PALM SANDERS

- Ideal for detail sanding of corners & hard to reach areas

CPS125

PRICE CUT
£22.99 EXC.VAT
£27.59 inc.VAT
WAS £28.79 inc.VAT

INC DUST EXTRACTION

Clarke DISC SANDER (305MM)

- Powerful, bench mounted
- 900W
- Dust extraction port

PRICE CUT
£189.98 EXC.VAT
£227.98 inc.VAT
WAS £239.98 inc.VAT

CDS300B

Clarke SHEET SANDERS

CON320

- Ergonomic design for optimum comfort

VARIABLE SPEED

FROM ONLY £26.99 EXC.VAT
£32.39 inc.VAT

Model	Sheet Size	Motor	exc.VAT	inc.VAT
COS210	190x90mm	200W	£26.99	£32.39
CON320	230x115mm	320W	£39.98	£47.98

Clarke 3-IN-1 MULTI SANDER

CMS200

PRICE CUT
£47.99 EXC.VAT
£57.59 inc.VAT
WAS £59.98 inc.VAT

1/3 SHEET SANDER

DISC SANDER

Clarke DETAIL SANDERS

- Perfect for smooth and fine finishing along with hard to reach areas or curved surfaces

CDS-1V

280W

£27.99 EXC.VAT
£33.59 inc.VAT

ALL MODELS INC. SANDING SHEETS

VAC KING WET & DRY VACUUM CLEANERS

PRICE CUT NOW FROM £62.99 EXC.VAT
£75.59 inc.VAT
WAS £77.99 inc.VAT

- Compact, high performance wet & dry vacuum cleaners for use around the home, workshop, garage etc.

* SS = Stainless Steel

Model	Motor	Dry/Wet Capacity	exc. VAT	WAS inc.VAT	inc. VAT
CVAC20P	1250W	17/13 ltr	£62.99	£77.99	£75.59
CVAC20PR2	1400W	14/12 ltr	£72.99	£95.98	£87.59
CVAC20SS*	1400W	17/13 ltr	£72.99	£93.59	£87.59
CVAC30SSR*	1400W	24/22 ltr	£109.98	£135.59	£131.98

Clarke TABLE SAW WITH SLIDING CARRIAGE

CONTRACTOR

CCS12B

230 VOLT

NEW

- A sturdy, powerful saw, manufactured from a durable steel body with tough powder coated finish
- Max Depth of Cut 83mm
- BladeDia 315mm

Clarke 18V CORDLESS LI-ION STAPLE / NAIL GUN

- Includes 300 nails and 400 staples
- 1x 2Ah 18V Li-Ion battery

SPARE NAILS / STAPLES IN STOCK

1x2Ah

powered by Li-Ion

CONSN18LIC

£129.98 EXC.VAT
£155.98 inc.VAT

ELECTRIC AND CORDLESS MODELS IN STOCK

Clarke 18V BRUSHLESS COMBI DRILLS

CONTRACTOR

- 2 forward and reverse gears

FROM ONLY £99.98 EXC.VAT
£119.98 inc.VAT

powered by Li-Ion

4Ah Li-Ion

CON180LI

Model	Volts	Batteries	exc.VAT	inc.VAT
CON18LIC	18V	2x 2.0Ah Li-Ion	£99.98	£119.98

Clarke DRILL PRESSES

- Range of precision bench & floor presses for enthusiast, engineering & industrial applications

FROM ONLY £99.95 EXC.VAT
£119.94 inc.VAT

B = Bench mounted
F = Floor standing

CDP102B

model	Motor (W) Speeds	exc.VAT	WAS inc.VAT	inc.VAT
CDP5EB	350 / 5	£99.95		£119.94
CDP102B	350 / 5	£115.95		£139.14
CDP152B	450 / 12	£209.98		£251.98
CDP202B	450 / 16	£269.00		£322.80
CDP352F	550 / 16	£339.00	£418.80	£406.80
CDP452B	550 / 16	£339.00	£418.80	£406.80
CDP502F	1100 / 12	£779.00	£946.80	£934.80

Clarke POWER PLANERS

FROM ONLY £36.99 EXC.VAT
£44.39 inc.VAT

CON950

Model	Width of Cut	Motor	exc.VAT	inc.VAT
CEP450	60mm	450W	£36.99	£44.39
CEP720B	82mm	720W	£44.99	£53.99
CON950	110mm	950W	£74.99	£89.99

Clarke RANDOM ORBITAL SANDER

- Adjustable front handle improves control
- 7000-14000rpm

CROS3

INC DUST BAG AND SELECTION OF 125MM DIAMETER SANDING DISCS

£39.98 EXC.VAT
£47.98 inc.VAT

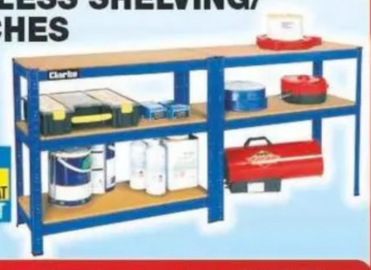
Clarke OSCILLATING BOBBIN SANDER

COBS1

- Dust collection port
- Inc. 6 sanding sleeves/bobbins

PRICE CUT
£159.00 EXC.VAT
£190.80 inc.VAT
WAS £202.80 inc.VAT

Clarke BOLTLESS SHELVING/ BENCHES



- Simple fast assembly in minutes using only a hammer

FROM ONLY £42.99 EXC.VAT
£51.59 inc.VAT

150 KG PER SHELF (evenly distributed) Strong 9mm fibreboard shelves

350 KG PER SHELF (evenly distributed) Strong 12 mm fibreboard shelves

CHOICE OF 5 COLOURS
RED, BLUE, GREY, SILVER & GALVANISED STEEL

Model	Dims WxDxH(mm)	exc. VAT	inc. VAT
150kg	800x300x1500	£42.99	£51.59
350kg	900x400x1800	£59.98	£71.98

Clarke WHETSTONE SHARPENER (200MM)

CWS200B

- Produces razor sharp cutting edges on chisels, planes, etc.
- Inc. 3 tool holding jigs, workpiece clamp & support frame, polishing paste & water trough

PRICE CUT
£139.98 EXC.VAT
£167.98 inc.VAT
WAS £179.98 inc.VAT

Clarke PLANERS & THICKNESSERS

CPT800

- Ideal for DIY & Hobby use
- Dual purpose, for both finishing & sizing of timber

FROM ONLY £249.98 EXC.VAT
£299.98 inc.VAT

Model	Planing Width	Max Thick Capacity	exc.VAT	inc.VAT
CPT600	6" (152mm)	120mm	£249.98	£299.98
CPT800	8" (204mm)	120mm	£299.98	£359.98
CPT1000	10" (254mm)	120mm	£399.00	£478.80

Clarke OSCILLATING BELT & BOBBIN SANDER

- Sand concave, convex, straight or multi-curved pieces
- Dust collection port
- Inc. sleeves, drum & belt

PRICE CUT
£219.00 EXC.VAT
£262.80 inc.VAT
WAS £274.80 inc.VAT

COEBS1

33410LH

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Clarke 40" WOODTURNING LATHE

Ideal for woodturning in the workshop

- Distance between centres allows for turning longer spindles
- Inc. tool rest, tail stock, drive centre & face plate
- Large turning capacity of 350mm
- 4 turning speeds

CWL1000B

PRICE CUT £169.98 exc.VAT £203.98 inc.VAT WAS £215.98 inc.VAT

Clarke 40" WOODTURNING LATHE WITH COPY FOLLOWER

Ideal for DIY, furniture or joinery workshops where repeat quantities are required

- Large 980mm distance between centres
- Variable speeds 600-2200rpm
- Inc. copy follower assembly, tool rest, drive centre tail stock assembly, face plate, eye shield & stand

CWL1000CF £469.00 exc.VAT £562.80 inc.VAT

Clarke BENCH BANDSAWS

- Produces fast, precise mitre & longitudinal cuts
- 250W motor
- 8" throat size
- Cuts in all types of woods

CBS205 £129.98 exc.VAT £155.98 inc.VAT

- Great for both home & professional use
- Induction 300W motor
- Table tilts up to 45°
- 9" throat size

CBS225 £239.98 exc.VAT £287.98 inc.VAT

REMOVABLE DUST TRAY

CBS300 FROM ONLY £249.98 exc.VAT £299.98 inc.VAT

Clarke PROFESSIONAL BANDSAWS

Top Quality Bandsaws - ideal for professional workshop use. Strong steel body with solid cast iron table

- Table tilts 45°
- Adjustable blade guide
- Supplied with stand, 4TPI wood cutting blade, rip fence, mitre guide, mitre gauge and push stick
- Induction motors

MODELS ALSO FEATURE:

MULTI-STEP DUST EXTRACTION OUTLET · FLEXIBLE LED WORKLIGHT · REMOVABLE DUST TRAY · BLADE TENSIONING CONTROL

* WAS £717.60 inc.VAT

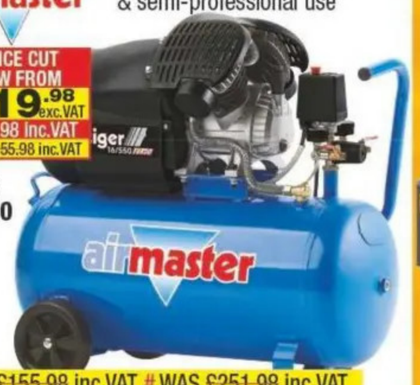
Model	Throat Depth	Max Cut 90°	Max Cut 45°	exc.VAT	inc.VAT
CBS250C	245mm/10"	115mm	65mm	£249.98	£299.98
CBS300*	305mm/12"	165mm	115mm	£579.00	£694.80
CBS350	340mm/14"	225mm	160mm	£699.00	£838.80

TURBO AIR COMPRESSORS

airmaster

- Superb range ideal for hobby & semi-professional use

PRICE CUT NOW FROM £119.98 exc.VAT £143.98 inc.VAT WAS £155.98 inc.VAT



Model	Motor	CFM	Tank	exc.VAT	inc.VAT
Tiger 8/260*	2HP	7	24ltr	£119.98	£143.98
Tiger 11/550#	2.5HP	9.3	50ltr	£179.98	£215.98
Tiger 16/550‡	3HP	14.5	50ltr	£249.00	£298.80
Tiger 16/1050♦	3HP	14.5	100ltr	£309.00	£370.80

* WAS £155.98 inc.VAT # WAS £251.98 inc.VAT ‡ WAS £334.80 inc.VAT ♦ WAS £419.98 inc.VAT

Clarke 13" MINI WOOD LATHE

PRICE CUT £189.00 exc.VAT £226.80 inc.VAT WAS £233.99 inc.VAT

CWL325V

- 325mm distance between centres
- 200mm max. turning capacity (dia)
- 0.2HP motor

Clarke 3/8" MORTICING MACHINE

NEW

£229.98 exc.VAT £275.98 inc.VAT

- Ideal for the serious DIY woodworker, craftsman & woodworking enthusiast.
- Max. chuck capacity: 13mm
- Max. mortice chisel stroke: 76mm

230 VOLT

CBM1C

Clarke CONTRACTOR ROUTERS

- Powerful heavy duty machines ideal for trade and DIY use

FROM ONLY £49.98 exc.VAT £59.98 inc.VAT

* WAS £119.98 inc.VAT

Model	Motor (W)	Plunge (mm)	exc.VAT	inc.VAT
CR1200	1200	0-55	£49.98	£59.98
*CR4	2000	0-66	£97.99	£117.59

Clarke GRINDERS & STANDS

- Stands come complete with bolt mountings and feet anchor holes

FROM ONLY £66.99 exc.VAT £80.39 inc.VAT

6" & 8" AVAILABLE WITH LIGHT

STANDS FROM ONLY £75.59 INC.VAT

* WAS £91.19 inc.VAT # WAS £125.99 inc.VAT

Model	Duty	Wheel Dia.	exc.VAT	inc.VAT
CBG6RZ	PRO	150mm	£66.99	£80.39
CBG6250LW	HD	150mm	£69.98	£83.98
CBG6250L*	HD	150mm	£72.99	£87.59
CBG6SB	PRO	150mm	£94.99	£113.99
CBG8370LW#	HD	200mm	£99.98	£119.98

Clarke ELECTRIC POWER FILE

CPF13

- Variable belt speed
- Tilting head

FROM ONLY £49.98 exc.VAT £59.98 inc.VAT

ARM ADJUSTS

*Black & Decker

Model	Motor	Belt Size (mm)	exc.VAT	inc.VAT
CPF13	400W/230V	13x457	£49.98	£59.98
KA900E*	350W/230V	13x455	£63.95	£76.74

Clarke WOODWORKING VICES

Record

FROM ONLY £16.99 exc.VAT £20.39 inc.VAT

WV7

Model	Mounting	Jaw (Width/Opening Depth) mm	exc. VAT	inc. VAT
Clarke CHT152	Bolted	150/152/61	£16.99	£20.39
Record TV75B	Clamped	75/50/32	£25.99	£31.19
Clarke WV7	Bolted	180/205/78	£39.98	£47.98

Clarke CONTRACTOR JIGSAWS

CON750

BEST SELLER

FROM ONLY £19.98 exc.VAT £23.98 inc.VAT

Model	Power (W)	Depth of Cut (Wood/ Steel)	exc. VAT	inc. VAT
CJS400	400W	55/ - mm	£19.98	£23.98
CON750	750W	80/10mm	£31.99	£38.39
Bosch PST700E	500W	70/4mm	£56.99	£68.39

Clarke SCROLL SAWS

- 50mm max cut thickness
- Air-blower removes dust from cutting area
- Table tilts 0-45°

FROM ONLY £99.98 exc.VAT £119.98 inc.VAT

BEST SELLER

CSS400C

Model	Motor	Speed RPM	exc.VAT	inc.VAT
CSS400D	120W	400-1600	£99.98	£119.98
CSS16VB	90W	550-1600	£129.98	£155.98
CSS400C	90W	550-1600	£157.99	£189.59

Clarke MULTI FUNCTION TOOL WITH ACCESSORY KIT

- Great for sawing, cutting, sanding, polishing, chiselling & much more
- Variable speed

£39.98 exc.VAT £47.98 inc.VAT

CMFT250

Clarke 10" SLIDING MITRE SAW

- For fast, accurate cross, bevel & mitre cutting in most hard & soft woods
- 2000W motor

CMS10S2B

PRICE CUT NOW FROM £89.98 exc.VAT £107.98 inc.VAT WAS £119.98 inc.VAT

LASER GUIDE

* WAS £91.19 inc.VAT # WAS £125.99 inc.VAT

Model	Blade Dia/Bore (mm)	Max Cut Depth/ Cross	exc.VAT	inc.VAT
CMS210B*	210	60/120	£89.98	£107.98
CMS10S2B#	255/3	90/340	£174.99	£209.99

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COMPETITION MICROJIG Grr-ripper2 Go™

WIN! 1 of 2 MICROJIG Grr-ripper2 Go™ table saw accessories

The new **Grr-ripper2 Go™** from **MICROJIG** is a table saw accessory that's designed to bring safety to the masses – there's two up for grabs

MICROJIG was founded on the principle of safety with its legendary, award-winning Grr-ripper™. Now, the company is bringing that same safety to the masses with a new, must-have table saw accessory, which is aimed at woodworkers of all experience levels – the Grr-ripper2 Go™.

Even more accessible than before, it's supplied fully assembled, so ready to use straight from the box. The Grr-ripper2 Go™ also features an easy, colour-coded guide to help users set cutting width. The handy device protects hands and fingers from the saw blade, provides the user with control throughout the cut, and prevents kickback.

Use it around the workshop

The Grr-ripper2 Go™ is suitable for use with table saws, bandsaws, router tables and jointers.

The device's legs and body maintain a constant 90° angle, and can be used on its side, which is ideal for resawing on bandsaws. It glides along the table top and applies even pressure against the fence with your hands clear of the blade. Even pressure means less blade drift, which results in smoother cuts.

The Grr-ripper2 Go™ also provides incredible command over workpieces on the router table. Whether using the fence or freehand routing, its powerful grip controls stock and protects your hands from dangerous spinning bits.

No assembly; easy setup

The legs are staggered so that any rip cut from 8-50mm upwards can be made with the blade passing safely underneath. The Grr-ripper2 Go™ is supplied with MICROJIG's patented colour-coded guide, so that cuts can be properly set.

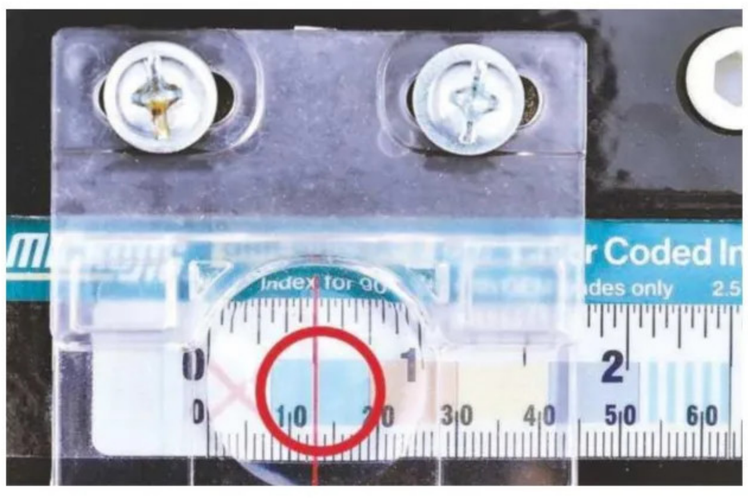
Apply the provided see-through colour-coded guide sticker to your saw's rip fence scale. Whenever the rip fence is set, the colour visible beneath the cursor shows how to position the Grr-ripper2 Go™ against it, which ensures that correct set ups are a breeze.

This handy table saw accessory can be used on its side, which is ideal for resawing on a bandsaw

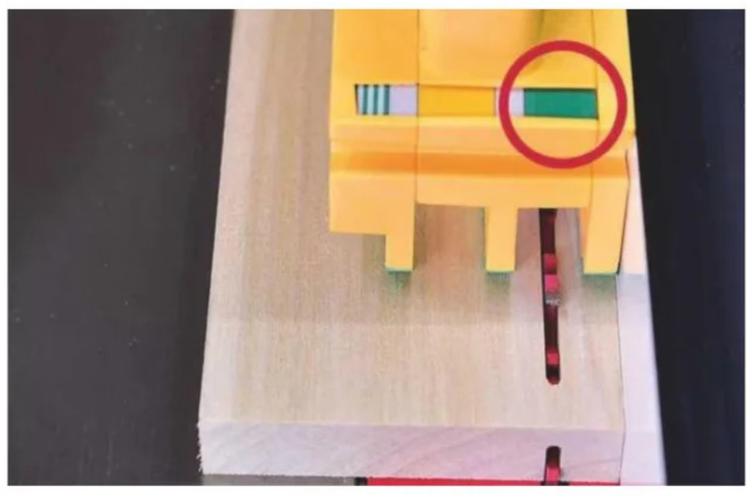
The Grr-ripper2 Go™ is also suitable for use on a router table, whether using the fence or freehand routing

For further information on MICROJIG, visit the website: **www.microjig.com**.

Apply the provided see-through colour-coded index sticker to your saw's rip fence scale



STEP 1 – Set your fence to the desired cutting width, and see which colour the fence scale lands on. In the example above, it's solid green



STEP 2 – There's a different colour on each end of the device. In this case, it's the end with the solid green colour, as shown in step 1

MICROJIG®

HOW TO ENTER

To be in with a chance of winning 1 of 2 **MICROJIG Grr-ripper2 Gos™**, visit www.thewoodworkermag.com/category/win and answer the multiple choice question below:

QUESTION: Name one piece of workshop machinery that the Grr-ripper2 Go™ is designed to be used with

A: Router table
B: Bandsaw
C: Lathe

The winners will be randomly drawn from all correct entries. The closing date for the competition is **19 May 2023**. Only one entry per person; multiple entries will be discarded. Employees of David Hall Publishing Ltd and MICROJIG are not eligible to enter this competition

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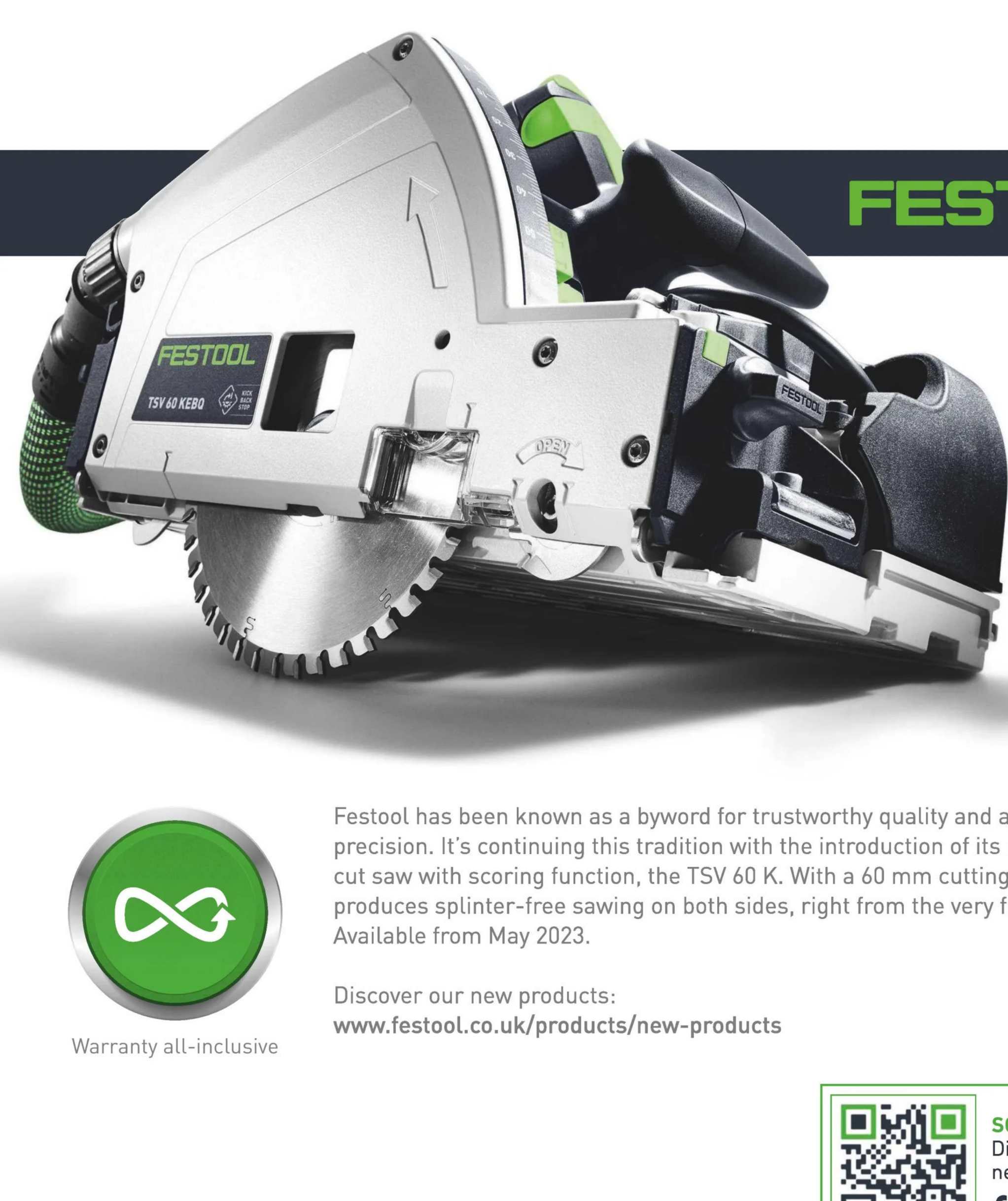

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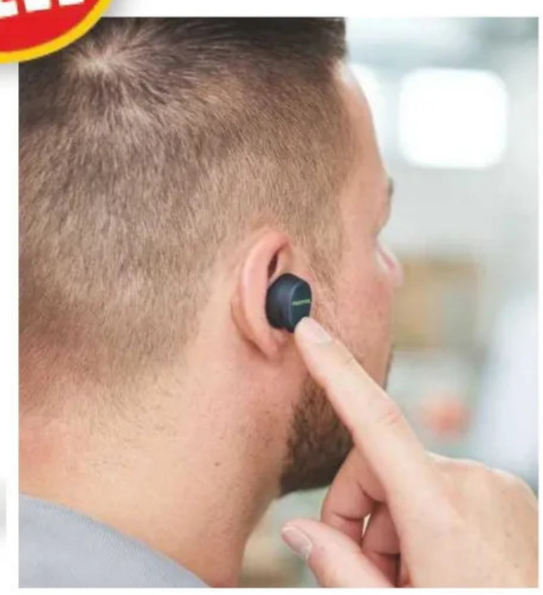
RSC 18 CORDLESS RECIPROCATING SAW & BLUETOOTH® GHS 25 I EAR PROTECTION FROM FESTOOL

MANUFACTURER: Festool
D&M GUIDE PRICES: **RSC 18 cordless reciprocating saw** – from £329.95; **GHS 25 I Bluetooth® ear protection** – £149.95

The new **RSC 18 cordless reciprocating saw** is a powerful new addition to the Festool cordless range, which is extremely strong, quick, precise and incredibly robust to boot. With its brushless EC-TEC motor, switch-activated pendulum stroke and low level of vibrations, the saw can be smoothly guided and will prove a great help when it comes to tackling all manner of conversion and dismantling work.

Regardless of whether this involves separating wooden beams and roofing boards, cutting out window and door frames, or roof and wall openings through chipboard, the new RSC 18 is an all-round sawing talent and will prove an indispensable aid for carpenters, joiners and window fitters. Available as body-only with case, or in kit form with 2 × 5Ah batteries, charger and case.

Also new from Festool and small, light and convenient in use, the cordless **GHS 25 I Bluetooth® earplugs** will quickly become your daily companion in the workshop or on the construction site. As well as offering protection from noise while working, they also allow telephone calls to be made via Bluetooth®, or your choice of music to be played and enjoyed in excellent sound quality. The GHS 25 I earplugs block out loud ambient noise that exceeds the safe sound level of 79dB – corresponds to EU standard EN352 – meaning you can now enjoy professional ear protection at all times. Still want to know what's going on around you? No problem: conversation mode takes care of that. The innovative technology allows speech and ambient noise to pass through at a safe listening volume, so you can still talk and engage with colleagues and customers at any time without having to remove the ear protection.



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Dust collection features include a tool-free dust port swivel adaptor – compatible with DeWalt's Airlock™ System or a standard 35mm dust extractor (both sold separately) – which ensures that dust is kept to a minimum while sanding. Also, the Wireless Tool Control™ System allows for ease of use when paired with a compatible DeWalt vacuum or dust extractor – both of which are sold separately.

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The magical grandfather clock

Classic children's stories lead **Robin Gates** to the March 1926 issue of *The Woodworker*

In recent months I've been reading classic children's stories that escaped my bookshelf when younger, which may explain why I felt drawn to this article about a grandfather clock in *The Woodworker* of March 1926. More on those books later, because in this digital age, timed by radio signals to LCD screens, surely there's no item of furniture more captivating than the grandfather clock – a mechanical leviathan of the horologist's art.

'A handsome piece of cabinet work that will grace any home' is how the author describes it, here shown as centrepiece to an eclectic gathering of oak-panelled chest, ceramic jardiniere and hand-woven rug. Graceful, yes, but also an important functional item in its day, meticulously adjusted and wound, governing the domestic routine as it chimed every quarter hour.

Imposing & complex

In weighing up the feasibility of building one we mustn't overlook the eight-day movement, which lies at the heart of the beast; certainly we'd need to have this in hand before finalising our cut list so as to be sure the case is of sufficient height and width to accommodate the drop of the weights and arc of the pendulum's swing. Although the finished case appears imposing and complex, I'm persuaded that, taking each part in turn, the basic structure assembled using glued blocks and tongued joints wouldn't be beyond the capabilities of many a hobbyist woodworker. The devil's in the detail, the veneers and inlays, planted mouldings, ornamental columns with brass capitals and bases. Note the little oval window or lenticel in the trunk for observing the pendulum on its supporting rod.

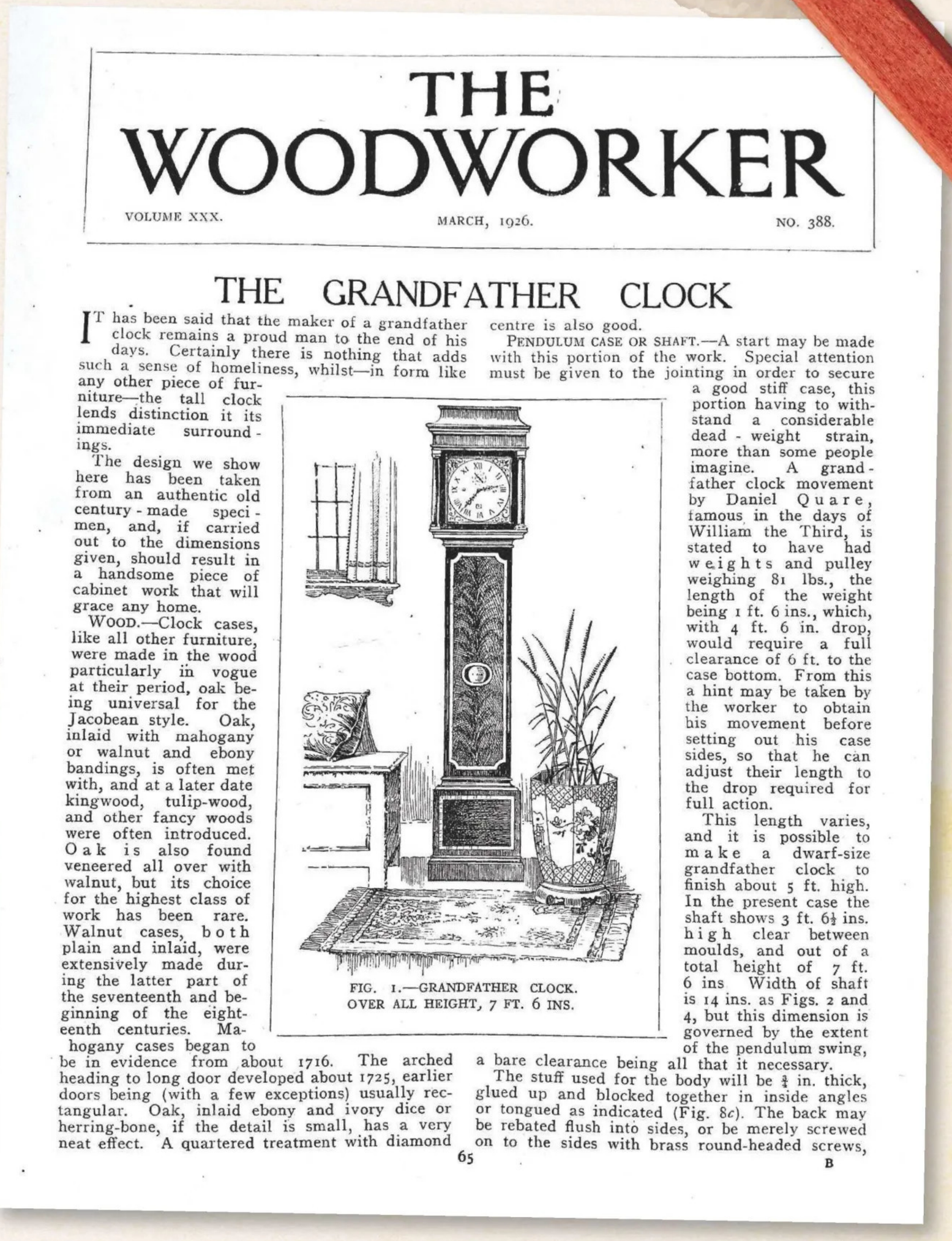
But despite the author's promise that 'the maker of a grandfather clock remains a proud man to the end of his days', I'm not at all confident my attempt at making one would end well, and so I'll return to those classic children's stories mentioned earlier.

Story-telling potential

The heroine of *The Borrowers* by Mary Norton, published in 1952, is none other than Arrietty Clock who lives with her parents beneath the floorboards of a big old house. Borrowers, by the way, are little people who 'borrow' the small things people constantly mislay – thimbles, cotton reels, match boxes, safety pins – to furnish their own home. And the thing about the Clock family is that the entrance to their home is through a hole in the wainscot beneath a grandfather clock, which 'had not stopped for 80 years'. On her first foray above the floorboards, Arrietty looks up to see 'cave-like shadows in the great case above her and the dim outline of the hanging weights. The hollow darkness around her vibrated with sound; it was safe sound – solid and regular; and far above her head, she saw the movement of the pendulum; it gleamed a little in the half light, remote and cautious in its rhythmic swing.' I was hooked and had to read Mary Norton's three subsequent stories.

Another classic is *Tom's Midnight Garden* by Philippa Pearce, published in 1958, again centred on an old house where our hero Tom is reluctantly spending the summer holiday with his Aunt Gwen and Uncle Alan. When the grandfather clock in the hall mysteriously chimes 13 at midnight, Tom decides to investigate. He finds the grandfather clock 'a tall and elegant figure of black in the lesser blackness' and, unable to find the light switch that was there by day, he attempts feeling the time from the position of the clock's hands using his fingers, but the 'dial-door' won't open. The door to the garden does open, however, leading him on adventures into the past.

Furniture has such marvellous possibilities for story-telling. Like that famous wardrobe imagined by C. S. Lewis, the grandfather clock has acquired a touch of magic.



THE WOODWORKER

VOLUME XXX. MARCH, 1926. NO. 388.

THE GRANDFATHER CLOCK

IT has been said that the maker of a grandfather clock remains a proud man to the end of his days. Certainly there is nothing that adds such a sense of homeliness, whilst—in form like any other piece of furniture—the tall clock lends distinction it its immediate surroundings.

The design we show here has been taken from an authentic old century-made specimen, and, if carried out to the dimensions given, should result in a handsome piece of cabinet work that will grace any home.

WOOD.—Clock cases, like all other furniture, were made in the wood particularly in vogue at their period, oak being universal for the Jacobean style. Oak, inlaid with mahogany or walnut and ebony bandings, is often met with, and at a later date kingwood, tulip-wood, and other fancy woods were often introduced. Oak is also found veneered all over with walnut, but its choice for the highest class of work has been rare. Walnut cases, both plain and inlaid, were extensively made during the latter part of the seventeenth and beginning of the eighteenth centuries. Mahogany cases began to be in evidence from about 1716. The arched heading to long door developed about 1725, earlier doors being (with a few exceptions) usually rectangular. Oak, inlaid ebony and ivory dice or herring-bone, if the detail is small, has a very neat effect. A quartered treatment with diamond centre is also good.

FIG. 1.—GRANDFATHER CLOCK. OVER ALL HEIGHT, 7 FT. 6 INS.

PENDULUM CASE OR SHAFT.—A start may be made with this portion of the work. Special attention must be given to the jointing in order to secure a good stiff case, this portion having to withstand a considerable dead-weight strain, more than some people imagine. A grandfather clock movement by Daniel Quare, famous in the days of William the Third, is stated to have had weights and pulley weighing 81 lbs., the length of the weight being 1 ft. 6 ins., which, with 4 ft. 6 in. drop, would require a full clearance of 6 ft. to the case bottom. From this a hint may be taken by the worker to obtain his movement before setting out his case sides, so that he can adjust their length to the drop required for full action.

This length varies, and it is possible to make a dwarf-size grandfather clock to finish about 5 ft. high. In the present case the shaft shows 3 ft. 6½ ins. high clear between moulds, and out of a total height of 7 ft. 6 ins Width of shaft is 14 ins. as Figs. 2 and 4, but this dimension is governed by the extent of the pendulum swing, a bare clearance being all that it necessary.

The stuff used for the body will be ¾ in. thick, glued up and blocked together in inside angles or tongued as indicated (Fig. 8*c*). The back may be rebated flush into sides, or be merely screwed on to the sides with brass round-headed screws,

65 B

New stylish cabinet hardware from IronmongeryDirect

Leading specialist trade supplier **IronmongeryDirect** has added a new selection of handles, knobs and hinges to its range of over 18,000 products

Hampstead Knurled Lever Door Handle on Rose – Satin Brass

Hampstead

IronmongeryDirect continues to expand its exclusive, elegant Hampstead range, and has introduced a striking, trend-led knurled collection to the line-up. These beautiful products are available in a variety of finishes, including brass, nickel, bronze, anthracite as well as matt black.

Carlisle Brass 13mm Knurled T-Bar Cabinet Pull Handle in Anthracite Grey

Carlisle Brass

Grey is the new black!

Carlisle Brass recently introduced Anthracite to the colour finishes across its stunning Knurled and Lines ranges and joins the stocked collection at IronmongeryDirect. The textured designs align with various interior styles – particularly industrial, modern and contemporary – available as pull handles, knobs and t-bar knobs for a cohesive collection of stylish hardware.

IronmongeryDirect is the UK's largest online supplier of ironmongery to the trade. With over 18,000 products in stock, woodworkers, carpenters and joiners can choose from a range of flexible delivery options to meet the needs of their busy schedules, including same-day delivery to postcodes in selected areas of London and the East of England, as well as click and collect from 6,500 pick up points across the UK. To view the products, see **www.ironmongerydirect.co.uk**.

Crofts & Assinder Monmouth

For those in need of versatile cabinet hardware, the Crofts & Assinder Monmouth range is ideal. With a simple and timeless design, combining geometric shapes and warm edges, the retailer has added a number of new finishes to its stocked collection, including the stunning Brushed Iron option, which has a similar aesthetic to gun metal.

Crofts & Assinder Monmouth Round Cabinet Knob – 32mm diameter – Brushed Satin Brass

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TIME FOR A CHANGE

WW PROJECT

CHISEL RATING

Peter Vivian finally gets around to a weekend project that's been on his to-do list for 12 years – making a new Mission-style case for an Amberley clock, which features a lovely eight-day Smiths Westminster chime movement

1 The original 'Amberley' clock, which belonged to my late mother

When my mother passed away 12 years ago, she left me her Amberley clock (**photo 1**). It featured an eight-day Smiths Westminster brass chime movement, which I loved, but wasn't so keen on the clock case. I'd always planned to make a new case for it, but other jobs always seemed to get in the way. Fast forward 12 years, however, and looking for a suitable weekend project to tackle, the clock finally found its way onto my workbench.

3 Frame parts showing half-lap joints

4 Draw bore pin jig

A quick online search gave me a good idea as to the design I was looking for, so I prepared a quick sketch (**photo 2**). The key elements seemed to be a tapered case with 'roof' and glass window. I had to change the proportions slightly from the sketch due to the chimes' length; I don't think that cutting them to fit would've ended well!

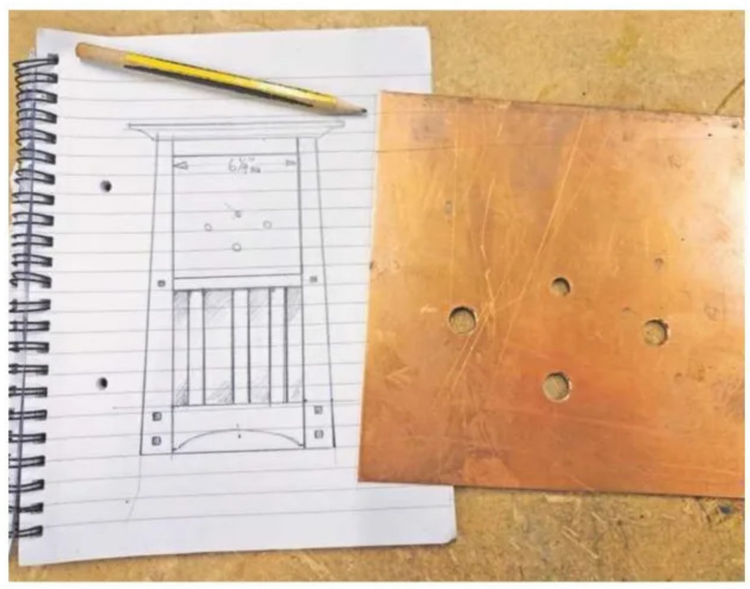
On a mission

Usually, the pendulum is visible through this window, but as the movement has an escapement instead, there wouldn't be much to see! Another online search turned up a beautiful piece of hand-made glass, which I could incorporate and in doing so, solve the problem.

Sound idea

I'd planned to build the clock from solid oak, but further examination of the original case revealed a thin plywood construction. I reasoned this might be for acoustic purposes, allowing the chimes to resonate more than if made from solid timber, which might dull the sound. I changed the plan to, basically, two 'face frames', which consisted of four solid oak uprights connected with thin

5 Pins in place

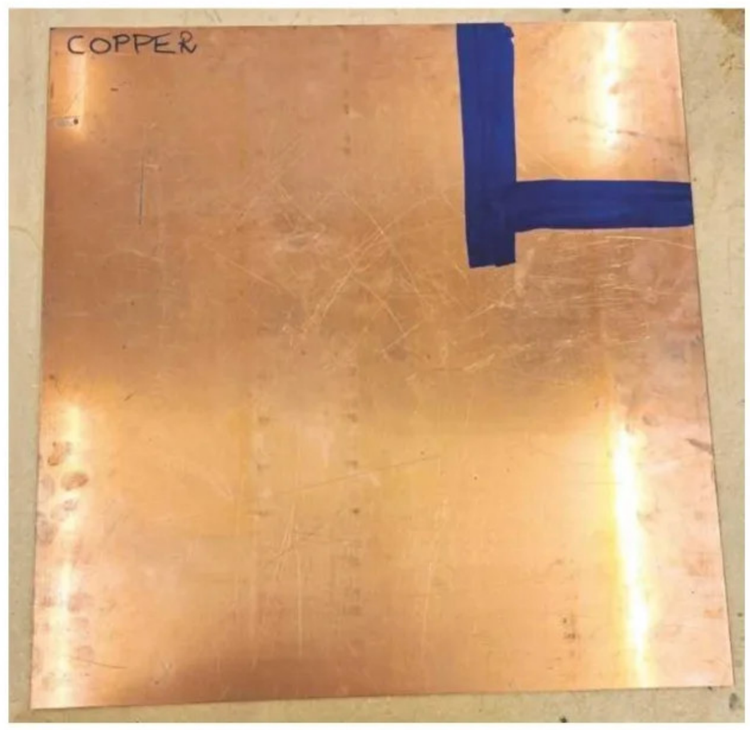


2 Preparatory sketch

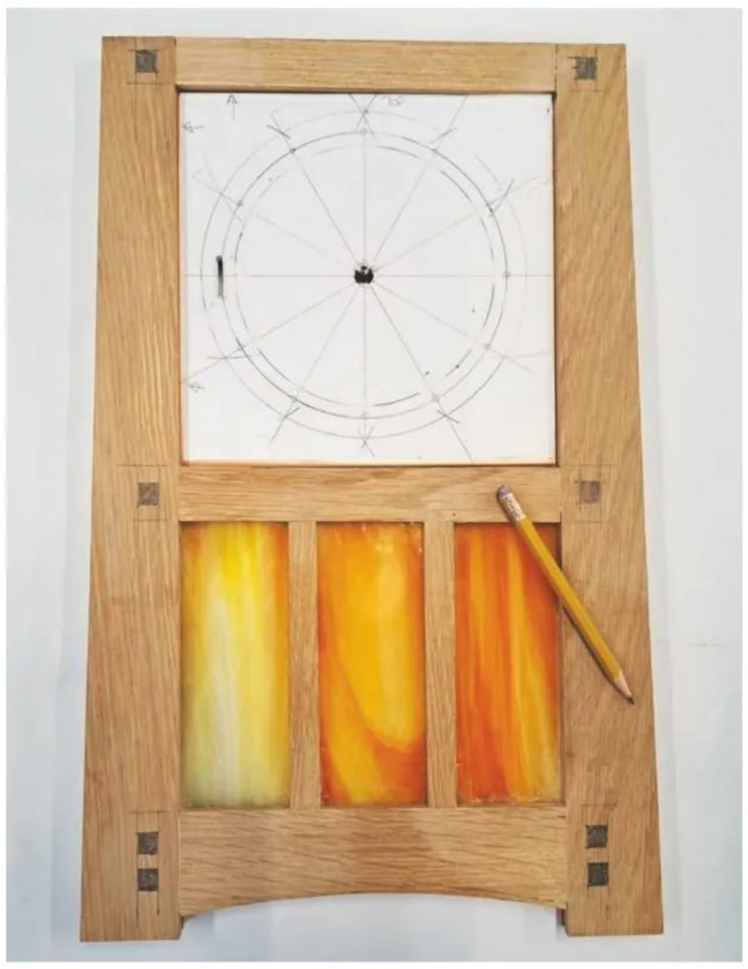
veneered plywood panels. The rebates on the uprights, to receive the panels, were produced on the table saw, which resulted in a snug fit. The horizontal rails are fitted to the uprights with half-lap joints (**photo 3**). Many of the Mission clocks I'd seen online had contrasting 'draw bore pins' on the joints; these aren't strictly necessary with modern glues, especially where the joints aren't stressed as on a clock, but I liked the look of them. I set about cutting a 10mm square strip of wenge, sanded a pyramid on each piece, then cut them to length using a simple jig (**photo 4**) before gluing in place (**photo 5**).

Face to face

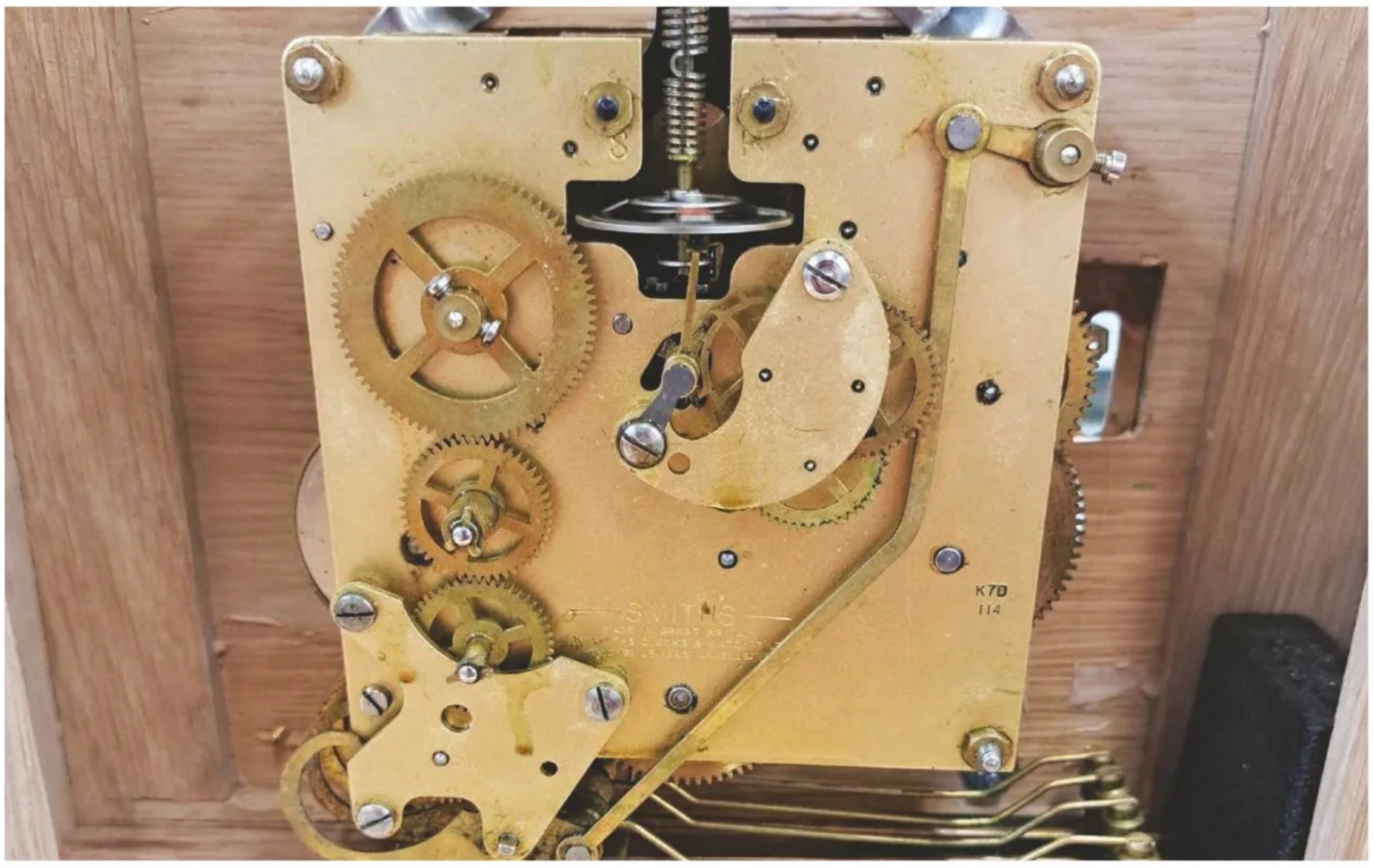
The Amberley clock has a 'chapter ring' for the numerals, and I wasn't sure whether to do the same, fit a dial, or keep it simple. Some of the designs I'd seen online had a copper face, which I liked the look of, especially as I already had a 1.5mm thick copper sheet in my odds and ends pile (**photo 6**). Using the original face as a template, I marked the position of the three holes for the key and very carefully drilled them – if these were offcentre to the winding spindles, it would've looked awful. I added a bevel to the holes to catch the light – a small detail that makes a big difference – then made a paper template, which allowed me to mark the hour and five minute intervals (**photo 7**). For the positions at 12, three and six, I used 10mm square pyramid-shaped brass studs, which are usually added to clothing, particularly leather jackets. I chose these to mimic the fake draw bore pins. I cut the tangs off the back, filled with two-part filler and glued them to the copper using CA adhesive. The interim positions are marked with 6mm



6 1.5mm thick copper sheet, for the clock face



7 Paper template for marking the hour and five minute intervals



8 Rear view of the clock

diameter silver domed upholstery nails. I drilled a 1.5mm hole and soldered these in place from the face's reverse. The 3 o'clock position is where the lever protrudes, so it can turn the chimes either on or off. The brass hands on the original clock seemed to suit the copper perfectly, so were therefore reused.

Hurry up & wait

Whenever my Mum wanted us kids to hurry up, she always said 'Tempus Fugit', which, translated from Latin, means 'Time Flies'. I thought it'd be a nice touch to have it engraved on the clock face.

Glass act

Coincidentally, the thickness of the glass exactly matched that of the plywood, so I used the same method as before to create the rebates. The two glazing bars are simply thin strips of oak, which are stuck to the glass with clear silicone sealant; this was also used to fit the glass into the rebates (**photo 9**).

Moving on

The movement is fitted to the plywood sub face with the original mounting brackets, which are secured in place from the front with countersunk set screws. These are hidden by the copper face, which, in turn, is fitted to the plywood with four small brass roundhead screws. The chimes are mounted in a heavy piece of cast-iron, which sits on a plywood shelf attached with three machine screws taken from the original clock (**photo 8**).

Open & shut case

I decided to leave the bottom half of the case's reverse open, which would allow light to pass through the glass, and a decision that I think worked well. The top is in wenge to match the pins. The bevel was made on a disc sander and fitted to the case by screwing a piece of ply to the underside – the size of which exactly matches the case interior and sub assembly – before gluing in place with PVA glue. I made the door – which allows access to the movement – from veneered plywood as before; this was fitted with some small brass hinges, also from my bits and bobs pile. The 'D' shaped handle and catch was taken from the original clock and coincidentally made from copper, which I only discovered when it came to polishing them. (**photo 10**).

Finishing time

I sanded the case down to 400 grit, then applied two coats of Danish Oil, wiping off any surplus with a clean cloth after 10 minutes. This was followed by a few coats of paste wax, buffing to a soft sheen. The only thing left to do now is find the best position for the finished clock – this could take some time!

9 Glazing bars made from thin strips of oak, which are stuck to the glass with clear silicone sealant

10 The access door for the chimes was made from veneered plywood, fitted in place with small brass hinges

11 The completed Mission-style clock – about time!

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1 Traditional French polish is a natural shellac lacquer that's worked into the surface in layers, using a folded cloth and absorbent wadding known as a 'rubber'

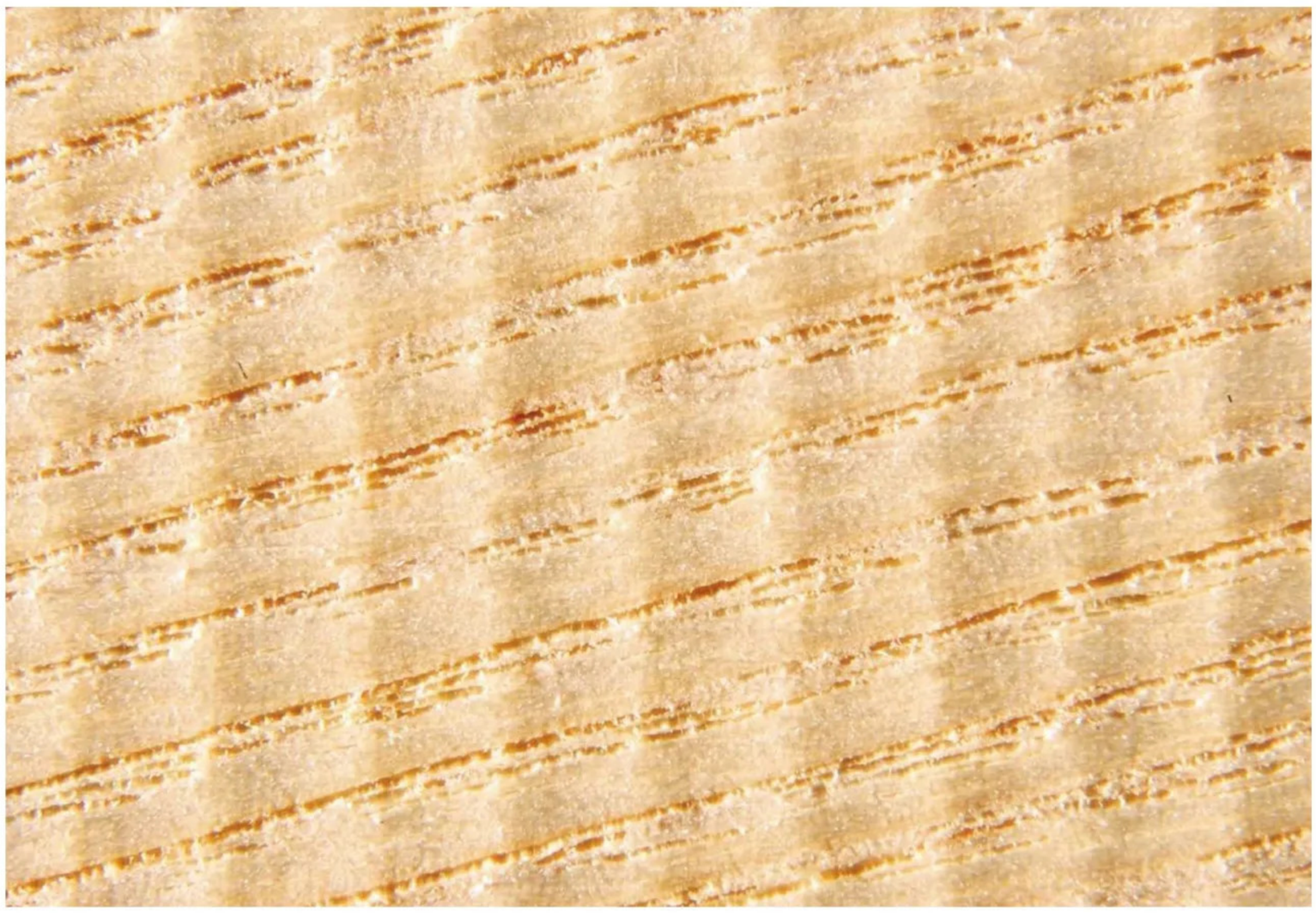
FINISHING TOUCHES

In the final part of this beginners' series, **John Bullar** looks at preparing and treating the wooden surfaces of furniture

First impressions count in furniture as much as anything else. It might seem unfair after all the care you've put into internal construction, but the fact remains that people will first judge your furniture by the outside fraction of a millimetre – how it reflects light and how it feels to touch.

This isn't to say that quality of construction is any less important, however. It's only when furniture looks good on the surface that people will take an interest in how the piece is made. After that they'll think about giving it a place in their home, finding out how robust it is and how well it functions. A good furniture maker with a lasting reputation has to pass all these tests.

While there are occasions when the wood is left bare, most furniture surfaces have some form of treatment, which improves light reflection, reduces oxidation and moisture transmission, as well as keeping them feeling smooth by preventing fibres furring up. This treatment can range from a quick lick of paint to a meticulously applied French polish (**photo 1**), with many variations in between.



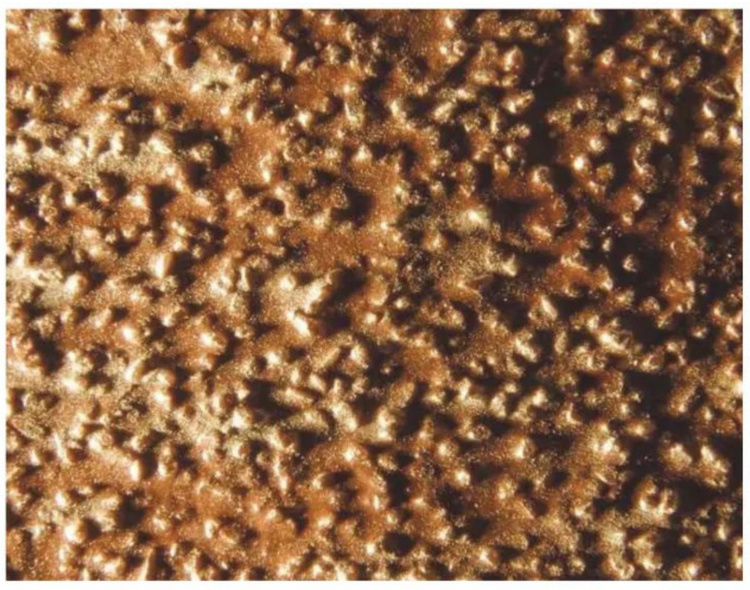
2 Machine-planed wood appears flat to the naked eye, but with angled light and a magnifying lens, you can see a series of ripples across the surface

Planed surfaces

Ideally when furniture is assembled from hand-planed components with carefully chosen grain direction, then the amount of surface preparation on the finished piece can be minimal. A finely-tuned hand plane with razor-sharp blade will slice through the surface fibres, leaving them silky smooth. In practise, however, there's often parts that need sanding due to compromises in wood selection or when working with less than ideal tools.

Machine-cut wood is a different story, though. By its very nature, a powered saw or planer leaves a series of ripples on the surface (**photo 2**). Because these are so fine they may not be obvious until a surface treatment is applied, which darkens the wood in varying degrees depending on the angle of fibres meeting the surface. The results can then be blotchy and disappointing, so the fact of the matter is that machine-cut surfaces will always require further preparation.

3 One of the most basic tools for flattening a wooden surface is the scraper blade, here mounted in a cast handle to take strain off the thumb



4 Commonly known as 'sandpaper' seen here with a large magnification, abrasive sheets have a layer of wood-cutting grit glued to the surface

Being prepared

Scraper blades are square-edged plates of steel used to remove the very minimum of thickness while opening up a fresh surface on the wood (**photo 3**). The simplest scraper is a playing card-sized rectangular sheet, gripped between fingers and thumbs of both hands

5 Although the belt sander is fast and powerful for removing wood, it's not widely used by fine furniture makers

while the edge is pushed across the wooden surface. The scraper blade is angled away from the direction of movement so that it doesn't catch, and to make the task easier, dedicated tools are available for holding scraper blades. Furniture makers and musical instrument makers use curve-shaped versions of these extensively on various carved work.

Abrasive sheets

An alternative to scraping the surface with a single edge is to rub it with a multitude of microscopic edges. Traditional cabinetmakers used to employ pieces of sharkskin as a fine abrasive sheet, which in time was replaced by sand and other fine grits glued to paper or fabric.

An ideal abrasive for wood surfaces won't clog up and the grit will flake off to produce new edges rather than rounding over (**photo 4**). Nowadays, aluminium oxide is most commonly used on wood with silicon carbide preferred in the case of metals.

8 A linear sander is ideal for following the wood grain pattern, especially on edges

6 A small hand-held sander produces spiral tracks on the wood's surface. The paper oscillates in a circular motion while the tool is swept across it

Powered sanders

Hand sanding is great for small projects with fine details; one big advantage being you can follow the grain direction and are unlikely to dig too deep. For larger pieces of furniture, however, this method is labour intensive, so electrically powered sanding tools are generally preferred. The belt sander (**photo 5**) is the most powerful and fastest in the sanding tool family, although it can be a bit of a brute. Taking a belt sander to a piece of fine furniture would be a bit like driving a 4×4 across a bowling green – yes it lowers the surface, but not in a good way!

Orbital sanders

Fine sandpapers are particularly suitable for use in orbital sanders where the abrasive moves in a spiral pattern, crossing the wood grain at all angles. Random orbit sanders use abrasive discs and avoid leaving swirl marks as the centre of rotation is continuously moving (**photo 7**). This produces a faster and more powerful action together with a better finish.

Linear sanders

A linear oscillating sander moves the paper backwards and forwards in a straight line. The sanding heads can be replaced with shaped profiles, which are especially suited to delicate work such as following the wood grain on edges (**photo 8**). Linear sanders take a little time to master and are much more expensive in comparison to small orbital sanders, but they do produce excellent results.

9 Primer paint applied to bare wood soaks into the surface and provides a firm key for later coats

7 The random orbit sander also produces spiral tracks, but each one is different from the last so that no pattern builds up and the effect is smoother

Basic finishes

One of the main purposes of wood surface treatment is to seal the wood exterior, which reduces dirt pickup or moisture and prevents discolouration. Traditional paints and varnishes consisted of resins and dyes dissolved in turpentine or a volatile oil-derivative. Several coats are required, starting with a primer that soaks into the surface followed by layers to provide colour and level out the coating, before applying a top layer, which forms a gloss or matt reflective properties (**photo 9**).

Modern paints and varnishes take the form of an emulsion mixed in a water base (**photo 10**), which greatly reduces harmful effects on health and the environment.

Pure wax treatments

Pure and simple beeswax is one of the oldest treatments for coarse-grained woods such as oak and is extremely effective for sealing to reduce dirt and moisture uptake (**photo 11**). Its only limitation is that it requires frequent

10 One of the most basic surface treatments is a water-based wood preserving stain

11 Pure beeswax can be rubbed onto coarse-grained and carved surfaces, then worked in with a brush

12 Warming the wood with a hot air blower allows the wax to soak deep into the end-grain as well as saturating between wood fibres

13 Beeswax applied to oak over centuries produces a deep lustrous patina, as seen on these Elizabethan wainscot panels

replenishment. In warm conditions, you can simply rub the wax directly onto the wood, then work it in vigorously with a stiff-bristled brush. Warm air blown over the wood surface increases the uptake of wax, which makes it more effective and longer lasting (**photo 12**). We can see the effectiveness of beeswax on centuries-old furniture and internal wall panels in museums and historic buildings (**photo 13**).

Wax pastes

Beeswax is often mixed with other oils, waxes and solvents, making it easier to apply and thus aiding the soaking in process. Liquid wax polish in particular soaks deeply into a newly prepared wooden surface. However, on an old long established wax surface, the solvent in the paste will soften lower layers and may reduce depth of finish (**photo 14**).

Steel wool is often used to apply wax paste where it's required to clean up an old finish or indeed remove some of it (**photo 15**). It can also be used to apply different coloured wax pastes, to give shading to furniture, which mimics the burnishing effects that result from centuries of handling. Only use fine steel wool graded '000' or ultra fine graded '0000' so as not to scratch the wooden surface and lift grain.

Oil finishes

When it comes to producing a matt finish, petroleum jelly or Vaseline can be used as an alternative to wax paste (**photo 16**). Just like wax, this will bring out the wood's natural colour and protect the surface from moisture and dirt, but without the glossy finish. As with wax paste, petroleum jelly soaks in and to provide continued protection, it requires replenishment.

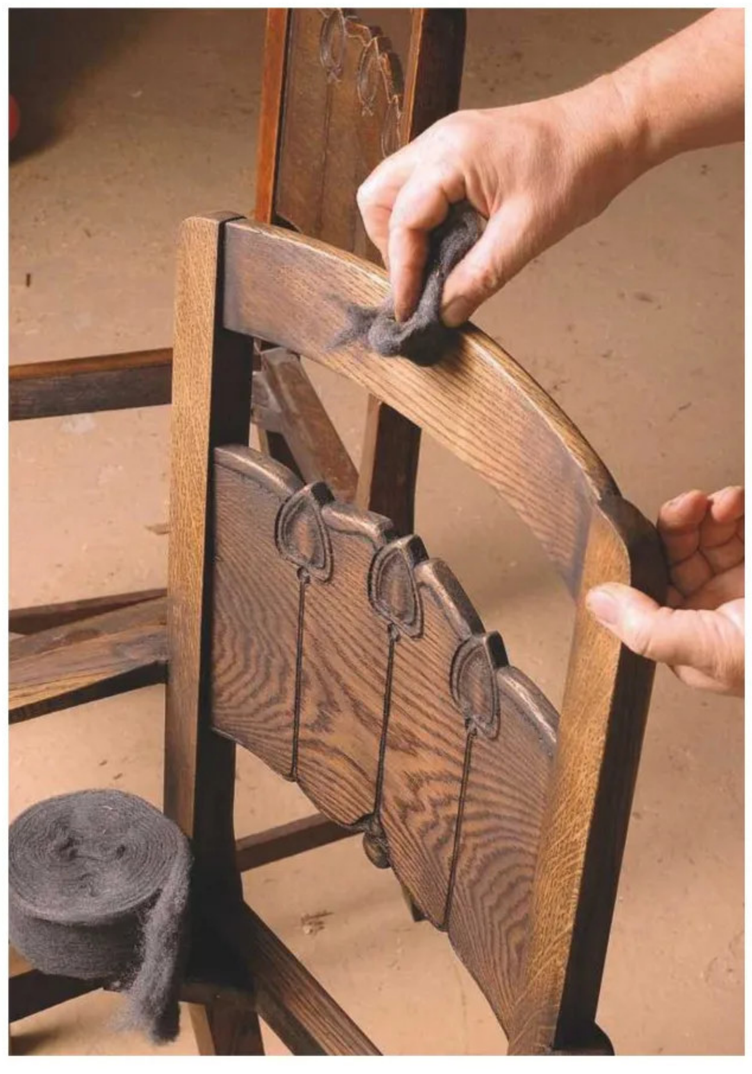
Danish oil is the name given to a type of oil finish traditionally used on Scandinavian furniture. Typically, it's a mixture of plant oils – such as tung and linseed – together with white spirit and other synthetic organic compounds, which help it penetrate deeply and quickly dry to a hard, semi-matt finish. Danish oil is applied generously to bare wood, then the excess wiped off the surface with a clean rag. After being given a day to dry, the process is repeated twice until it builds up a deep, long lasting, semi-matt sheen (**photo 17**). It can be used as a preparatory primer coat for wood, and once cured, then polished to a glossier finish with a wax paste polish.

Shellac & lacquers

Shellac – a natural resin secreted by lac beetles in the forests of India and Thailand – is best known as the medium used in 'French polishing'. This is a lengthy process used to fill the grain and produce a high gloss reflective finish. Part of the traditional process is dissolving solid flakes in alcohol and clarifying the liquid, but ready-mixed shellac polish saves a lot of trouble. Mixtures come in a range of natural colours from clear 'white' to dark 'garnet' (**photo 18**).

Apart from the option of producing a high gloss with many coats, shellac is an excellent sealant producing a long lasting shell-like coat on smoothed wooden surfaces (**photo 19**). A shellac sealed surface can be rubbed with

14 Smooth flat surfaces such as this walnut can be treated with beeswax polish either in the form of a liquid emulsion – upper right – or paste – upper left



15 Steel wool rubbed in beeswax polish can be used to burnish a surface and shade the colouring with a stained paste

16 In place of wax, using petroleum jelly brings out the contrasting colours of this Welsh ash and oak box while producing a lustrous matt finish

17 Danish oil rubbed into bare wood, such as this English walnut, produces a tough semi-matt finish that can be improved with age

18+

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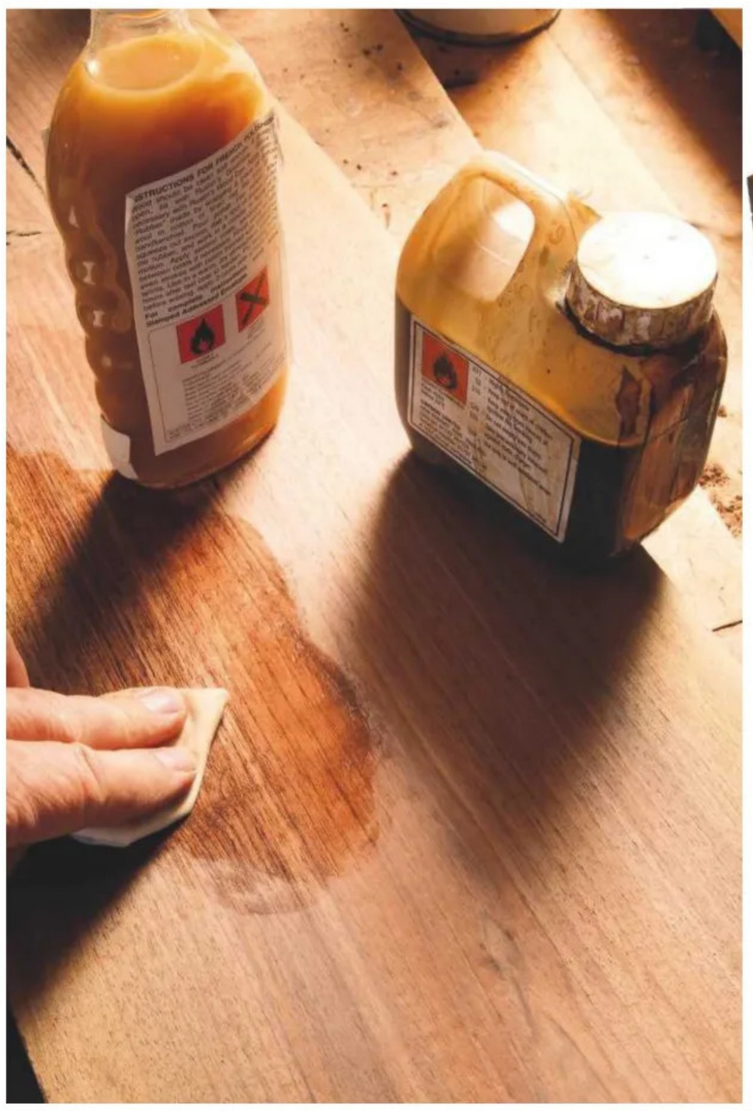


18 Ready-mixed shellac polish is available in a wide range of natural colours

waxed fine steel wool to prevent taking too high a gloss. However, care must be taken not to spill alcohol onto shellac, as it will dissolve even a long established finish.

Synthetic lacquers copy the performance of shellac using a polymer resin dissolved in synthetic solvent. They can briefly resist moisture, alcohol or even boiling water, so are therefore ideal for kitchen furniture (**photo 20**).

Spray finishes

Varnishes are available in many types and grades, some of which – such as pre-cat and acid catalyst lacquers – were traditionally used for spraying furniture in production workshops.

21 Water-borne varnishes use small amounts of solvent – low VOC – by suspending the varnish as a fine emulsion in water

19 To prevent shellac taking on too high a gloss, it can be rubbed with waxed fine steel wool

Breathing masks were necessary to reduce the health hazard and filtered extraction in the case of environmental damage (**photo 21**). Modern water-borne finishes considerably reduce these problems, although filtered breathing is still a must (**photo 22**).

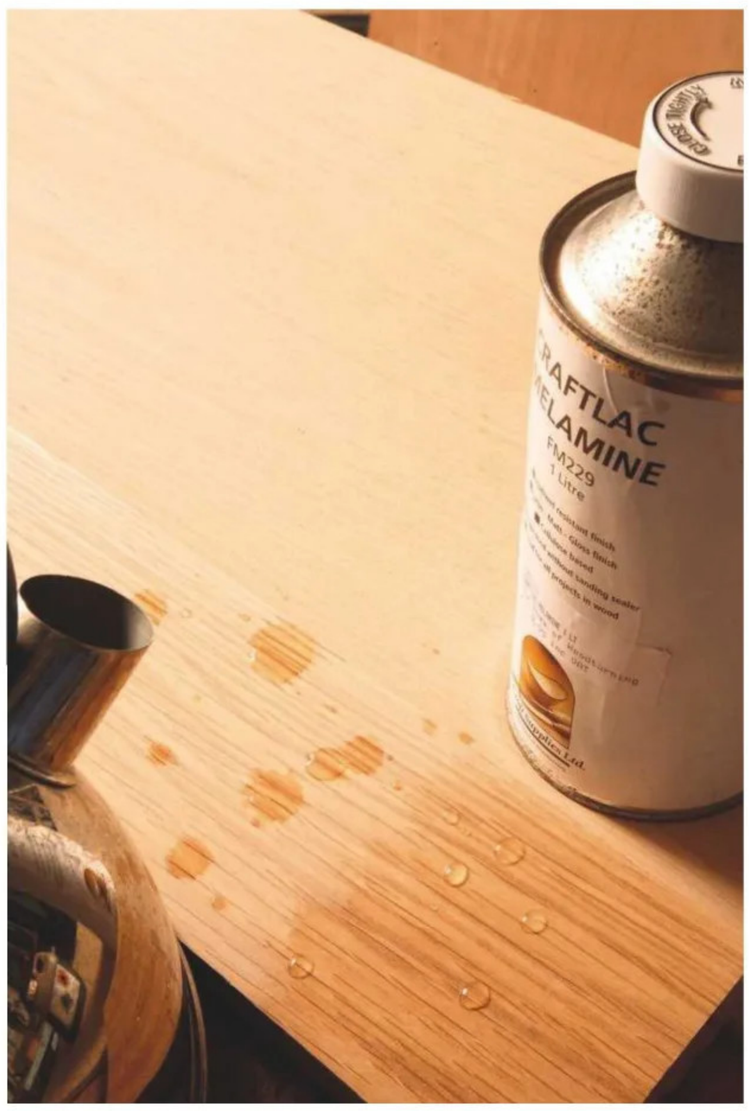
Water-based finishes are diluted then best applied with a high volume low pressure (HVLP) spray system, which provides an even coating with relatively large water droplets (**photo 23**).

Conclusions

Don't be tempted to rush the final stage of furniture making. The type of finish that's desirable will depend on the wood species used as well as various practical considerations, not to mention the end user's personal tastes. My preference is for a semi-matt finish that doesn't clog up the grain, but brings out the best of the figuring and decoration (**photo 24**).

While there are many areas and details we've not yet covered, I hope this series has given you a few pointers towards making your own furniture or perhaps even inspired you to give it a go.

22 Spraying with water-based finishes is much less hazardous than traditional solvent-based spraying



20 Synthetic lacquers, such as melamine, can briefly resist wetness or even boiling water as demonstrated on the bottom corner of this board

23 For spraying, water-based finishes are best applied with a high volume low pressure – HVLP – system, which provides an even coating with relatively large water droplets

24 A clear fine semi-matt finish that doesn't clog up the grain brings out the best wood figuring and decoration

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Peter Scaife looks at two books by **Ben Law** – *Woodlander* and *Woodland Craft* – that should appeal to the woodsman in all of us

BRANCHING OUT

My friend has bought a small wood in Suffolk; it's more of a copse or spinney, I'd say. And he goes there to coppice, and fell, and plant, and weed, and generally tend. I don't know what it cost him, but he's not rich. He certainly seems happy when he goes there.

If you should fancy doing the same, how much would you have to pay? Very roughly, upwards of £5,000 an acre. And one football pitch can be around an acre and a half. Not cheap, admittedly, but you could have it for life.

Thinking of going ahead? Before you do, it's worth factoring in additional expenditure for two books, mainly as an inspiration but occasionally as a warning. These are: *Woodlander: A Guide to Sustainable Woodland Management*, and *Woodland Craft*, with a foreword by Hugh Fearnley-Whittingstall.

Woodlander

Appropriately enough the author, Ben Law, lives in Prickly Nut Wood, West Sussex, and I'm initially tempted to say that he knows all there is to know about woods and woodland crafts. But, no, on second thoughts, I have little doubt his view would be that after 30 years, he's still learning something new every season. However, besides being a woodsman, he's also a craftsman, builder, teacher and writer. That's when he's not running courses and tours as well as training apprentices.

I cannot begin to tell you all the contents of *Woodlander* such is the breadth of information included. In the beginning, Ben describes, over some 16 pages, the different types of woodland; then come chapters on understanding and establishing woodland, management, tools, selling timber, forest produce and social activities.

If you're thinking of buying woodland, I'd advise reading the end chapter first.

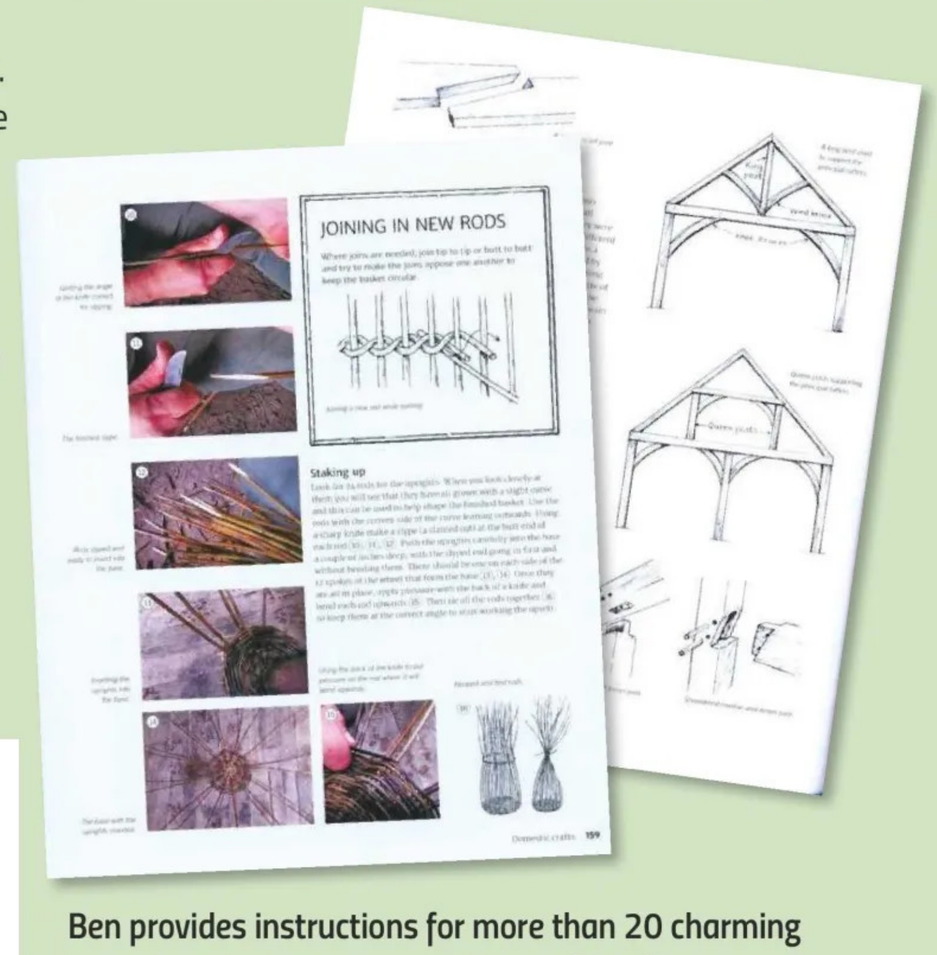
Woodland Craft

In this book, you'll find things to make from a spoon to a steam-bent lounger, as well as details of which woods to use, with comments about the resurgence of interest in simplicity.

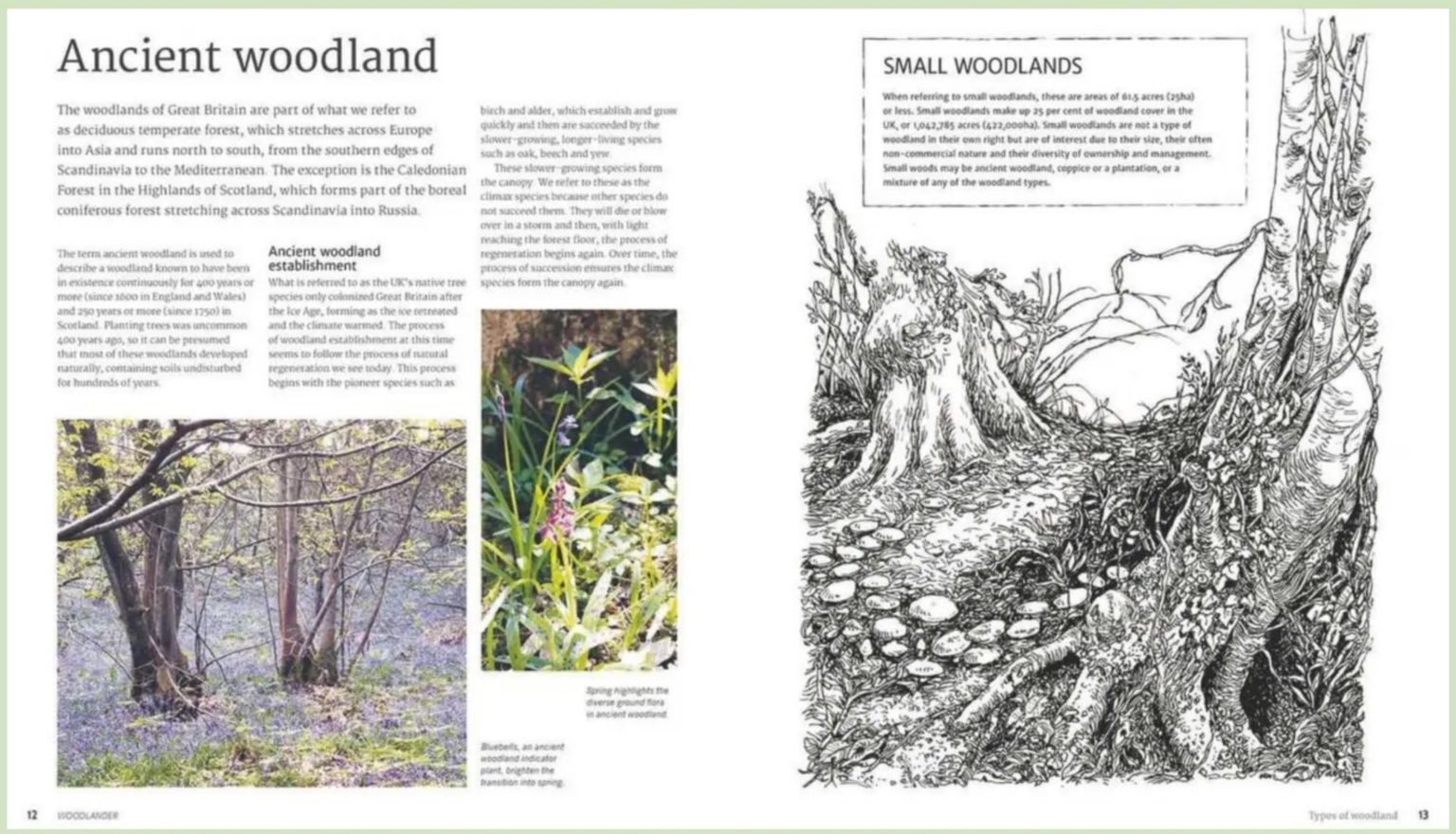
There's also a directory of tree species, crafts for farm and garden, building and crafts, for fuel; and plenty on the tools and devices to use.

If you want to make, for example, the ladder-back rocking chair pictured, the photos will guide you through the process with admirable clarity.

Even if you only go for a walk in the woods from time to time, or are limited for most of the year to living in a high-rise flat in a city centre, I'd still recommend reading both of these books.



Ben provides instructions for more than 20 charming projects to tackle at home, all hewn from freshly-cut green wood and shaped by hand



From guidance on planning your planting scheme to managing for timber and creating forest gardens, every page is infused with a deep respect for the traditions of the past while also embracing new ideas, methods and creative thinking

FURTHER INFORMATION

Woodlander: A Guide to Sustainable Woodland Management, by Ben Law
Typical price: £25
ISBN: 9781784945572
Web: www.gmcbooks.com

Woodland Craft, by Ben Law – foreword by Hugh Fearnley-Whittingstall
Typical price: £16.99
ISBN: 9781784943967
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CHISEL RATING

LIGHT BULB MOMENT

Having invested in a lathe, **Robert Couldwell** received some training and advice from an experienced turner friend, before going on to successfully transform an old fence post into an attractive table lamp

This isn't a turning master class; after all, I'm very much a novice myself. Rather, this article is intended to show that a beginner can create a useful and attractive item using just a very cheap piece of wood.

During the various COVID-19 lockdowns, I saved a fortune on fuel and meals out, so decided to put this money towards a lathe, thinking I could eventually supplement my pension by selling bowls and other items at craft fairs, etc. Fortunately, a good friend of mine is an experienced turner, who took me under his wing. On one occasion, he provided three lengths of old fence post for homework practice, knowing that I'd struggle to turn the softwood. While practising, I thought to myself: 'I'll show him and actually make something', which turned out to be a table lamp.

I have to admit that a great deal of sanding was involved, but the end result wasn't at all bad. I was actually surprised when my wife approved and put the lamp in the dining room, where it duly replaced a shop-bought item.

Unfortunately, I neglected to take step-by-step photos showing the making process, so I set about turning another one for this article, which served as something of a skills refresher.

1 Fortunately, I still had one of the fence post lengths gifted to me by my woodturner friend, which I used for this project

2 My other hobbies have been taking precedence lately, so I had to re-learn some skills, particularly tool sharpening, as having sharp tools is one of the keys to successful turning. The other essentials are face protection, chip extraction and not having any loose clothing. Safety is paramount, especially for beginners

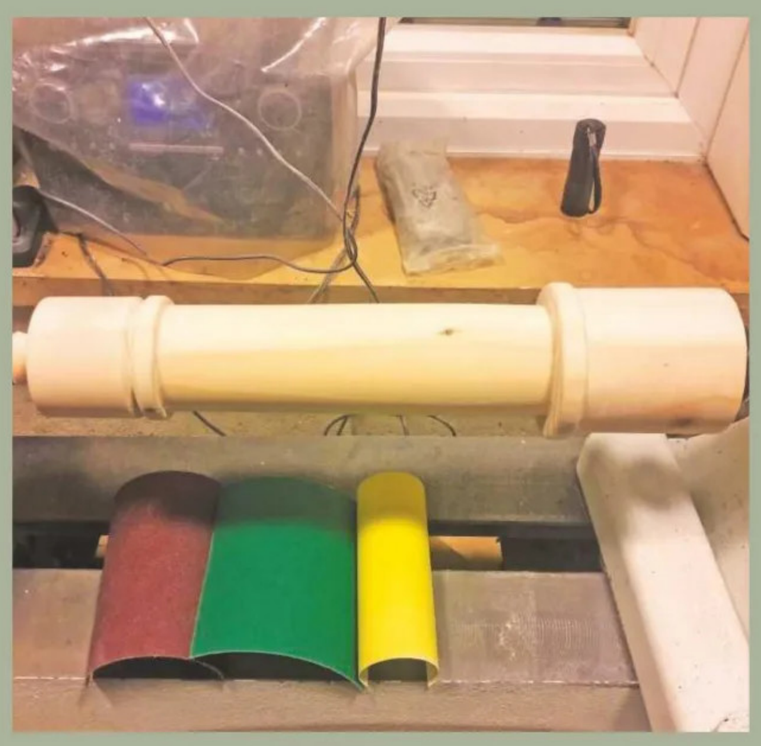
3 If working with a square piece of timber as I'm doing here, you have three available options – the first of which is the rather agricultural roughing method...

4 ... followed by the hand-planing method or, if you're lucky enough to have a bandsaw, the octagonal approach, which involves sloping the saw table and progressively removing any sharp edges

5 I use a wide range of woodturning chisels but tend to prefer the carbide-tipped variety as they're easier for beginners...

6 ... and don't require sharpening – apart from occasional honing on the flat face of a diamond 'stone'

7 Once you've removed the rough edges, gradually turn the hexagonal blank to match the size of the widest desired feature, then start to form these using various tools. At this stage, the results with softwood look pretty agricultural, but persevere...



8 Keep going until all the features are formed, then start sanding. Use 80, 120 and 240 grit abrasives, but perfectionists can keep going down to 400 grit or higher if desired

9 Next, create a hole that runs down the entire length of the middle; this will house the cable. The easiest way to achieve this is with a hollow live centre and long hole-boring bit, but it's also possible with a drillstand or even freehand with a cordless or mains drill. As the long bit tends to wander, drill a larger hole in the opposite end

10 There are various ways to make the item the correct size. One way is to turn it down, leaving a 25 × 5mm boss, which fits into a corresponding hole made in the base

11 For the base, use three offcuts of various thicknesses, and as the item will be painted, any wood will do. If you have a router table, use it to make a chamfer on the top edges of each, but this can also be achieved with an abrasive block

12 Use Forstner bits to cut a recess in the upper base portion and a 30mm hole in the lowest part; this will allow the cable to turn into a hole drilled in the base's side. Glue the pieces together with mitre glue and insert four screws for security. Finally, drill a hole through all three pieces to accept the cable. Drill and countersink four further screw holes for fixing the base to the lamp

13 I've always felt that decorators have the worst job in the building industry, working out how to cover up all the mistakes and poor workmanship of other trades. I was reminded of this when I came to paint the lamp, which involved some fine filler for the imperfections followed by further sanding

14 I happened to have a tester pot of matt emulsion in a suitable colour, which I allowed to dry before further fine filling and sanding. Matt paint covers a multitude of sins whereas satin or gloss highlights them. Modern emulsion is remarkably durable and can be wiped down

15 Carefully screw a brass threaded base around the hole on top of the lamp, then thread the correct 3-core cable through the base and central hole. Next, wire in the lamp holder and three-pin plug using a 3-amp fuse. If selling or giving the lamp away, you should now have it PAT tested – Portable Appliance Testing – which can be done very cheaply by a qualified electrician. I purchase my lampshades from B&Q, which has a good, reasonably priced range. As a final flourish, cut a piece of leather or felt to cover the base. I happened to have leather offcuts left over from another hobby, but small pieces can be purchased cheaply online

16 Finally, stand back and admire the end result and start thinking about what you'll turn next

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Queen of the woods

Barrie Scott ventures into the historic Clissett Wood to meet pole-lathe turner **Gudrun Leitz**, who shows how to turn a spindle in under 30 minutes. After 28 years of offering her acclaimed courses, she's handing over the reins, but will still continue as co-owner

A selection of homemade shavehorses

The continuing popularity of green woodworking schools isn't surprising; they offer a useful way for people to try their hand at pole-lathe turning, among other hand tool skills, which could be seen as woodwork at it's most fundamental. Individuals get to spend a few days living in a woodland; the gear is set up ready for them; expertise is on hand to provide necessary guidance; and they come away with a lovely piece of hand-turned craft. It seems the case that many return to build on existing skills as well as taking the opportunity to sop up some more of the atmosphere. The classes are jolly affairs; people enjoy spending time 'bodging' in the woods.

28 years in Clissett Wood

Clissett Wood in Herefordshire has been a prominent green woodworking site for over 30 years. Trundle up a dirt track running off a narrow country lane and you discover an area where a stretched canvas canopy covers the work area, letting the light in nicely but allowing work to continue in all weathers. The lush green surroundings are complete with wood-stove and earthy comforts. The wood is co-owned by Gudrun Leitz, who after 28 happy years of offering her acclaimed Green Woodwork course programme, is now handing over this woodland workshop space to skilled assistant, Matt Hatter.

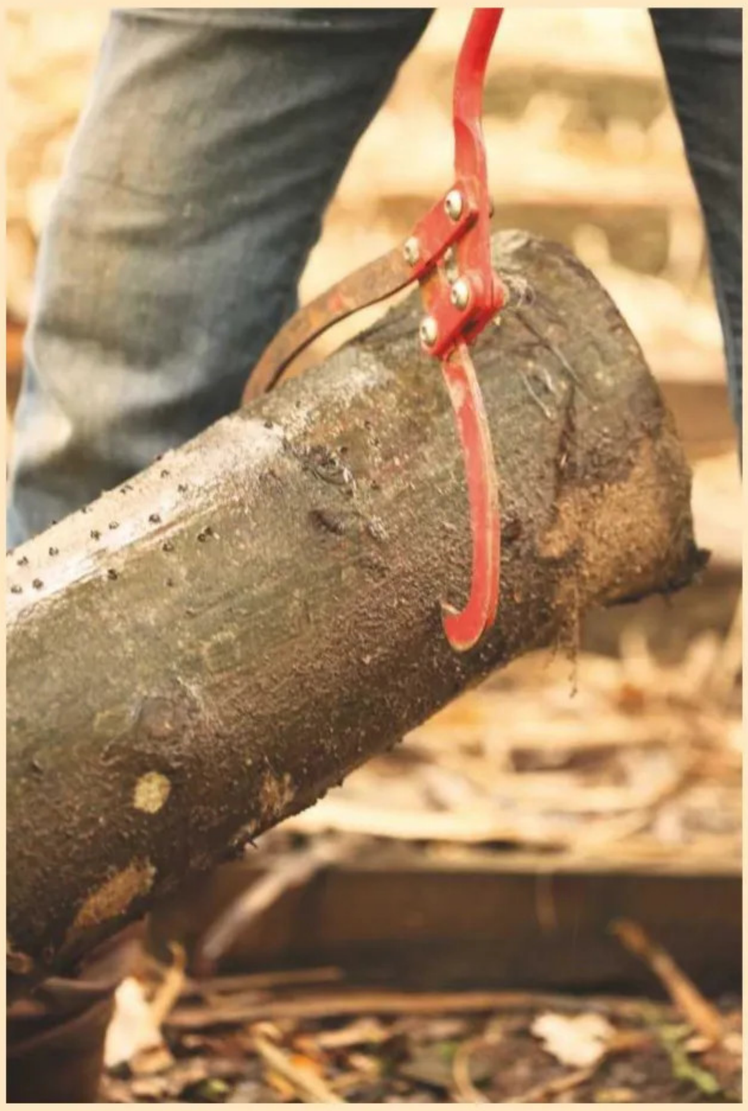
Unsurprisingly, Gudrun has many accomplishments to her name, the most notable of which took place during the '90s – a contract offered by Southwark Bridge in London, which involved supplying 500 hefty turned oak balusters for the rebuilding of Shakespeare's Globe Theatre. It was a studied reproduction of the Elizabethan building complete with amphitheatre surrounded by tiers of oak galleries, greatly enhanced by the woodturner's art and skill.

I was lucky enough to meet her again after several years and enjoy a demonstration of the process. She turned a classic Windsor chair pattern piece from log to spindle, all by hand, swiftly, and without a machine in sight.

Woodland pedigree

Closely situated to the workshop of 19th-century chairmaker Philip Clissett, the woodland, which has a considerable pedigree, was named accordingly. Clissett sourced his supplies of elm, ash and cherry locally and spent 72 years cheerfully improving his craftsmanship. Around 50 years into his trade, he was then 'discovered' by Ernest Gimson, a Cotswold furniture designer associated with the Arts & Crafts movement. Gimson was impressed by the way in which Clissett worked in the old tradition, with pole-lathe and cleaving brake, and not 'demeaned by Victorian barbarism' in the form of modern industrial practices, and for a time, he even became Clissett's student.

In Gimson's view, the speed and efficiency of Clissett's work, and the 'rightness' of the chairs, earned him national acclaim and much better business. Clissett was known for singing as he worked and could often be heard calling out: "If you're not singing, you're not happy."



A cunning device for lifting a log – the weight forces it to lock on

Material being prepared on a backwards sawhorse

The side axe

Photographs by Phil Callow – philcallow@mac.com

Cleaving with axe and beetle

Reduced to clean timber

Removing timber to just above finished size

Perhaps this is an element of the spirit that brings students back to the simple but ingenious process of pole-lathing? Modern joiners may whistle while working at the planer, but they can't hear themselves!

Swift spindles

Using a self-locking steel wood-claw – a cunning device – Gudrun hoiked a wild cherry log up onto her stick-built sawhorse. It'd been felled eight months prior and was cleft in half ready. Green woodworkers' use of cleft timber exploits the natural strength of trees' fibres, and also offers a different take on the use of grain patterns. She sawed off a 400mm length and set it on a stump ready for working with the side axe, which, for cleaving, offers greater control than a standard version.

The mallet is traditionally known as a beetle. The weighty version favoured by green woodworkers, for whacking against an axehead, is made from a log, usually ash, some 75-100mm-thick, which is simply pared down to create a handle. As well as axes, cleaving can be carried out with steel wedge and hammer, or a froe, depending on the length of timber to be cleft. The process mostly involves hitting steel with wood and steel always wins!

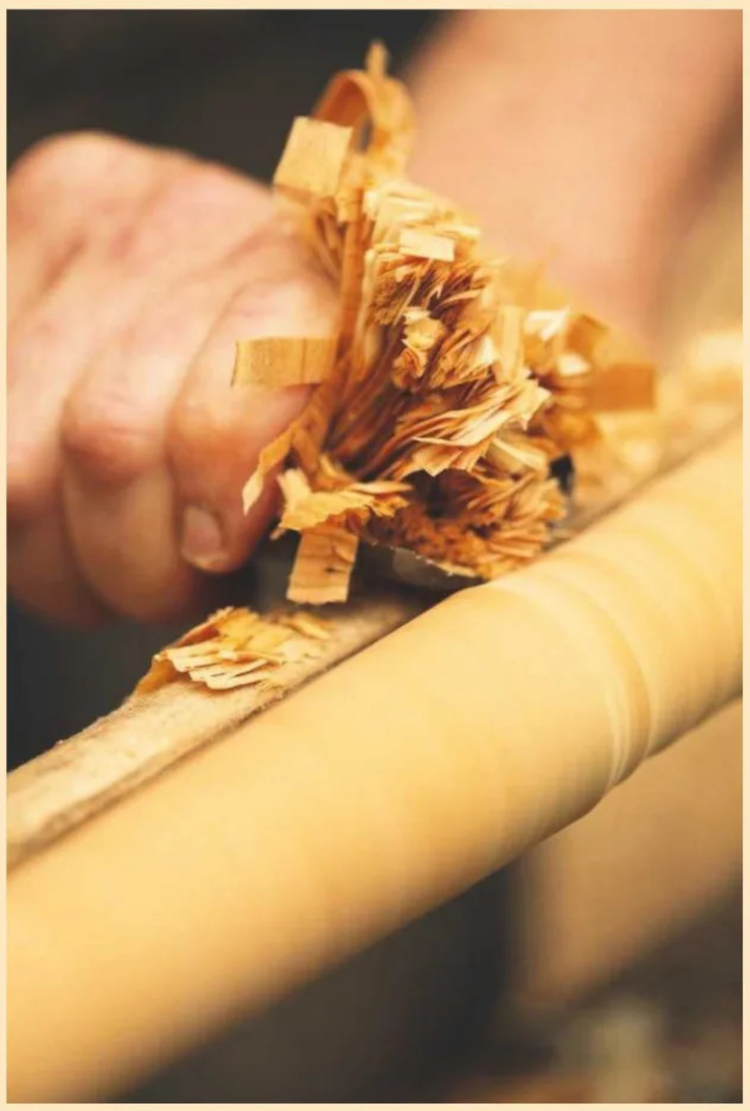
Compared to modern methods, considering the time taken to buy timber, set up machines, etc., cleaving is faster, carbon neutral and doesn't wreck ears or nostrils. In this fashion, Gudrun cleaved a quarter log, removed bark and pith, along with a few corners, and a stick of clean timber was soon ready for the drawknife. The shaving horse is a basic but evolved workbench for drawknife work. Your body weight holds it steady and the foot rests on a simple quick-release clamping lever; this allows the workpiece be to efficiently shaved and manoeuvred, ready for the lathe.

Many will have seen the pole-lathe in action at woodworking shows, etc. It's said that operating the lathe by muscle rather than electric gives greater control and sensitivity over the work, so has technical advantages. To stand and watch it in the hands of an experienced operator is always a fascinating and calming experience. Concentration is placed on creating the desired shape and, it seemed, enjoying the action and sound of the device. It's silent other than the rasping of chisel against wood, which as Gudrun points out, changes when the spindle becomes completely round. An essential trick is to dab a little oil on the

A handy drill hole to hold a reservoir of walnut oil; this lubricates the end-grain, which turn easily in the centre rods

Drawkniving on the shavehorse – getting the stock as near round as possible, so that it's ready to turn

Applying walnut oil



Wonderful shavings!

Tools of the trade

The joy of turning

A handful of shavings is used to burnish and smooth

end-grain where the wood attaches to the centre rods, which hold it in position during turning, thus allowing a smooth movement. Gudrun likes walnut oil. The whole process took barely half an hour, inclusive of chatting time. Many of us enjoy the rapid production potential of machine power, but were possibly originally attracted to woodwork due to the lure of enjoying blade against grain. If you're not careful, the machine route, with dust extractors, goggles and ear protectors, can become like factory work, whereas pole-lathing is the complete opposite. Those lucky enough to work near their material source, a woodland or coppice, can enjoy a natural, harmonious process, where the earthy products are a pleasing million miles from those of the plastic age.

It was around the turn of the century that I last met Gudrun at Clissett Wood. Here, she told me about her work at the Globe, and an irresistible idea light-bulbed into my head. At that time the theatre in nearby Ledbury was being rebuilt. I approached them with a proposal that they could have their own Globe feature in miniature via the very local craftswoman who'd completed the work. By chance, the building's design included a gallery in the entrance lobby, which would require a balustrade. They liked the idea.

A substantial oak trunk needed to be sawn up and cleft in preparation. I placed an advert in the local newspaper asking if anyone had an oak tree to spare and sure enough, a farmer had one lying in his field, and was happy to donate it to the community theatre. It all happened and they're still there, looking fine, and will undoubtedly outlast the building.

Even though Gudrun will no longer be teaching green woodworking, she plans to continue as co-owner of Clissett Wood as well as increasing her ongoing involvement with Childer Wood and Meephill Coppice. To find out more about the course programme going forward, see details below.

FURTHER INFORMATION

The Green Woodwork course programme will now be handled by Matt Hatter, who, according to Gudrun, has many exciting plans for the future. To find out more, email him directly – **mhatter@riseup.net** – or visit the website: **www.greenwoodwork.co.uk**

Oak spindles in Ledbury Theatre – Gudrun's work and replicas of those made for Shakespeare's Globe

19th-century chairmaker, Philip Clissett

The oak spindles, which were lovingly made by Gudrun, as seen inside Shakespeare's Globe Theatre

PROJECT Mini pole-lathe

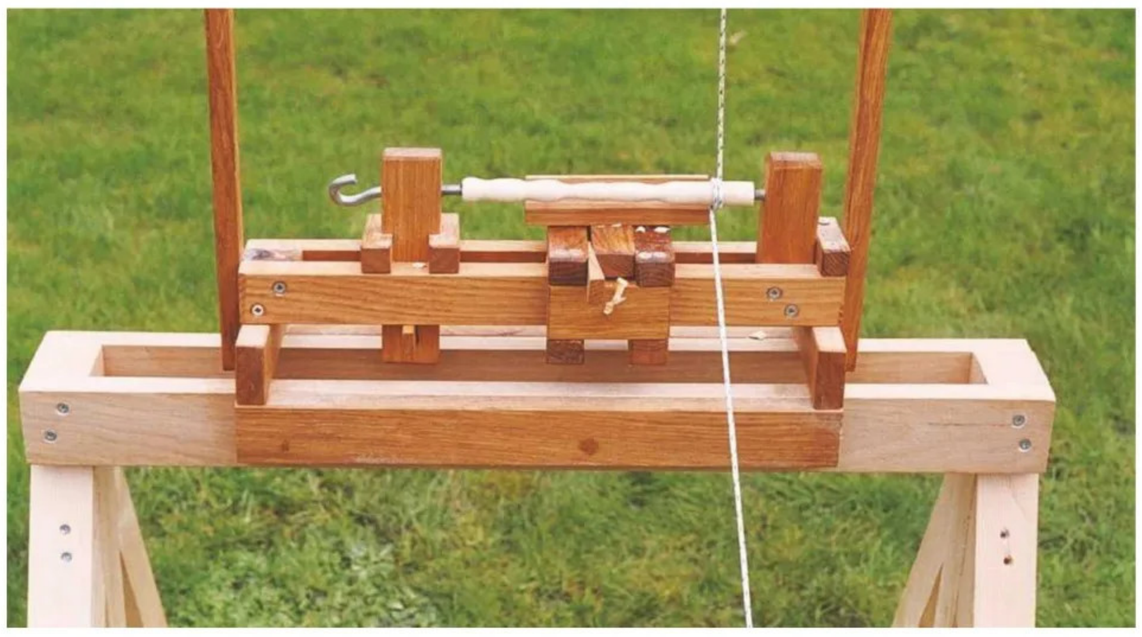
CHISEL RATING

PEOPLE POWER:

UNPLUG & TRY YOUR HAND AT GREEN TURNING

Alan Turner shows you how to build a small version of the traditional pole-lathe, which can even be used in a city garden

1 View of the lathe with workpiece, ready for turning



2 Pieces up to around 50mm diameter can be turned on a lathe of this size

Pole-lathes have been around for centuries and only went out of commercial production in the late 1950s. Today, they're commonly used by green woodworkers in a woodland setting – see feature on page 46 – and by an increasing number of hobbyists who enjoy the hands-on experience offered by this ancient tool. It's certainly a cheap, safe way to enjoy the pleasures of woodturning.

I built my own pole-lathe about four years ago and have spent many happy hours turning green wood into usable items, including a couple of Windsor chairs. The idea of making a smaller version came from a picture I saw, which showed a medieval lathe operated in the sitting position and driven by a bow. This, of course, only leaves one hand to then work the cutting tool.

I wondered if it was possible to make a mini lathe that could be driven by leg power in the sitting position, thus leaving both hands free. Many hobbyists don't have room for the 4-5m pole originally used on these lathes and have to use car roof rack bungies to drive theirs. These can be attached to the workshop ceiling and provide the treadle's spring return. In my mini version, the spring return comes from rubber stretched across the framework, about 300mm above the workpiece. It's cheap and simple to make and offers the chance for a complete novice to have a go at turning. As all power comes directly from the operator, it's also safe for children to use, under supervision.

CUTTING LIST

Quantity	Size	Use
2	710 × 60 × 20	For top of A-frame
4	400 × 40 × 20	For lathe bed
2	130 × 40 × 20	For lathe bed
1	40 × 40 × 20	Spacer for lathe bed
1	110 × 40 × 20	Left poppet
1	160 × 40 × 20	Right poppet
3	60 × 20 × 20	For right poppet and lathe bed
4	100 × 25 × 20	Toolrest
2	40 × 20 × 20	Toolrest
1	110 × 27 × 20	Toolrest
1	125 × 30 × 20	Toolrest
2	50 × 20 × 10	Wedges for toolrest
2	660 × 20 × 20	Uprights for rubber drive
1	400 × 20 × 20	Cross piece for uprights

A-frame: Around 7m of 50mm square section softwood
Treadle: Around 2m of 50mm square timber
Additional materials: 2 × 1in cup hooks; 1.2m of model aircraft rubber or similar; 2m of 3mm drive cord; 2 × 12mm bolts or threaded bar; leather or webbing for pivot; No.8 × 2½in screws; No.8 × 1¼in screws
Note that all measurements are in millimetres

Lathe bed

The lathe bed is simple to make, but you must ensure all screw holes are countersunk. Also, those holes drilled at the bed's right-hand end, to fix the spacer, and those at the left poppet, should be diagonally opposed.

MAKING YOUR BLANKS

Pole-lathe blanks are usually made by cleaning freshly-cut green ash or beech into workable-sized pieces. These are held in a shaving horse and shaped into a cylinder using a drawknife. For this mini lathe, it's easier to use short lengths of straight timber up to 50mm diameter and 200mm long. One advantage is that the central pith of a small section log will often mark the work's centre for setting in the lathe. If you want to use seasoned timber, always cut off the corners to form octagonal sections and punch centre points in the ends to around 5mm deep

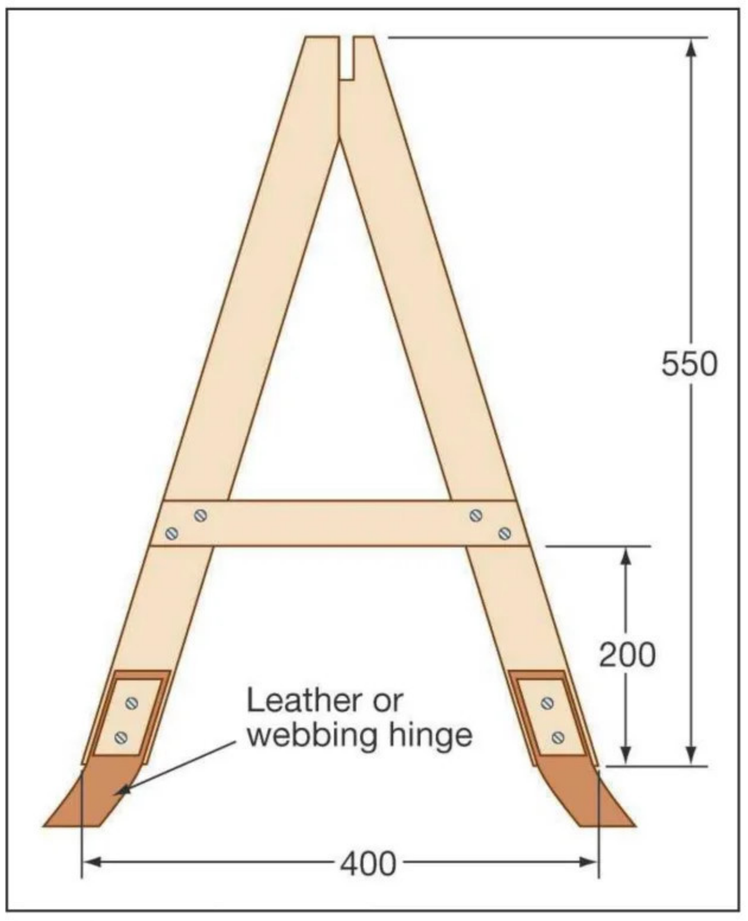


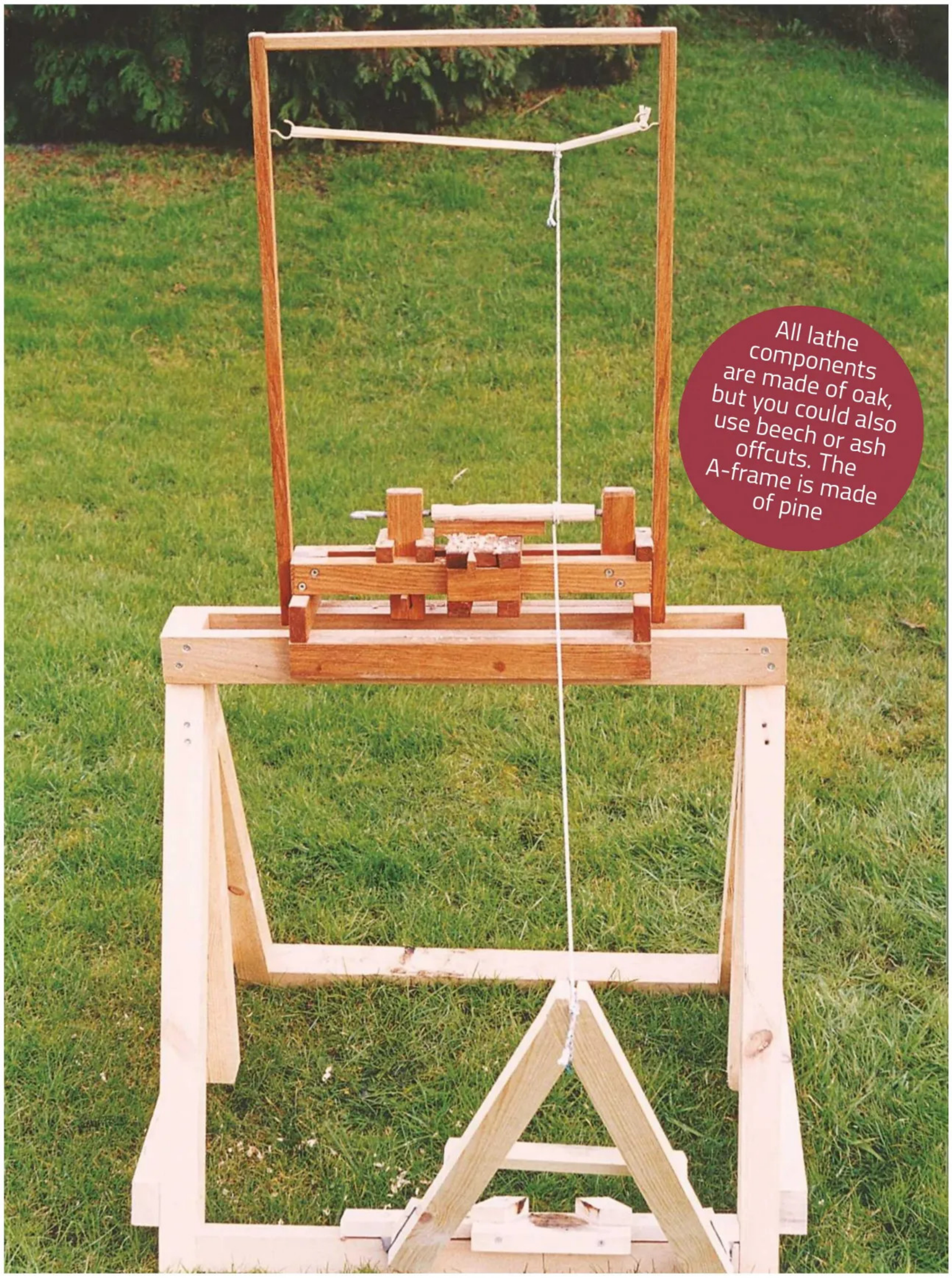
Fig.1 Treadle

Poppets

To make the poppets, you'll need 12mm threaded bar and bolts. On the left-hand poppet, drill a 10mm diameter hole, 20mm deep and 25mm down from the top. It should be perfectly horizontal to the lathe bed. Turn the threaded bar into this hole to cut the threads in the timber. Remove the bar and grind one end to a point. Cut to a length of around 35mm and screw into the hole until tight. The left poppet can now be screwed in place on the lathe bed. The right poppet is also drilled with a10mm bit, 25mm down, but this time all the way through (**Fig.2**).

The threaded bar for the right poppet will also need grinding to a point and requires a crank on the other end. I used a bolt with a hooked end, but you could heat some straight bar and bend this to a crank shape if preferred. The bar needs to have around 60mm of usable thread. This can now be threaded into the hole made in the poppet. A drop of oil may ease the thread cutting process and make the thread easier to turn in use. If it's stiff, the thread can be lightly sanded, which will remedy this. This particular poppet must be easy to turn.

When you come to cut the slot at the bottom, drill the lower hole at a slight angle so that it corresponds with the wedge taper. Note that the top of the slot will be located just above the bed's base, so that the wedge locks the poppet in place. The 60 × 20 × 20mm pieces can now be screwed centrally onto the 8mm deep slots and the accuracy of centres checked by moving the right-hand poppet across to meet the fixed left-hand one, just like the drive centres of a powered metal lathe.



Wedge

Cut the wedge from a 100 × 30 × 8mm piece and round off the taper's bottom edge, so that it corresponds with the round edge made at the bottom of the slot.

Toolrest

On a pole-lathe, the rest usually sits up against the poppets and is held at one end by a screw. Adjustment is needed for workpieces of different

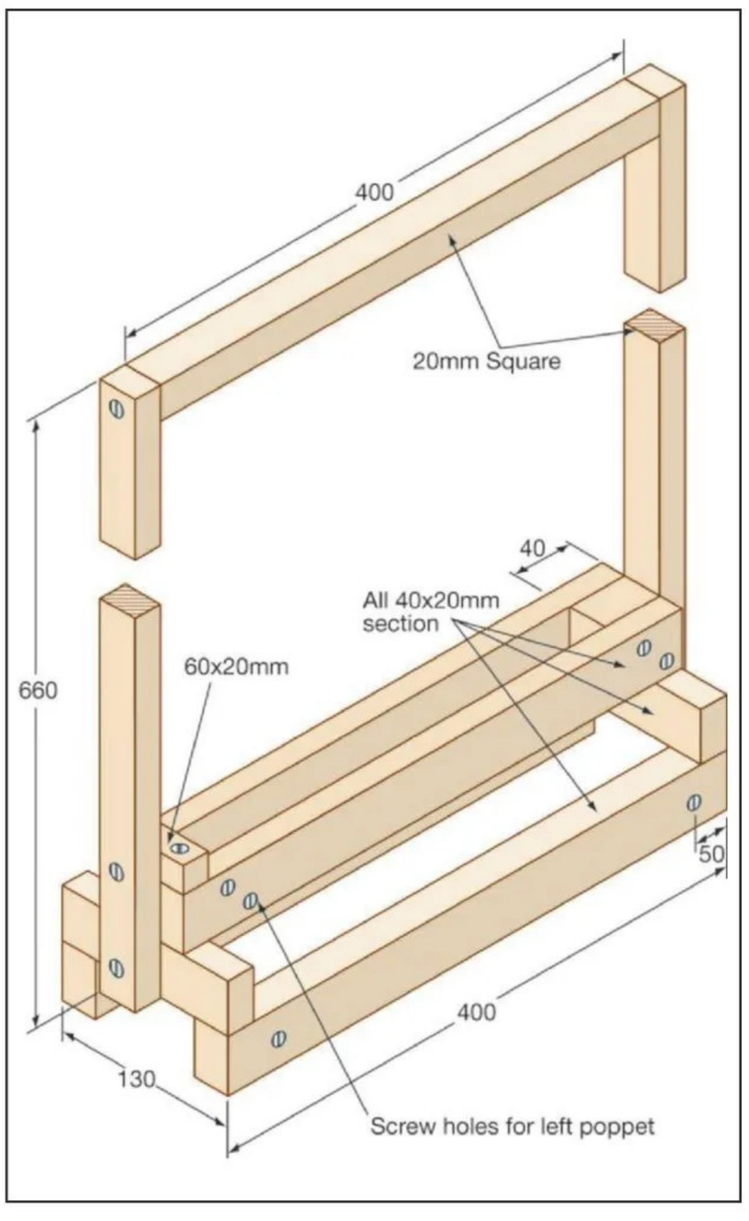


Fig.2 Lathe bed

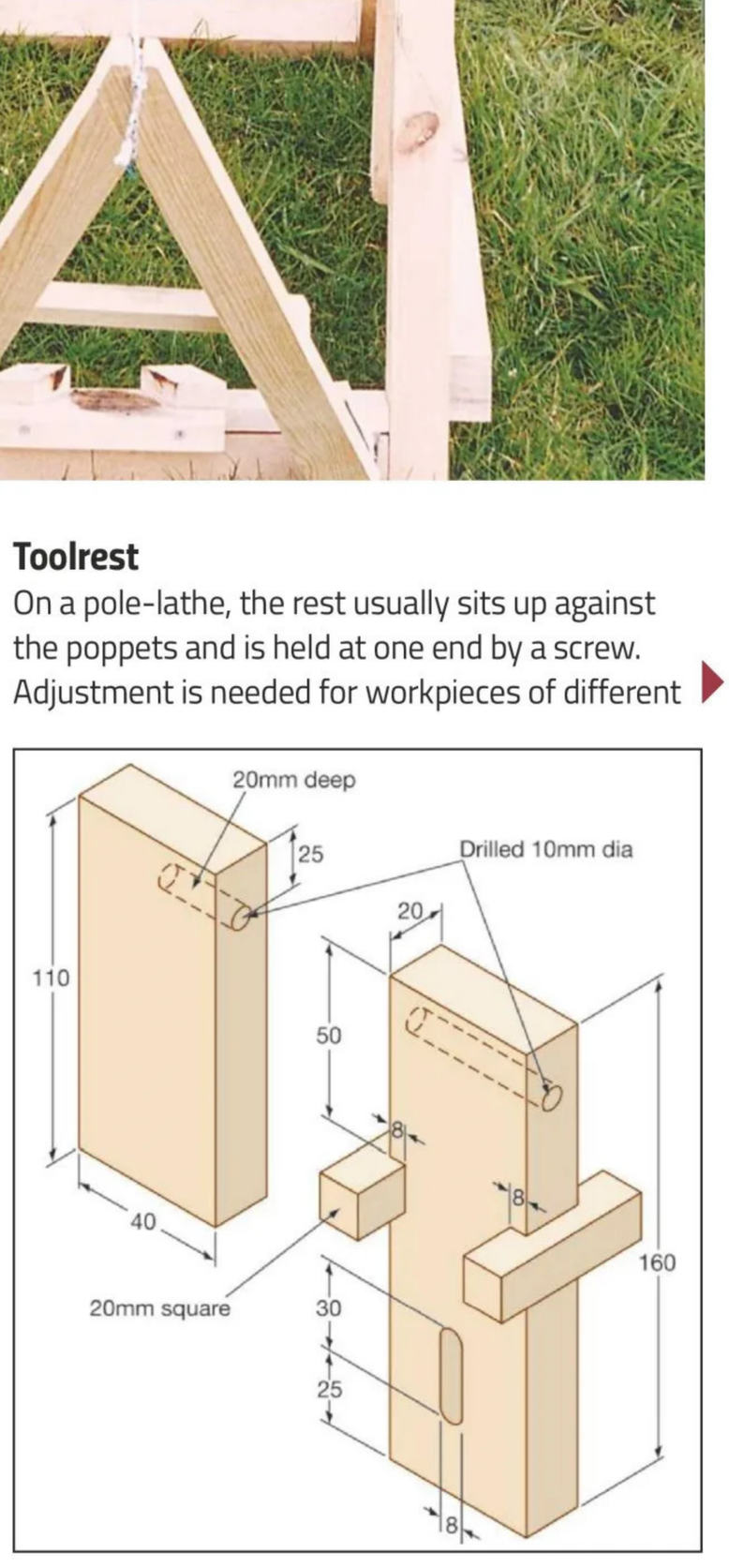


Fig.3 Poppets

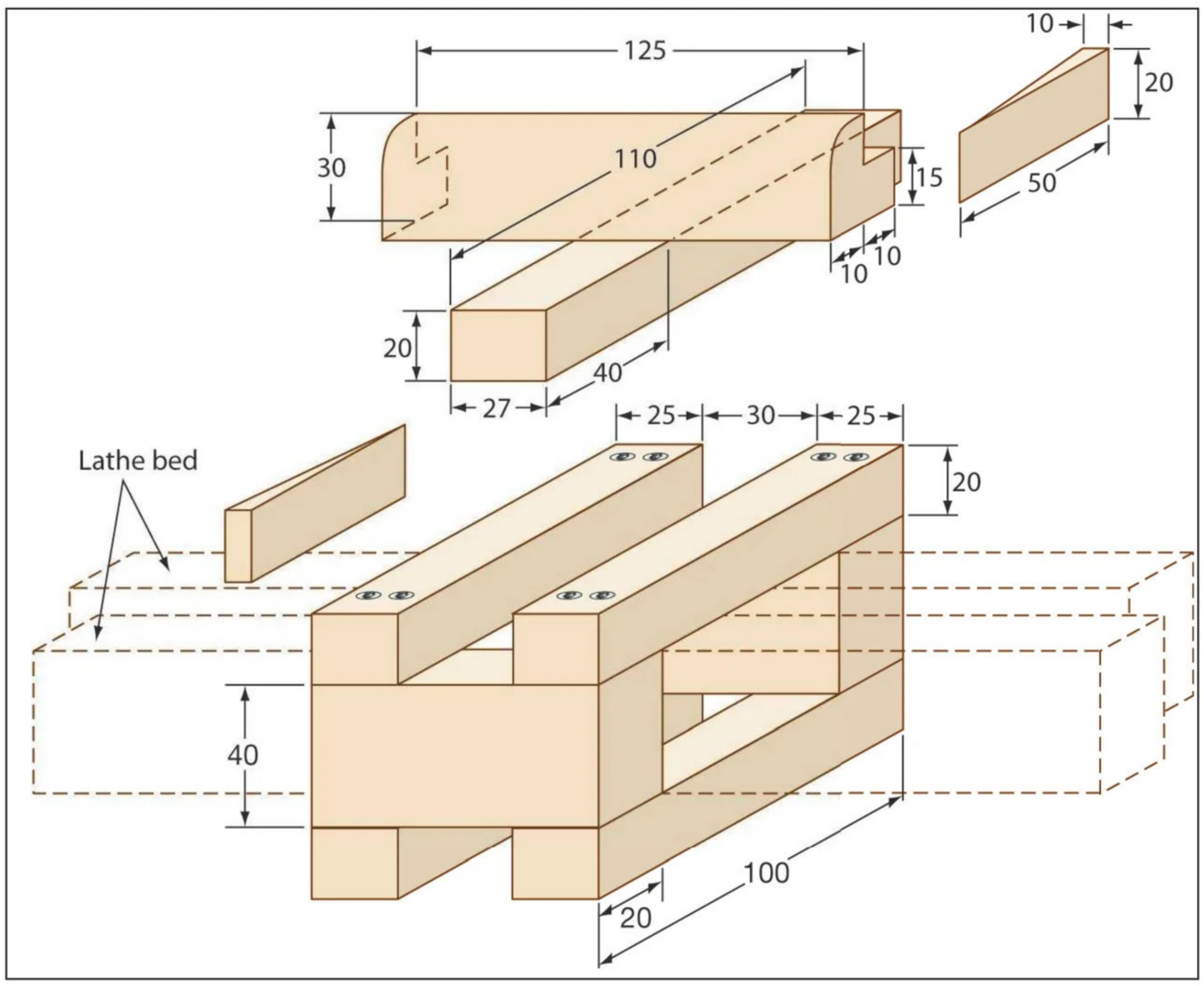


Fig.4 Toolrest

diameters. I chose to design a toolrest that'd slide across the bed and be adjustable according to a workpiece's height and size. Note that the gap between the two top cross pieces is 30mm, allowing the toolrest's 27mm lower section to be moved into place and held by wedges. A spacer placed underneath facilitates height adjustment.

The 660 × 20 × 20mm uprights can be screwed into position at the lathe bed's sides and the cross piece added. The rubber can now be stretched across the hooks placed around 100mm down.

The rubber

Raid the sewing box for elastic, or use a bungie or part of a bike tyre inner tube for this step,

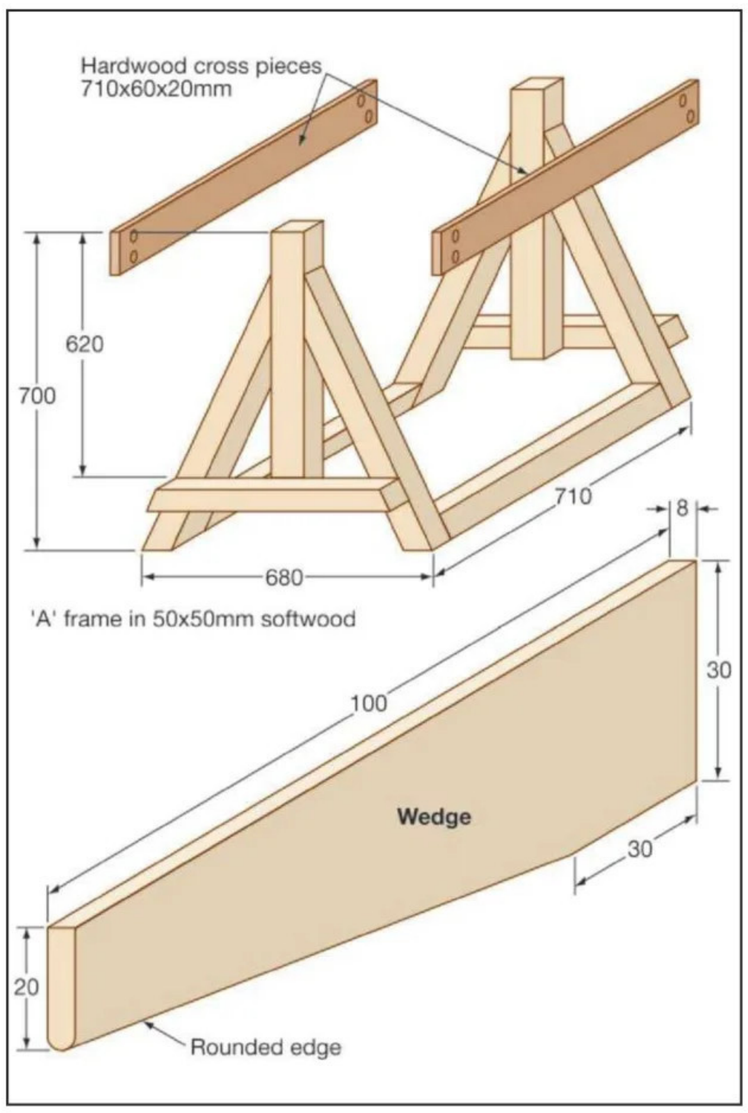


Fig.5 A-frame

but remember that the tension determines the pressure required to drive the lathe as well as the return action. On my machine, I used 1.2m of model aircraft rubber. The ends were knotted together and the length halved and fastened by hooks.

Making the A-frame

I'm 1.88mm tall and when sitting with the stool level at 460mm, this frame is the ideal height. You'll have to experiment to find the right size for you. If the A-frame is made 1,100mm high, it can be used standing up. In this case, the treadle would be pivoted from a base measuring 500mm square, which the operator stands on when using the lathe.

The bed sits astride the A-frame and can be screwed to it in a position that allows the cord to run freely at the left-hand side of the workpiece. The distance the treadle moves determines the number of revolutions for every downward stroke. As this lathe is operated in the sitting position, there'll be less treadle movement than with a normal pole-lathe. It's a simple job to lengthen the treadle and adjust it to suit the user.

Strips of leather could be used to make the treadle hinges, but I used seat webbing in a double layer. The material you choose must be trapped onto the frame with short pieces of timber screwed over the top and the same on the rear stretcher. To check it works smoothly, sit on the lathe and find the best fixing position. Use short strips screwed around the shape of the heel to prevent your foot slipping.

Driving cord

I used 2m of 3mm cord, fastened to the treadle arm's end. It's then wrapped twice around the workpiece and tied onto the rubber, so that it's under slight tension.

TIP

If space is tight, make the A-frame with bolts and wing-nuts; this will allow it to be taken apart and stored away in the workshop ready for next summer

5 STEPS TO GREEN TURNING...

STEP 1

Move the right-hand poppet across the lathe bed until the distance between centres is around 6mm greater than the length of the blank. Lock it in place by tapping the wedge with a mallet.

STEP 2

Wrap the drive cord twice around the blank and proceed to push onto the centre of the left-hand poppet.

STEP 3

Turn the crank on the right-hand poppet until it holds the work firmly but doesn't restrict the turning action. Put a spot of oil on both centres, treadle a few times, then re-tighten the crank as necessary.

STEP 4

The blank should rotate towards you as the treadle is pushed downwards and spring back as you release it. The drive cord should run smoothly on the workpiece and not cross over itself. You can adjust this if required by moving the attachment point of the cord to the rubber. When you tension the rubber, it should still allow the treadle to move easily.

STEP 5

Rest your gouge on top of the toolrest and cut as the wood rotates towards you. Pull the gouge back slightly as the treadle returns. With practise, you'll soon get used to the action. Your right foot is used to provide stability by resting on the frame's rear stretcher.

Gouges

A 25mm or wider spindle roughing gouge is essential to turn the blank into a cylinder. I use 5mm and 10mm woodcarving gouges for the shaping and a 50mm firmer chisel for smoothing. I did try working my version with a bow but found that it must've been a simple curved stick with cord held loosely between the ends. The concave arch is held facing downwards and the cord becomes taut when wrapped twice around the workpiece. It's surprising how much drive is transferred to the work with minimal effort, but you need a lot of practice to use the gouge skilfully with only one hand. Whether you decide to use a bow or the treadle shown here, I hope you enjoy making and using your own mini pole-lathe – happy turning!

TORMEK®

CELEBRATING 50 YEARS OF SHARPNESS

This year marks 50 years since Torgny Jansson founded Tormek. That calls for a celebration! And what better way to celebrate than with a limited edition anniversary machine?
Meet the Tormek T-8 Black. With a 50-year warranty.

The Tormek T-8 Black is produced in a limited edition of 5 600 units. It is equipped with a diamond grinding wheel and a composite honing wheel for maximum performance. The all-black appearance, contrasted with the glittering diamonds of the diamond grinding wheel, gives a real edge to any workshop, sharpening service or home.

This is for you who want to experience true Tormek sharpness. And stay sharp for at least 50 years.

50 YEAR WARRANTY
5+45 after online registration

TORMEK 50 Est. 1973

TORMEK HONING WHEELS: A HOW-TO GUIDE

DEBURRING A TOOL'S EDGE & PRODUCING RAZOR-SHARP RESULTS

Following on from the last issue, the next stage of the sharpening process, and one that's considered very important, is honing. **Tormek**'s range of honing wheels allow you to deburr and maintain a tool's edge, increase durability, as well as ensuring it's kept razor-sharp

Honing is one of the most important parts of the sharpening process. Honing a tool's edge after sharpening will deburr it, which is crucial to not only getting it sharp, but also increasing overall durability. In addition, as it polishes the edge, cleaner cuts are therefore produced.

Honing also acts as a means of maintaining a tool's edge between sharpenings. In many cases, a couple of strokes on the honing wheel is all that's required to get that razor sharpness back again, and in doing so, you'll save both time and steel.

Tormek's range of honing wheels includes both leather and composite variants. In this article, we'll take a detailed look at each product as well as outlining the honing process and the many benefits it presents.

LEATHER HONING WHEELS – TOP QUALITY SWEDISH LEATHER

A honing wheel is essential for removing the burr and creating a sharp and lasting edge on your tools. Tormek's leather honing wheels provide maximum sharpness and, when used with PA-70 Honing Compound, gently remove the burr.

Honing also serves to maintain the tool's edge between sharpenings, when you don't yet need to establish a new edge or bevel. Using just the honing wheel, you can quickly regain sharpness until the next sharpening session.

As mentioned above, Tormek's leather honing wheels both deburr the edge and polish the bevel to razor sharpness.

- **LA-220** and **LA-145** polish the bevel and deburr the edge; **LA-120** is intended for use on the inside of arched edges, where it polishes the bevel and deburrs the edge;
- Maintains your tools between sharpenings;
- Quality cowhide that lasts year after year;

Tormek's PA-70 Honing Compound is applied to the leather honing wheel's surface

FURTHER INFORMATION

For more information on Tormek, see **www.tormek.com**
To find your nearest reseller, see **www.tormek.com/uk/en/resellers**

TECHNICAL Tormek honing wheels range

- The larger **LA-220** fits the Tormek T-8, T-7 and older models with a 215-220mm diameter × 26mm wide honing wheel. The smaller **LA-145** fits the Tormek T-4, T-3 and older models with a 145mm diameter × 26mm wide honing wheel. The **LA-120** fits both the T-8, T-4 as well as older models.

Restores the edge between sharpenings

The LA-220 and LA-145 Leather Honing Wheels are used with PA-70 Honing Compound. Honing an edge tool on the leather honing wheel after sharpening affords you maximum sharpness. Honing greatly improves edge retention as well as offering excellent maintenance benefits. You can quickly and easily realign an edge against the leather honing wheel between sharpenings. With a brand-new honing wheel, start by impregnating it with the included light machine oil before applying the honing compound; this will extend service life and allow you to achieve the best performance.

Quality vegetable tanned leather

The leather used for both the LA-220 and LA-145 honing wheels is eco-friendly and top quality. It's supplied by the respected Tärnsjö Garveri tannery in Sweden, which has over 140 years of heritage and is one of only a few tanneries to use natural vegetable products on their leather.

Specs & details

Honing wheel dimensions: **LA-220** – 215mm diameter × 30mm wide; **LA-145** – 145mm diameter × 26mm wide; **LA-120** – 120/93mm diameter with a 3mm radius and 60° angle; **LA-124** – 120/93mm diameter with a 2mm radius and 45° angle
Weight: **LA-220** – 0.54kg; **LA-145** – 0.16kg; **LA-120** – 0.27kg; **LA-124** – 0.06kg
Colour: **LA-220** – Black/brown/silver; **LA-145** – Black/brown; **LA-120** – Black/brown; **LA-124** – Black
Material: Aluminium, ABS plastic, cowhide from Tärnsjö Garveri tannery

LA-220 LEATHER HONING WHEEL

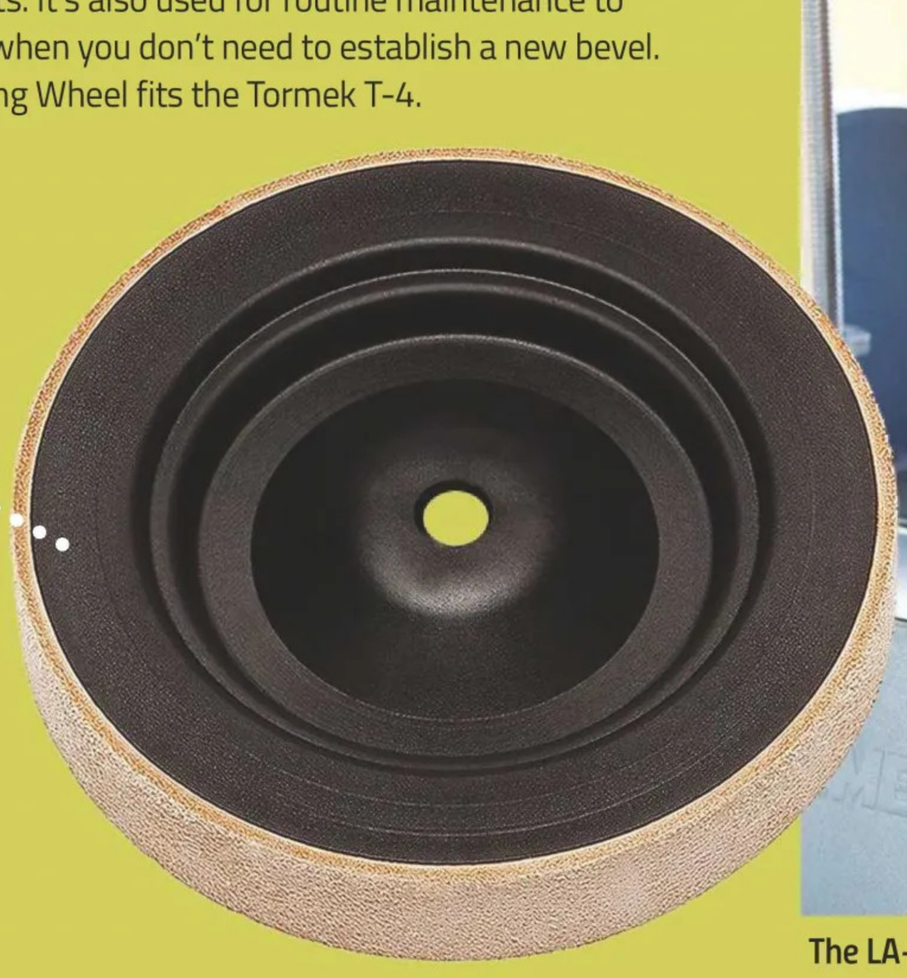
The LA-220 Leather Honing Wheel is always used with PA-70 Honing Compound. The wheel gently removes burrs that build up during the sharpening process and polishes the bevel for the sharpest and most edge retaining results. It's also used for routine maintenance to quickly regain sharpness when you don't need to establish a new bevel.
The LA-220 Leather Honing Wheel fits the Tormek T-8.

This leather tyred honing wheel gently removes the burr that develops during grinding

The LA-220 removes the burr and brings the edge to a mirror finish with razor sharpness

LA-145 LEATHER HONING WHEEL

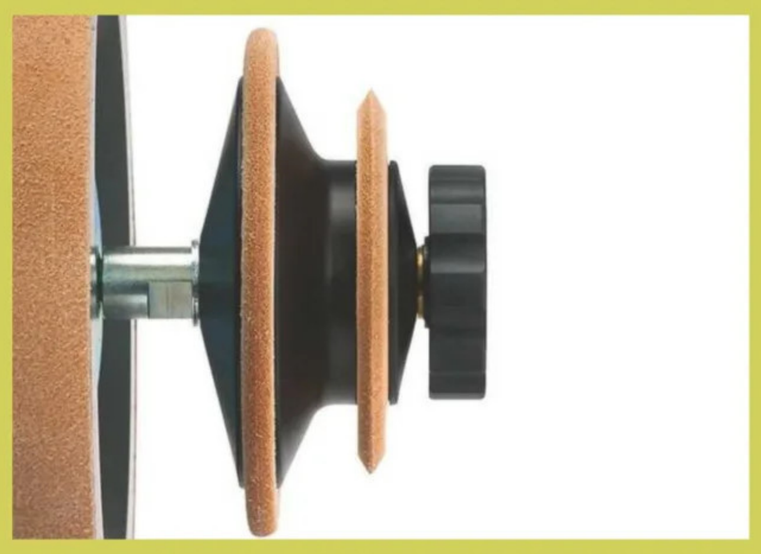
As above, the LA-145 Leather Honing Wheel is always used with PA-70 Honing Compound. Similar to the LA-220, it gently removes the burr that builds up during sharpening and polishes the bevel for the sharpest and most edge retaining results. It's also used for routine maintenance to quickly regain sharpness when you don't need to establish a new bevel.
The LA-145 Leather Honing Wheel fits the Tormek T-4.



The LA-145 leather tyred honing wheel has a diameter of 145mm

The LA-145 is also used for routine maintenance between sharpenings

LA-120 PROFILED LEATHER HONING WHEEL – HONE THE INSIDE OF ARCHED EDGES



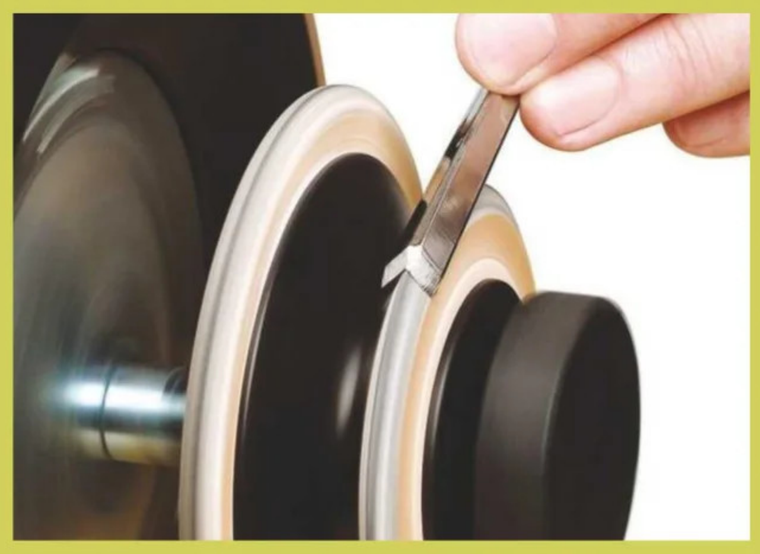
Made of solid tanned leather, the larger wheel has a 120mm diameter, which speeds up the honing process

The LA-120 Profiled Leather Honing Wheel allows you to hone and polish the inside of tools with curved edges where access is otherwise difficult. As a result, honing turning and carving gouges, and V-gouges, is made very easy. The LA-120 fits all Tormek water-cooled sharpening systems and mounts onto your regular honing wheel.

Hone arched edges

Simply mount the LA-120 on the outside of a regular honing wheel. This allows you to hone the outside of arched edge tools on a regular honing wheel, then easily swap to honing the inside on the profiled wheel that fits your tool.

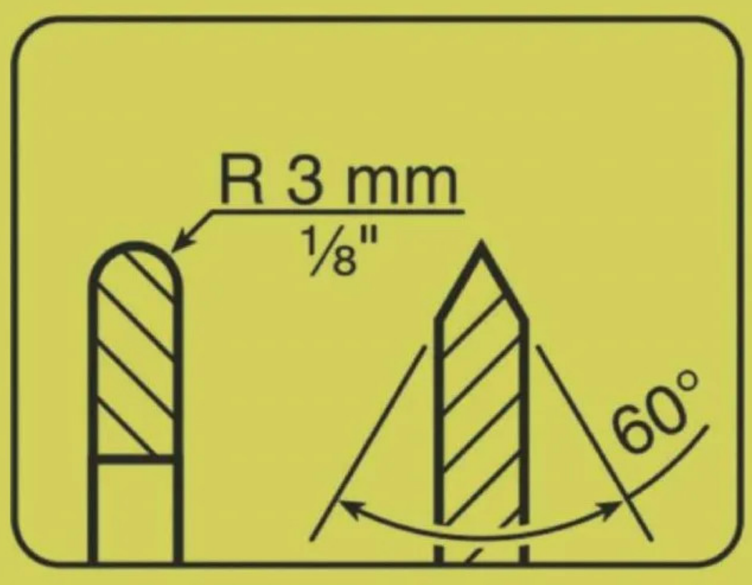
The LA-120 Profiled Leather Honing Wheel is supplied with two standard leather discs. The first has a 3mm radius and is designed for honing gouges and the like; the second has a 60° tip for tools such as V-gouges.



The LA-120 is designed for honing and polishing the inside of tools with curved edges, such as turning and carving gouges...

More options

The leather discs are interchangeable and you can easily replace a worn disc with the LA-122 Set of Standard Exchange Discs. Narrower profiles are also available with the LA-124 set, allowing you to access the most tightly arched edges.



Two standard discs have a 3mm radius and 60° tip

... as well as V-parting tools

You can also mount double LA-120 discs – one with a standard profile and the other a narrower profile; this allows you to access four different profiles at the same time.

The discs are used with PA-70 Honing Compound. New discs require impregnating with a few drops of light machine oil before the compound is applied.

LA-124 SET OF NARROW EXCHANGE DISCS – HONE THE INSIDE OF ARCHED EDGES

You can replace the leather discs on your LA-120 Profiled Leather Honing Wheel with the LA-124 Set of Narrow Exchange Discs. This allows you to hone the inside edge of tools with a smaller radius or tighter angle.

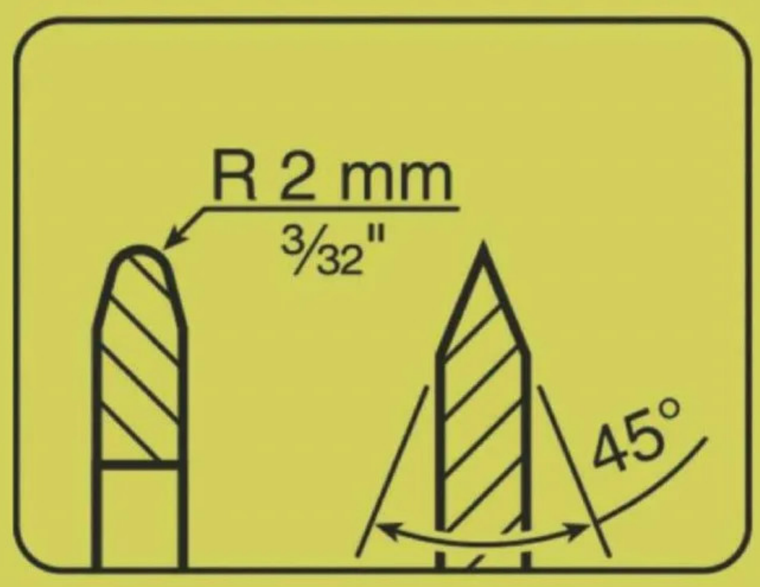
- Fits the LA-120 Profiled Leather Honing Wheel;
- Hones arched edge tools with a smaller radius or tighter angle.

Replace regular profiled honing wheels with narrower ones

The LA-124 Set of Narrow Exchange Discs is an accessory for the LA-120 Profiled Leather Honing Wheel. You can easily replace the leather in your standard profiled leather honing wheels, which will allow you to hone the smallest turning and carving gouges as well as V-gouges.

Includes two leather honing wheels: one with a 2mm radius and the other with a 45° tip.

These narrow discs are used in conjunction with the LA-120 Leather Honing Wheel



One of the discs has a 2mm radius and the other is supplied with a 45° tip

These smaller disc profiles permit the honing of small carving tools with very narrow profiles

TECHNICAL Tormek honing wheels range

CW-220 COMPOSITE HONING WHEEL – QUICKLY DEBURRS EDGES

The CW-220 Composite Honing Wheel is perfect for quickly deburring an edge. It's supplied with an integrated polish and is easy to use. The composite wheel can also be used for regular maintenance and to quickly regain sharpness when you don't need to establish a new bevel. The CW-220 Composite Honing Wheel fits the Tormek T-8.

- Deburrs the edge more quickly;
- Maintains your tools between sharpenings;
- Durable composite material with integrated polish for cleaner honing without honing compound;
- Vegan alternative to a leather honing wheel;
- Fits the Tormek T-8, T-7 and older models with a 215-220mm diameter × 26mm wide honing wheel.

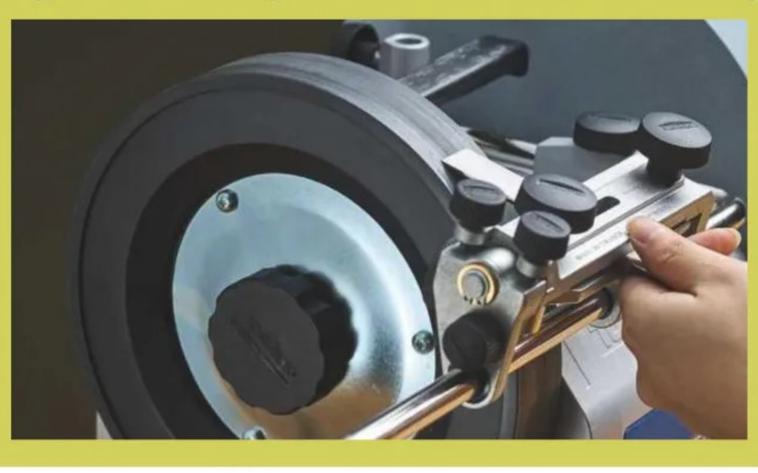
This no fuss, no mess honing wheel doesn't require any additional honing compounds or pastes

Cleaner honing

As honing compound isn't required, the CW-220 Composite Honing Wheel is therefore suitable for use in clean environments. Instead, polish is integrated into the composite material. Quickly deburr the edge and achieve great results without getting yourself or your workstation dirty.

Wet for more feel

For smoother honing, wet the CW-220 Composite Honing Wheel with a sponge or cloth dipped in a little plain tap water. Hold it against the honing wheel with the machine running. If you find honing a bit too aggressive, this method gives a softer feel.



ProEdge

THE ULTIMATE SHARPENING SYSTEM

Knife Sharpening Kits

We offer two knife sharpening kits, the only difference between them is the size of the holder.
The larger knife holder is ideal for hunting knives, carving knives and knives over 8” long. The small knife holder is ideal for pocket knives, vegetable knives and blades up to 8” long.

Large Kit - PEKJIGL

Small Kit - PEKJIGS

Both holders can be adjusted using the collar on the arm to allow for steep and shallow sharpening bevels. Each kits contains a back plate, a raised wear plate, a universal arm and a knife holder. The kit comes with full instructions and an instructional video can be seen on Robert Sorby’s YouTube channel.
Knife holders are also available separately.

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LETTERS

★LETTER OF THE MONTH

ENDANGERED HERITAGE CRAFTS: A GROWING AWARENESS

Dear Tegan,
I'm writing in response to the excellent article by Johnathan Swann, featured in the April 2023 issue, on the subject of endangered heritage crafts. This seems to be a very hot topic at present, helped, no doubt, by Jay Blades MBE – host of BBC's *Repair Shop* – who's also a judge for The Heritage Crafts Awards. Jay, among others in the industry, has been very vocal about the need and importance of keeping age-old skills and techniques alive, which was excellently discussed in your recent feature. Here, we learn more about the Heritage Crafts Association and the endangered 'Red List'. A link to this is provided on the website – **www.heritagecrafts.org.uk** – as well as information on categories of risk and other factors affecting a craft's visibility, which is very much a lesson in itself.

One such craftsman who caught my eye was the incredibly talented London-based

Devon stave basket making is recognised as critically endangered – the example shown above is made by Mark Snellgrove, who runs courses in a bid to share these dying skills and techniques

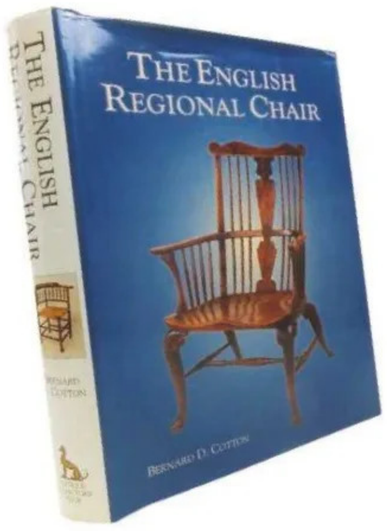
luthier, Jonathan Hill, who specialises in making historically accurate and modern stringed instruments, using a wide range of traditional decorative techniques such as carving, gilding, marquetry and inlay. Having trained at West Dean College, he then went to work and train with a master violin maker in Yorkshire, before travelling to Turkey to do the same. He also recently received the inaugural Woodworker of the Year Award, sponsored by Axminster Tools, which was given in recognition of the outstanding contribution he'd made to the field of woodworking over the past year. However, Jonathan is just one of many makers out there and woodworking is just a small part of the Heritage Crafts sphere – there's also sail making, scissor making, damask weaving and rush mat making, to name but a few. The website also contains some fascinating case studies on such crafts, offering a great way of raising awareness and finding out more about this national charity.

So, let's keep talking about these amazing craftspeople, and in doing so helping to safeguard these pivotal heritage craft skills and ensuring they don't die out and become lost forever.

Winners of the Heritage Crafts Awards will be revealed later this year, so I look forward to following this. Thank you again for covering such a pertinent topic, which I'm sure will only gain in popularity, momentum and importance.
Best regards, **David Dodds**

Hi David, I'm so glad to hear you enjoyed the feature and thank you to Johnathan for shining a light on these wonderful craftspeople. We looked at Andrew Bellis and his wonderful instrument bows, but here you reference Jonathan Hill's incredible stringed instruments, which really are a thing to behold. As you rightly say, endangered heritage crafts is a hot topic and kudos to the Heritage Crafts Association for doing so much to ensure these skills are nurtured. The fact that influential folk such as Jay Blades is talking about this can only be a good thing, and we look forward to seeing the results of the 2023 Awards.
Best wishes, **Tegan**

REGIONAL CHAIR STYLES



Dear Tegan,
In the 2022 March edition, you published my piece – 'Meet the chairmen' – which looked at a collection of chairs that I own. Further research into the archives has provided a little more information that I hope yourself and readers will find useful.

These were made in a variety styles, from the end of the 18th to middle of the 19th centuries, with what's called a hollow nail – or nailed – seat because that's how it was fixed to the frame. Some had strips of hessian glued underneath to provide further strength. Made in mahogany and native timbers, the double-reeded splat is reminiscent of some chairs made in the mid-Suffolk village of Mendlesham, by one of the few makers for whom we have a name: Dan Day.

A good reference book on the topic is *The English Regional Chair*, by B.D. Cotton, published by the Antique Collectors' Club, Woodbridge, 1988.
Best wishes, **Peter Scaife**

Hi Peter, thank you for taking the time to research this further and for introducing us to the regional chair styles throughout the country. This is a fascinating area and it's remarkable to think that so many different craftsmen each had their own individual design 'signatures'. As you say, this book is a definitive reference material for anyone wishing to explore this extraordinary subject in greater depth.
Best wishes, **Tegan**

BASIC WOODWORKING: SIMPLE JOINTS, TOOLS & TECHNIQUES

Hi Tegan,
So, what or why, that's the question. Basic woodworking starts with the humble butt joint. For far too long now YouTube has overshadowed the basics of what we should be practising – especially so among young woodworkers.

The humble butt joint, which has been in use for hundreds of years, has sadly been eclipsed by power tools and CNC equipment. I recently built a beautiful small box just to prove the point that using a basic butt joint can be elegant and functional, not to mention simple, and goes to show that we don't always need to build such a project using dovetail joints or even box joints. The other advantage is that this basic joint can be held together using just glue and nails, and yes I did say it – glue and nails.

We honestly need to be teaching the next generation of young woodworkers – boys and girls in their teens – when starting out in their woodworking/furniture making careers, that basic woodworking is the way forward. If you understand the basics of hand tools and woodworking joints, along with those of wood movement, you're well on the path to a very successful career.

Looking back at woodworking in the early 1900s, you can clearly see that most chair construction made use of the butt joint, held together with glue and wooden dowels, and indeed if we look back even further to the 1800s and tall case clock construction, this joint was used again, glued and nailed with hand-cut nails and, in some cases, veneered over to disguise the joints.

'Die Lorelei' 7/7 Viola D'amore by Jonathan Hill – maple back and sides, pearwood neck and carved head, carved 'clam shell' boxwood pegs with pearl pips. Spruce soundboard with twisted silver wire 'rope' rosette and silver gilt bridge. Mother of pearl inlaid pegbox, ebony veneered fingerboard and tailpiece, with engraved silver plate tailpiece attachment. 7/7 strings – 37cm string length

So, in my opinion, I think we need to take a step back in time and start teaching these simple, straightforward, basic joint principles to beginner woodworkers, along with the message that you can build beautiful furniture without having to resort to biscuit or even Domino jointers. Instead, use the tried and tested skills, which have been shared for thousands of years, that can be practised with basic hand tools, and in doing so, hopefully we can preserve the teaching of our craftsmanship for many more years to come.
Kind regards, **Phil Gaynor**

Hi Phil, very wise words and advice – thank you for taking the time to write in. Another reader pointed out the very same joint a few issues ago, in terms of the butt joint's simplicity, and the fact it's been used for countless years. It's easy for basic skills to get overlooked and lost in this modern day and age, with machinery being able to do the job for you, but anyone can learn these skills, so long as they're shared and not forgotten. There seems to be a recurring theme running throughout this month's letters page; many thanks for reiterating this important topic.
Best wishes, **Tegan**

Phil's box was made using butt joints and held together with glue and nails

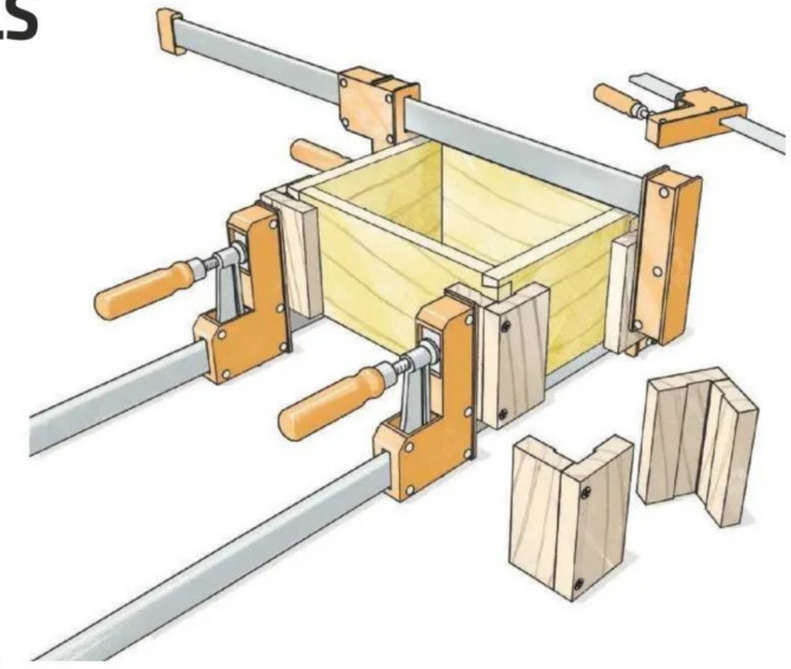
READERS' HINTS & TIPS

For the next eight issues, in conjunction with Veritas and Axminster Tools, we're giving one lucky reader per month the chance to get their hands on a fantastic Veritas apron plane with PM-V11 blade. Ideal for trim carpentry and featuring a ductile cast-iron body, its unique side wings allow for a comfortable, firm grip. To be in with a chance of winning this great piece of kit, just send your top workshop hints, tips or pointers – indeed anything that other readers may find useful in their woodworking journeys – to **tegan.foley@dhpub.co.uk**, along with a photo(s) illustrating your tip in action. To find out more about Veritas tools, see **www.axminstertools.com**

CLAMPING MADE EASY:
CUSTOM CORNER CAULS

Clamping boxes made with box joints or dovetail joints often presents a challenge. These custom cauls wrap around box joint corners and have recesses that clear the protruding pins. When clamping such pieces, you'll find that if the pins extend beyond the outside faces, the clamps can't be placed at the corners, and therefore can't pull the joints tight.

As mentioned above, the custom cauls shown in the drawing opposite are designed so that they wrap around the corners, with recesses that clear the protruding pins. These can be simply made using two pieces of 20mm hardwood with shallow recesses cut into the inside faces as indicated. When the cauls are assembled, the recesses clear both the pins and any glue squeeze-out. Be sure to alternate, adding clamping pressure in all directions as you tighten. An added bonus is that the cauls also protect the surface of the box from clamp marks.
Brett Arnold



These custom cauls can be simply made using two pieces of 20mm hardwood with shallow recesses cut into the inside faces as indicated

WRITE & WIN!

We always love hearing about your projects, ideas, hints and tips, and/or like to receive feedback about the magazine's features, so do drop us a line – you never know, you might win our great 'Letter of the Month' prize, currently the Trend ¼in 30-piece Router Cutter Set, worth over £100. Simply email **tegan.foley@dhpub.co.uk** for a chance to get your hands on this fantastic prize – good luck!

CHISEL RATING

BOAT TRIALS

Michael Allsop shunned kit-made canoes to chase his dream of sailing a scratch-built one

Getting on for 20 years ago now, I discovered an old book languishing in my school library, which contained plans along with construction details for a selection of wooden boats and canoes. This little hardback sparked a flame of interest in my teenage self and ever since that day, I'd been determined to make a wooden boat. Early attempts, however, didn't make it beyond some pallet wood frames, which sat in my parents' garden and gradually collapsed. But last year, with the spark re-ignited by several canoeing trips in hired boats, my wife and I decided to find a suitable design, and finally set about building our very own canoe.

While reaching the above decision was easy, what proved more difficult was actually finding a boat that'd accomplish the various criteria we'd set. It had to be stable and strong, yet with traditional lines and good looks – and it had to be built in three weeks over the Easter holidays.

There are several high-quality kits available, which provide you with pre-cut plywood panels and all the epoxy resin and fibreglass required, but we'd fallen for a design by Eric Schade of Shearwater Boats in the US, which was available in plan form through Seawing Boats in the UK.

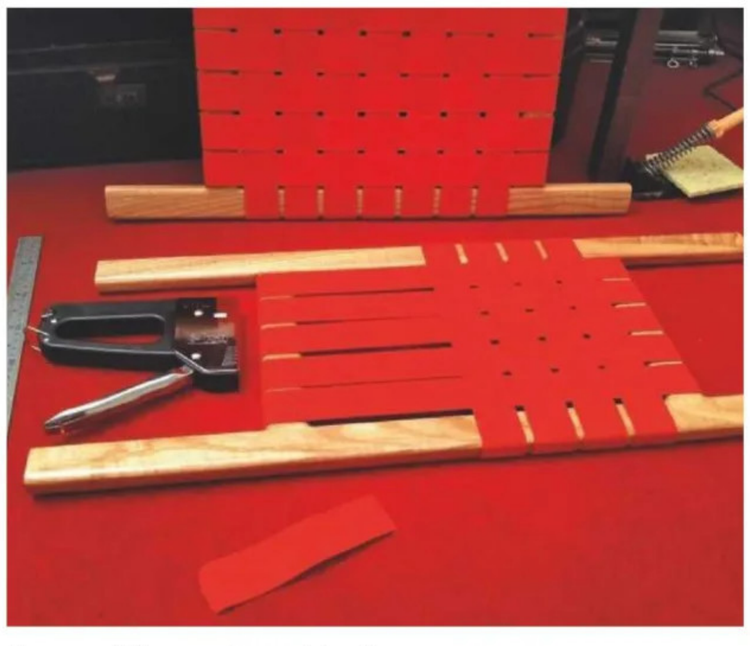
1 This jig was produced to help with making the frame components

JARGON BUSTING

In lapstrake boat construction, also known as clinker-built, the planks that are attached to the frames lap one edge over another rather than butting together at their edges. This adds strength to the hull because where the lap occurs, the fastened doubling of plank thickness essentially forms a stringer at each plank edge. Effectively, stiffeners are therefore formed, which allows the boat to be constructed from lighter plank stock

2 The seat frames, thwart and yoke were made from solid ash. The hardware is useful for tying kit into the boat

3 The interior components were finished ahead of assembly…



4 … and the seats webbed

With an eye to saving money, along with increasing the satisfaction of creating the boat from scratch, we ordered the plans and started by sourcing the five sheets of marine ply, as detailed in the bill of materials.

Careful labelling

Bearing in mind our three week construction window – we were due to take over my parents-in-laws' double garage as we don't possess the necessary indoor space for waving 17ft lengths of plywood around – all the smaller joinery components needed to be made in advance. Consequently, the winter months saw the fashioning of stems for each end of the boat, from thick marine ply, the seat frames, thwart and yoke from solid ash, and the decks from meranti and oak. These could be finished as much as possible then set aside ready to be dropped in at the appropriate stage (**photos 1-4**).

A week or so before the Easter holidays, we completed as much of the hull as possible, which amounted to marking up and cutting out the 10 panels required to make it.

Bearing in mind the canoe's length, however, each panel was made up from two full lengths of 8×4 ply with an extra foot or so from an additional sheet. This resulted in a stack of parts that required careful labelling if we weren't to end up with a very unusual canoe.

Canoe assembly

Now armed with our homemade kit of parts (**photo 5**), we transported everything needed from our Derbyshire home to the in-laws' house in Northumberland. Fortunately my father-in-law is a keen woodworker, so should it turn out I'd forgotten anything – we'd already had to go back for the spokeshave – he'd probably have it.

The first job was to lay out the hull components and check that everything matched up and looked symmetrical. My wife's careful labelling was very much appreciated at this point. These parts were then butt-joined with strips of biaxial fibreglass tape followed by epoxy resin (**photo 6**). After 24 hours curing, we could confidently plane the chamfers on the panel edges where they'd overlap on the sides or meet edge-to-edge down the middle of the boat. Previously, during the cutting stage, several little holes had been drilled along the panel edges; these needed to be cleaned out again in order to take the copper wire that'd be used to stitch the panels together.

Assembling the boat was surprisingly quick and extremely satisfying. First, the bottom two panels were laced together with copper wire and several station moulds – the forms used to shape a boat's planks in order to give it true and fair lines – positioned along the boat's length. It was then a relatively straightforward task to gradually add panels on each side until they'd all been attached, at which point it looked like we'd nearly finished. But no, much more work was to come…

Epoxy nightmares

Building a boat is stressful. It must be, given the recurring nightmares we suffered during the next phase of construction, which involved seams popping, epoxy dribbling out to leave dry joints, and copper wire snapping in inaccessible places…

5 The stack of parts amounted to a homemade kit awaiting transport and hull construction

6 Careful labelling meant the panels went together without a problem

While most of these luckily didn't occur, our initial swift progress (**photo 7**) was hampered by a spell of cold weather, which prevented the epoxy going off on the bottom seam. This led to a rather unpleasant moment when I realised that the bottom of the boat was starting to open up having removed the copper ties. Rapid re-tying and applying more epoxy brought it back into line (**photos 8** & **9**), but we had to hold fire for a few days before being able to remove the remaining copper wire (**photo 10**).

However, once the epoxy fillets had set, it was wonderful to snip out all the wire and see the boat's shape in all its glory (**photo 11**). Following a little preparation, the bottom two planks on each side were fibreglassed, with the rest of the hull receiving a coating of epoxy resin, both inside and out (**photos 12** & **14**). This took a couple of days, again with a day or so in between to ensure the resin was hard enough to rest on the trestles without marking.

With the boat becoming stronger and more rigid by the day, it was time to fit the inner and outer gunnel strips and decks (**photo 13**). The gunnels had been routed to shape from 10ft long lengths of ash and, while slim, still needed a lot of persuading, and several screws to keep them in place at the curved ends. Luckily the design covered this, and the gunnel screws went through the ply skin and into the decks, helping to hold it all together while the thickened epoxy set.

The scuppers – made from meranti to match the decks (**photo 15**) – are designed to mimic the ends of frames from the time when canoes were made according to a plank-on-frame method. Not only do these provide useful tying points for securing bags within the canoe, but also act as drainage holes, allowing water to escape when the canoe is turned upside down for storage or portage.

7 At this stage, it's already starting to look like a canoe – note the station moulds used to keep it in shape during construction

8 The panels were stitched together with copper wire and epoxy...

9 ... which turned out to be a frantic process that involved having to re-tie and apply more wire

10 After the epoxy had gone off, the copper wire could then be removed

11 The bottom of the canoe was fibreglassed...

12 ... and the hull interior epoxied

13 Holding the gunnel strips and decking in place requires an extraordinary number of clamps!

Finishing

A lot of standing back and admiring went on at this stage, but we needed to crack on and get the canoe painted. otherwise it wouldn't be dry enough to tie onto the roof rack. It seemed a travesty to cover up the gorgeous epoxied hull, but we were keeping the wood finish on the inside and had agreed that a glossy white canoe was the order of the day.

The next step was to apply a coat of self-etch primer on the hull's exterior (**photo 16**). The boat immediately looked more finished as a result, and when the gloss was applied the following day, it really did look rather fine. The paint – International High Gloss Low Drag yacht paint – was wonderful to apply and dried to a very smooth, uniform finish. The inside was treated to several coats of International Schooner Gold varnish, which mellowed the ash fittings and gave a gorgeous depth of colour to the ply panels. A few days later when all was dry, we loaded our canoe onto the car to take it home and commence some rigorous testing.

14 Finally, the canoe exterior could be epoxied – just look at that lustre!

15 The meranti scuppers provide useful tying points for securing bags and the like

Will she float?

We live close to the Peak Forest Canal in the Peak District, so took it along to Bugsworth Basin for its maiden voyage (**photo 17**). Much to our relief, all went smoothly and we were very happy with the finished vessel. Over the next few months, seating arrangements were tweaked, and as time passed and we became more familiar with the canoe, the more impressed we became with the design and its handling characteristics.

After a trip on the Thames and a few other waterways, we felt prepared for a trip to Scotland during the summer, for whatever the lochs could throw at us. As it turned out, this included waves that occasionally rolled over the gunnels, but the canoe never faltered – a sure testament again to Eric Schade's design. It's often said that people build a canoe, sell it, then build a better one which they then keep. In our case, however, we'll certainly be hanging on to this one for a while yet.

16 A coat of self-etch primer was then applied to the hull's exterior

17 The white-painted canoe entered the Peak Forest Canal for its maiden voyage

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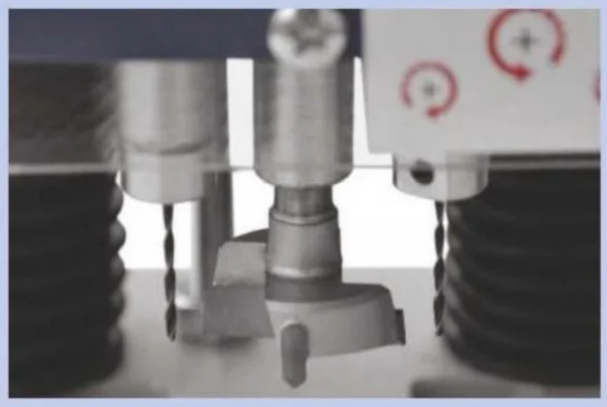
Rotational speed	**3000 rpm**
Motor power	**0.75 kW**
Voltage	**230V**
Machine dimensions	**500 x 500 x 520 mm**
Weight	**22 kg**



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MATERIAL & MAKER

CHAIRMAKING – THE WINDSOR WAY

Landing on America's shores in 1985 having made the journey by sail boat from England, **Michael Brown** built his own timber-framed house before setting up a business making stunning bespoke hand-crafted chairs and furniture, which he continues to do to this day

The handmade wooden chair is an item steeped in history and one that remains as popular today as it was in the 18th century. While design has inevitably moved on to embrace current trends, it's reassuring to know that age-old skills are still being practised by a wide range of craftspeople, in a bid to keep these traditions alive.

One such exponent of the craft is Michael Brown, an Englishman who made the trip over to America back in 1985. This is quite a story in itself, and involves a 42ft fibreglass sail boat made with his own hands, not to mention stopping in Bermuda to repair hurricane damage, and in doing so meeting his wife-to-be. Leaving Bermuda safe and well, with his future wife in tow, Michael spent the next seven years in New York, before the couple decided to buy some woodland on the edge of Beard Creek, North Carolina. "It wasn't long before I started to selectively cut down trees to build our home," Michael says. "I meticulously sawed these into posts and beams, following the finest practices of generations past. I raised a frame of pine, sycamore, oak, poplar and maple, connected with wooden pegs that glowed in the setting sun and cut right to my heart." When the couple designed the house, which technique-wise Michael refers to as "just mortise & tenon joinery on a bigger scale," they were living on the boat, so it ended up being much bigger than required; however, the end result is truly amazing and includes many fun details and quirky features.

A love of working wood

When asked about his background, it seems that boatbuilding and woodworking were very much in the family, with Michael explaining how his father renovated wooden boats as a hobby: "We'd sail it for a while and then he'd get a bigger one, before we started all over again. So he instilled in me that love of working wood." On chairmaking, Michael says he chose this particular discipline as it's the hardest and most complex of all the wood-based trades and therefore the least competitive, so his thinking was that it'd be more likely for him to make a living and be able to support his family. Fast forward some 20 years and Michael's business is very much going strong, as he continues to create his interpretation of the original Windsor chair, producing office, dining, rockers, stools, comfy-rondack and various other designs in addition to custom pieces.

A preference for hand tools

Working from his functional workspace/studio – an unheated pole barn that's great to work in during the summer but freezing cold in the winter – Michael crafts chairs and pieces of furniture using a selection of traditional, manual tools. While admitting to using the odd power tool where necessary, he predominantly works with the spokeshave, cabinet scraper, frame saw, adze, planes and a homemade shavehorse, which happens to be his favourite: "You sit on this thing like a stallion and kick the foot bar, pull the 'shave and generally pretend you're riding your childhood rocking horse," he says. "It is, of course, a handmade 'horse using whatever was lying around when I needed to make it, and I imagine that one day I'll improve its looks!"

Michael explains that his preference for hand tools is purely aesthetic: he likes the sound, speed and feel. He uses old wooden spokeshaves where the blade is – almost – parallel to the wood, which makes them much easier to push or pull: "A tool designed for ease makes sense; adjustment is a mere knock on the shavehorse, no knobs, no bolts, just tapered metal tangs in wooden holes – simplicity itself."

Despite being influenced by traditional designs, Michael admits he's not tied to age-old methods; rather, he believes in using what's available today to make the task as easy as possible. Choosing to work exclusively with sustainably sourced wood, which he endeavours to get from either his backyard or eco-friendly sustainable logging

The exterior of Michael's stunning woodland house, which he made himself using traditional methods

and sawing enterprises, Michael uses a chainsaw to cut the trees down, then moves them to an on-site bandsaw mill for converting into usable pieces. He also has his own wood drying kiln, so after sawing and air drying, all pieces are moved there, which helps to ensure that this furniture maker is working in the most eco-friendly way possible, which is high on his list of priorities.

Traditional designs with modern elements

Taking a closer look at Michael's portfolio of work and the various designs, all are hand-crafted with an emphasis on custom design, aesthetics and sustainably sourced wood, to create exquisitely detailed chairs and furniture that perfectly fit the user. Despite the fact that Michael's chairs are based on the traditional Windsor design, it's interesting to see how he incorporates modern features. He also talks about the design process, which has been painstakingly developed to create a chair that supports the sitter's entire body. Each piece is therefore precisely custom-made according to an individual's body measurements. Speaking on this, Michael explains that he incorporates the grain wherever possible: his chair spindles, split from the log, follow the grain, which is what gives them the flex that makes this delicate looking chair strong enough to support the human form.

When asked about commissions, Michael says that designs are generated in response to certain criteria: "My client will say they need to be able to seat 'X' number of people and that their house is 'modern' or 'minimalist' etc., or preference as to wanting a live edge, walnut slab, etc. From there I sketch ideas, price it, then email the client who replies saying they like "1 and 4" and now we have a point where I can generate a detailed design. Designing on commission is working within a few parameters," he says, "but creating something functional and beautiful within this box is much more difficult than just making a piece aesthetically pleasing"

At present, Michael is collaborating on a table commission with glass artist David Goldhagen – designed with glass legs – that David is currently in the process of blowing and moulding. This meeting of artistic minds came about in response to a client commission, and Michael explains that in the past, he's worked with metalworkers who've also designed custom features for him.

Talking more about gaining inspiration for the design process, Michael has a strong affinity to nature and the outdoors. Each day, he ventures out before dawn and watches the sunrise, before rowing on the creek or riding his bike. According to Michael, within this hour, designs come forth. "How can you commune with nature and not want to put the curve of a dolphin's back cresting and blowing inches

Music set in cherry with walnut (legs) – guitar stand, music stand and music chair – 508mm wide × 610mm diameter × 1,016mm high

Chippendale reproductions in walnut

from you into the leg of a chair, or the reflection of Southern yellow pines, straight and true, on the river's mirrored surface suddenly swaying like drunken sailors as the wake from my rowing boat ripples through them, bringing to mind a piece of curly maple. You can stare at two boards for months, not knowing what to do, and then, there it is – given to you as the sun rises and the world wakes, the light changes, the day begins, and I'm hurrying back to my workshop to create this dream. Life doesn't get much better than that; I feel so, so lucky."

Chairman Brown & workshop companions

When asked who inspires him, Michael cites John Brown, a British chairmaker who used to write columns for *Good Woodworking*, which were, according to Christopher Schwarz: "Short epistles on topics philosophical, mundane or both. He might offer a recipe for bacon in one column, plans for a workbench in another, and in a third, comment on the sad state of woodworking where we've traded skill for speed." He inspired thousands of woodworkers to attempt or even completely embrace hand woodworking, and was certainly a colourful character, who could be both cantankerous, charming and controversial. Brown sadly passed away in 2008, but it's reassuring to see that his influence lives on in other chairmakers such as Michael.

I'm sure John would very much approve of the way in which he works: staying true to designs of old – while adding his own unique twist; using traditional methods; and keeping the art of chairmaking alive for another generation, and doing so with such an appreciation for the raw material and all it has to offer.

Looking at several of the photos here, it becomes apparent that Michael is an undeniable animal lover, who happily shares his workspace with a very content free range goat – that actually belongs to a neighbour; a lovely little tabby cat – that wandered in and never left, and all sorts of other wildlife, including birds that often nest on a shelf next to his workbench. Indeed, the self-built barn that houses his workshop is always open on two sides, which perhaps serves as an invitation for them to enter.

Dining chair in sustainable mahogany with ash spindles/legs. Seat – 432mm wide × 483mm diameter × 458mm high – 1,016mm high overall

Rocking chair in cherry with ash spindles/legs – short rockers designed to suit apartment living – 813mm wide × 914mm diameter × 1,118mm high overall

Tripod stool in pecan with ash spindles/legs – 559mm diameter × 559mm wide × 1,016mm high – with seat at 660mm

Situated right in the woods, and surrounded by 65ft trees, mixed soft- and hardwoods, Michael explains that he left the woodland and built his barn/workshop in a space nestled between them.

On the subject of workbenches, Michael says that a recent project to leave his was a table that utilised a wine bottle: "A good repeat client gave me a wine bottle from her daughter's wedding and asked me to make something. I'd previously made a Shaker candle stand for my wife – the stem of which was reminiscent of a this very shape – so I set about experimenting with the design, and tried gluing wooden legs to the glass, with some epoxy and a little jig to hold them while drying."

In the morning, however, due to the change in temperature, Michael discovered that the glass had shattered, as it'd moved more than the wood. Although he'd now formulated the design, Michael still had to figure out how to hold the bottle without making it an integral part of the table. To this end, he constructed

'Lovebirds' rocker in cherry with ash spindles/ legs – 1,219mm wide × 965mm diameter × 1,067mm high

MAKING A CHAIR THE TRADITIONAL WAY – WITH MICHAEL BROWN

1 Drawknifing bark off a cherry table top

2 Frame sawing a seat out of 50mm curly maple

3 Boring with a spoon bit

4 Using a travisher to hollow the seat

5 Adzing a chair seat using a blade from the Pacific Northwest Natives

6 Bevelling the seat with a wooden spokeshave

7 Wedging spindles and driving in walnut wedges

8 Cutting the kerf for wedges

Rocking chair in reclaimed chestnut and walnut with full length rockers – 813mm wide × 1,219mm diameter × 1,118mm high

a metal table support and drilled a hole in the bottom of the bottle to pass through a 16mm stainless steel rod, before welding on some brackets that attached the legs.

Another recent project is a walnut and curly maple dining table, with four chairs and a bench, in addition to a chair that's one of his three annual 'Karma' designs, which will be donated to a local charity.

Evolving designs

Michael acknowledges the fact that there are quite a few traditional Windsor chairmakers, all of whom are very talented, whereas Michael feels the need to put his own, unique spin on things : "Surely we can improve, or at least try? Does a design have to stop? Can it not evolve?" As an example, Michael comments on how, over the last 20 years, chair spindle dimensions have had to increase as a result of his clients becoming larger.

Talking on the exceptional work of some students he's taught over the years, Michael says he's interested to see how their work progresses/evolves, and how individual ideas are expressed through this medium. Could these young furniture makers represent the future of chairmaking? Under Michael's tutelage and guidance, we think they undoubtedly stand a very good chance.

Despite Michael's immense skill, he's definitely a modest man, thanking nature for its gifts and talking very humbly of his work. So while pride may be considered a sin, it's refreshing to hear how at the end of a long day, this maker sits in one of his rocking chairs and feels a sense of happiness in what he's created, and rightly so. The immense amount of pride Michael has for the home he's single-handedly made, which he refers to as his "little bit of paradise" is also undeniable. Few of us could ever hope to possess such skills and knowledge, and it's wonderful to hear that Michael has no desire to give up doing what he loves doing any time soon: "I hope to keep making chairs until I drop. Coming into my workshop every day isn't just a way of supporting us, but a pleasure; we took four years off when we were younger and called that our retirement."

We do hope that Michael's chairmaking journey continues indefinitely, and for people far and wide to keep enjoying his heirloom pieces, not to mention the craftspeople of tomorrow, who benefit from his generous sharing of skills.

Bedside table in curly maple with cherry legs – 610mm wide × 610mm diameter × 610mm high

'Minstrel' chair in walnut and ash – 813mm wide × 610mm diameter × 1,067mm high

'Valet Chair' in sustainable mahogany – 508mm wide × 559mm diameter × 1,016mm high

Mahogany sidechair with ash spindles/legs – 508mm wide × 508mm diameter × 1,016mm high

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PROJECT Guitar stand

CHISEL RATING

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WW PROJECT

Treat your guitar with the respect it deserves by making **Mike Ninham**'s dedicated oak stand

1 Cutting a slot in the base...

As a good friend of mine had a birthday coming up, I thought a good present would be a new stand for his guitar. A quality instrument, it needed something more robust than the usual bent wire or tubing arrangements, and wood seemed the ideal choice of material. Here, I used oak but any suitable hardwood would be ideal.

Upright

I set out the upright's basic curved shape – 75mm at the bottom; 35mm at the top – opting for the bandsaw over the jigsaw, for ease, and leaving plenty of clearance off the lines. This precautionary measure was just as well as I had to make a few attempts before finally achieving the desired shape.

This was further refined with a spokeshave, going with the grain to obtain a smooth finish. I then made a small, decorative crescent-shape cut on the bottom.

Base notes

The base had to be made from two pieces glued up in order to achieve the required width. I cut these roughly to shape then biscuit-jointed them, ensuring to keep the biscuits close to the inside edge so as not to affect the notch that'd be cut to join the parts together. Next, the notch was cut to the same width as the upright and 50mm deep for a tight fit. A matching notch at 15mm was then cut in the upright; when fitted, the angle on the base should be about 15°, so it's advisable to measure and mark this first.

Using the router with a bearing-guided cutter, I then went round all the edges, aiming to impart a smooth, finished shape. To cover the end-grain on the upright's top, I had a rummage in my small offcuts bin and managed to find a nice piece of ebony, though mahogany or any contrasting wood could also be used. This was glued in place before being sanded to a smooth fit.

Metal hanger

I searched online for a suitable metal hanger and found one that cost under £5. I cut off the wall hanger part to leave 25mm, which was then glued in at the correct height for the instrument, using two-part epoxy.

After a good sanding, and checking to ensure the guitar hung correctly, the base and upright were glued together and when dry, finished with three coats of Danish oil. The end result is one happy musician friend, which makes this project a resounding success!

2 ... followed by a matching slot in the stand

3 The metal wall hanger requires cutting down

4 Once assembled, the finish can be applied

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MADE IN SHEFFIELD

AROUND THE HOUSE WITH PHIL DAVY

It's often revealing when hand tool techniques turn out to be more effective than using power tools. Admittedly, a recent task involved brickwork rather than timber, but the principle is still the same. The job in question involved cleaning up the faces of some reclaimed bricks on my new hearth. Although they looked reasonable, the brickie wasn't the neatest when it came to cleaning off excess mortar, so I decided to take matters into my own hands. A multi-tool seemed the obvious option here, with a tungsten carbide sanding plate fitted. As the bricks were relatively soft, this turned out to be a bit too aggressive and still didn't shift all the mortar. A scraping blade was a tad gentler, but the bricks were still not looking their best, while a traditional wire brush didn't make much of an impression. In the end, I resorted to stiff 60 grit abrasive paper, which worked a treat. Even though this may be a more time-consuming method, on the plus side, it doesn't generate as much mess and is also a lot quieter. At this rate I'll be in danger of thinning out my power tool collection!

USEFUL KIT/PRODUCT
BETSY PAINT MATE

Working from a ladder can be hazardous at the best of times, but when you're forced to take both hands off the rungs, perched at several feet above the ground, things can get dodgy. Holding a paint tin or kettle with one hand while using a brush in the other means you have no way of holding on, unless there's a tray attached. Any product that reduces this risk must be worth a closer look, which is why I was so impressed with the Betsy Paint Mate. Designed predominantly for paint or varnish, the Paint Mate frees up one hand and allows you to hang on while climbing or descending a ladder.

The Paint Mate consists of a shaped plastic tray, attached to an adjustable waist band, that's then strapped around you

Clever design

It consists of a shaped plastic tray, attached to an adjustable waist band, that's then strapped around you. There's a circular cut-out in the tray for a clear plastic pot, which is provided. A diameter of about 125mm means you can use a 100mm brush, so painting a fence or similarly large area is feasible. A couple of clips allow you to store a brush while shinning up the ladder, while you can slide the lid under the opposite one when ready for painting. Once you've finished using the Paint Mate, its contents can be stored for several days in the pot without going off, the lid forming an airtight seal. The container can then be cleaned out ready for the next job.

Betsy to the rescue

The Paint Mate came to the rescue a few weeks back when replacing barge boards on my cottage. Although the oak could have been left to weather, I wanted to finish it with Rustins Flexterior. Working off the roof of an adjoining outbuilding meant having to use a roofing ladder for access. Clambering up there holding a tin would've been asking for trouble, not to mention then reaching up to apply the varnish.

Of course, the Paint Mate is just as handy at ground level, too. There's a choice of six Betsy colours, while a pack of three replacement pots costs £5.99 – plus postage – which seems pretty good value.

SPECIFICATION

Typical price: £12.99 (plus P&P)
Web: www.betsygroup.co.uk
RATING – PERFORMANCE: 5 OUT OF 5
RATING – VALUE: 5 OUT OF 5

OUT & ABOUT
HEREFORD CATHEDRAL & GOODS FROM THE WOODS

Sometimes you stumble across contemporary woodwork that almost takes your breath away. Not necessarily because of its complexity or intricacy, more its simple elegance. Visiting Hereford Cathedral a while ago, I was fascinated to discover a delightful pair of riven oak gates, together with a run of cleft fencing around a new outdoor workshop compound. I came to learn that these were in fact created by local craftsmen, Sherwood Keogh and Glen Southern, whose outfit, Goods From the Woods – **www.goods-from-the-woods.co.uk** – produces rustic items such as waney-edge tables, benches and compost toilets. Sherwood also runs courses in woodland skills and crafts.

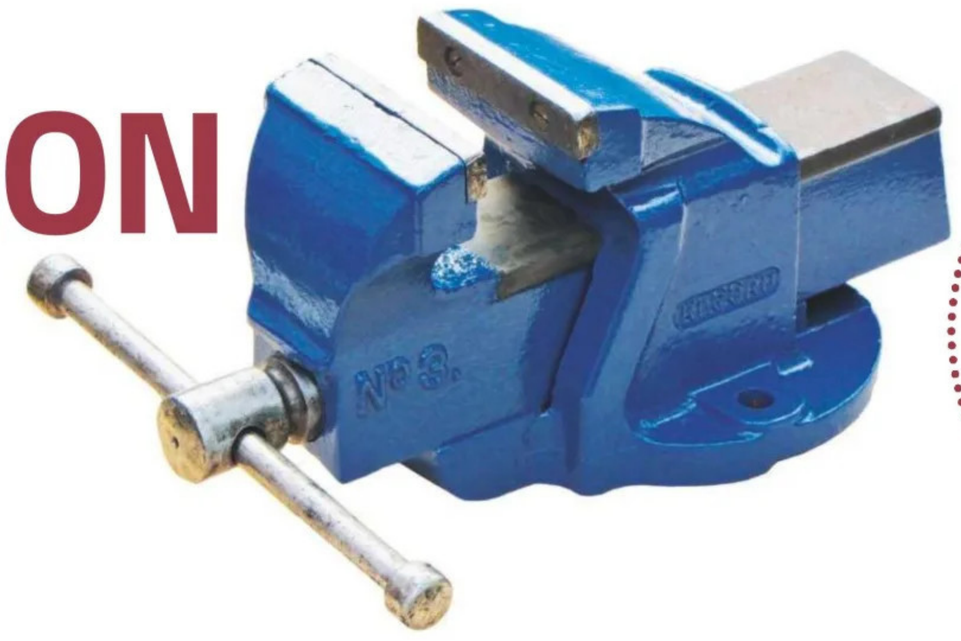
Using green oak, ash and other native hardwoods, most of their work on site is completed using hand tools. The gates were made from a fallen oak tree on the nearby Holme Lacy estate, just a few miles down the road from the Cathedral. The gorgeous riven pales, stiles and rails, were shaped with side axes and drawknives, then fixed in situ with hand-cut pegs. As woodworkers, there's so much of interest for us to visit here in Blighty, whether it's something newly created or craftsmanship that's been visible for hundreds of years. Hereford Cathedral is definitely worth a detour if you're in the area, particularly as it's home to the extraordinary 13th-century Mappa Mundi, one of the world's unique medieval treasures.

A pair of riven oak gates, made by Goods From the Woods

SPRING PROJECT: VICE RESTORATION

RESTORATION JOB

Phil Davy's discovery of an old engineering vice led to a satisfying clean-up job that should see it play a useful role for many years



Takes:
Half a day

Tools you'll need:
Shield Technology products, scraper, abrasive pad, gloves, bucket

Although you can't beat a dedicated woodworking vice for gripping timber, a second pair of jaws is always useful. So when you find an elderly engineering vice hiding in the garden, it's too good an opportunity to miss. This Record No.3 model was heavily rusted, though the handle still turned the threaded screw without too much effort. Subjected to the elements for decades, the vice was ripe for restoration and a new life.

Before tackling the rust, however, the first job was to degrease thoroughly, especially the screw thread, which was thick with the stuff. I used Shield Technology's Restore Pre-Clean Degreaser – £19.95 for 500ml – brushed on all over the vice. Grease also needs a helping hand from scrapers, nailbrush and abrasive pads.

It's a messy job, but once you've brushed on the Degreaser – or soaked components in solution – you're halfway through the dirty work.

Rust solution

After rinsing with hot water, the vice was ready for Restore Rust Remover – £16.74 for 250ml. As a dipping solution this is diluted with water, rusted tools then placed in a suitable plastic container such as a bucket. I soaked the vice overnight, turning it once or twice and waited for the magic to work. The next morning, I rinsed off the black deposit, using an abrasive pad to help the process. The vice was then soaked for a few more hours and the cast-iron definitely looked much cleaner.

If rusted items – such as machine tables – are too large to dip, you can try Shield Technology's Rust Remover Gel – £16.74 for 250ml. I used this with an abrasive pad on some stubborn parts of the vice, but normally you wouldn't need both solution and gel. As a bonus, Shield Technology products are biodegradable, so you can dispose of used solution down the drain quite safely. It's still advisable to wear protective gloves during use, however.

After thorough drying with a heat gun, I brushed on two coats of Hammerite Direct to Metal paint. In a limited range of colours, the Smooth Blue looks good and is closest to Record's original paintwork, with no primer necessary. It's cheaper to use a disposable brush than to buy a proprietary solvent, so wrap the brush in cling film between coats. Incidentally, two-stroke fuel is a cheaper alternative for brush cleaning!

Along with the vice, I treated an extremely rusty Stanley smoothing plane with Restore and the results were amazing. To find out more about the Shield Technology products used here, visit **www.shieldtechnology.co.uk**.

1 This vice had sat outdoors for more than 30 years, but surprisingly the jaws still opened

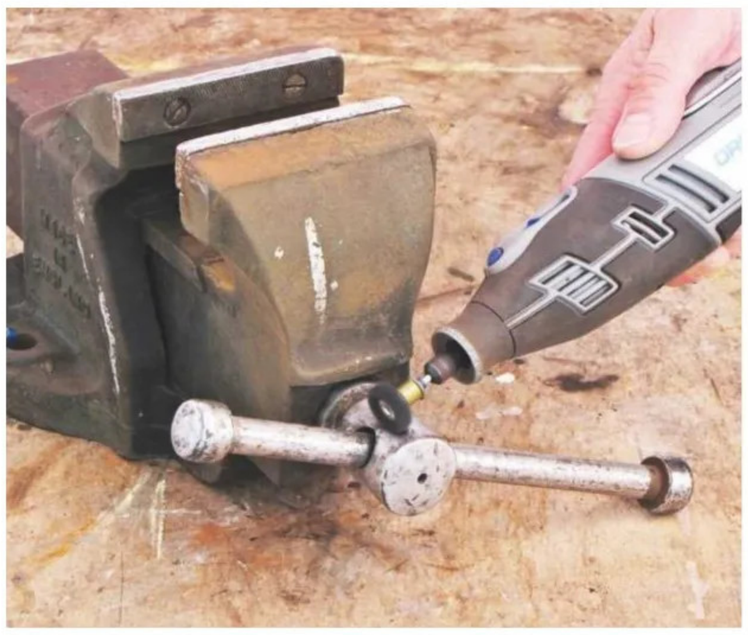
2 Scraping off congealed material and loose rust before using Restore solution to help the process

3 Liberally brush on diluted Pre-Clean Degreaser to remove oil or grease residue; rinse with hot water

4 Dip the vice in a suitable container of Restore Rust Remover, turning end on end if not fully immersed

5 Remove black deposit from surfaces with water and an abrasive pad; repeat dip process if necessary

6 Remove jaw facings; if screws are seized, try heat gun or WD40, but you'll need to repeat degreasing



7 The finish on the handle can be revived with a Dremel multi-tool and abrasive brushes, but ensure to wear eye protection throughout

8 Dust and dry thoroughly, using a heat gun if necessary; mask off the handle and jaws before you begin painting

9 Brush on two coats of Hammerite – no primer or undercoat required here; wrap bristles in cling film after painting

10 Finally, grease the screw thread underneath. The restored vice is now ready to bolt to a bench and start a new life in the workshop

Takes:
A weekend

Tools you'll need:
Mitre saw, sander, router, drillstand, block plane, sliding bevel

SPRING PROJECT: OBELISK TRELLIS

PYRAMID SCHEME

Climbers will scramble to the top of **Phil Davy**'s pyramid trellis – and that's a promise

Although an outdoor feature more often associated with formal gardens, an obelisk or pyramid trellis can look just as impressive in a small garden. Positioned in a corner or on the patio, it certainly adds style. Make a pair of smaller ones and they could be at home either side of an entrance. Build a decent trellis and you'll still have something attractive while the plant grows up it.

Of course, with a project like this it doesn't matter what size timber you use. I had some 50 × 50mm PAR softwood set aside for the four legs, but this looked a bit too heavy. With a thicknesser, it's a straightforward task to reduce wood to size, so finished timber sizes on my project are 35 × 35mm for the legs, while horizontal rails are 30 × 20mm. The pyramid consists of two A frames, joined together with rails.

Each leg is 1,900mm long and set at 82°, while the overall width of each frame is 600mm at the base. You could use pressure-treated timber instead of PAR softwood, but that's likely to be rough-sawn rather than planed, so will create a more rustic look. To simplify the project even more, you could dispense with the routed housings, although this would make the structure less rigid, especially as it'll probably be subjected to extremes of weather. Either screw, nail or use a nailgun to fix rails to legs. If screwing or nailing, drill pilot holes first or you're likely to split the ends when fixing in place. Use exterior PVA glue.

Construction methods

Assemble two – opposite – triangular frames together, fixing lower and upper rails first for rigidity. When this pair is completed, you simply connect them with the intermediate cross rails. It's important to note that each leg has housings cut on both exterior surfaces, so a simple numbering or lettering system is a good idea as it's easy to get mixed up.

To rout the housings, you'll need to make a simple jig. I used 12mm MDF screwed to a couple of battens. Because the housings slope both ways – left- and right-handed – you'll need to rout half of them first, then change the jig's orientation.

With two legs held together, loosely cramp the battens either side so that everything is parallel. Screw one piece of MDF to the first batten and check the leading edge's angle with a sliding bevel. Cramp this to the second batten and add another screw. Re-check the angle and fit further screws so that the jig is rigid. Do the same with a second piece of MDF, spacing the two pieces apart to accommodate the router base, plus the housing width. Make test cuts on offcuts, then you're ready to rout.

It's important to mark the position of each housing with the correct slope, as it's easy to cut them the wrong way if you don't. Rout all

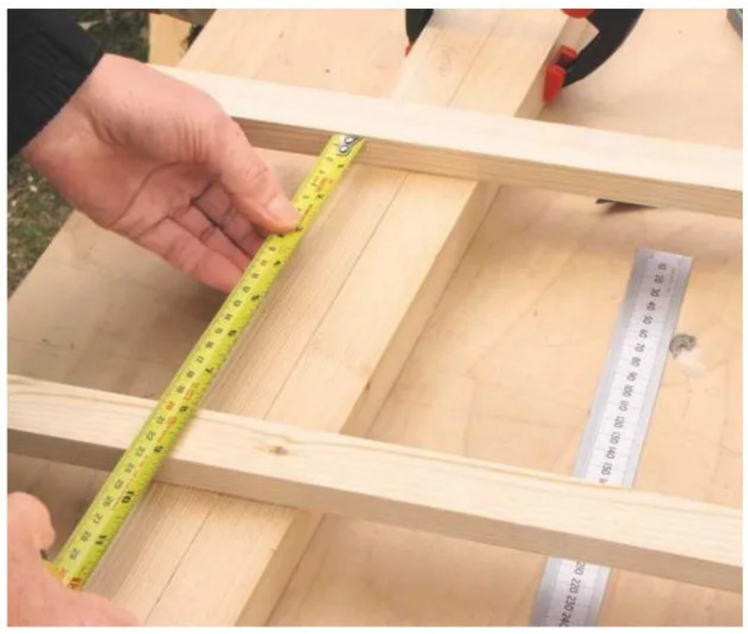
the housings that slope one way, then remove screws on the jig and swivel the MDF pieces to suit the opposite slope.

A mitre saw is handy for cutting the battens, though not essential. Bear in mind that there's 60 mitres to cut, so this is by far the quickest method. You could cut housings with a sliding mitre saw, though they'll not be as clean as if routed.

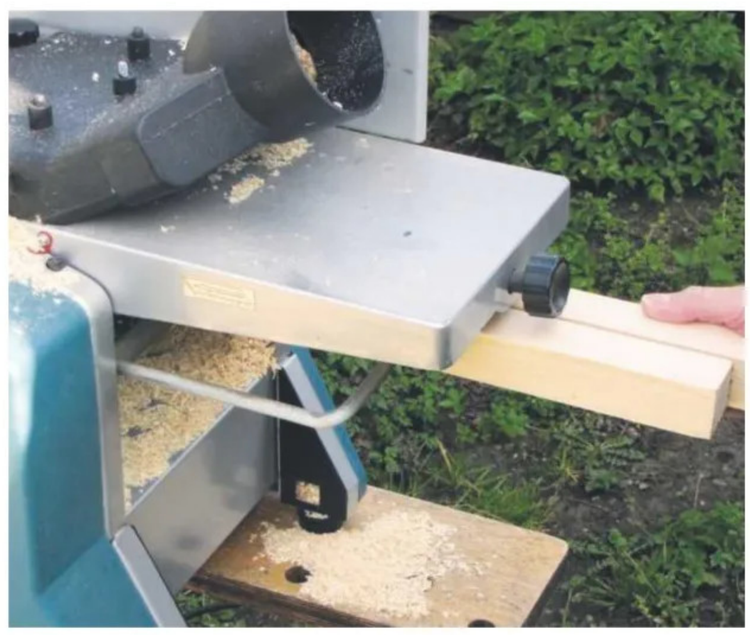
To cap it off

Once assembled the trellis needs something at the top to finish it off. I cheated and used a turned oak newel post cap, left over from a previous stair project. Whatever you choose, add a cap first to protect the legs' end-grain from the elements. Ideally this should be bevelled so that water will run off.

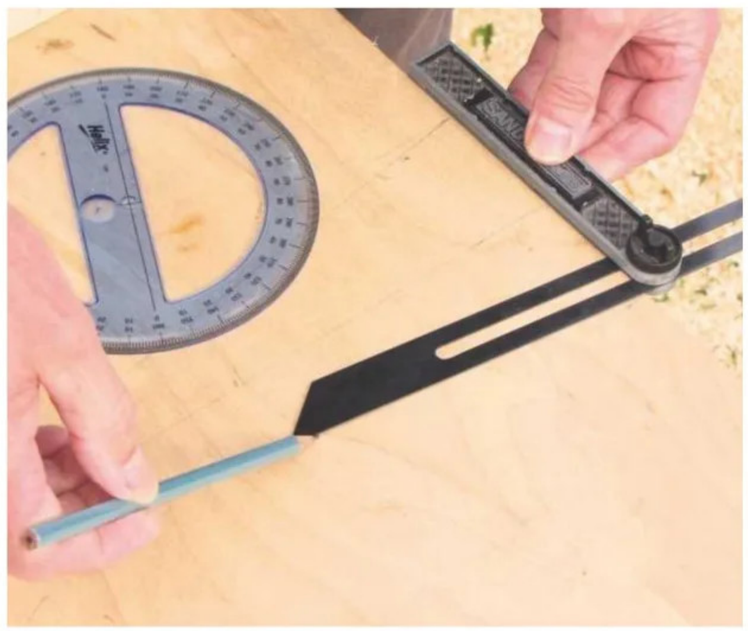
If you want the trellis to blend in with its natural surroundings, finish it in green or brown if positioned close to a fence. If it's being used as more of a feature, however, a contrasting colour will really make it stand out. I used Cuprinol Shades in County Cream. A word of warning, though: if you're not keen on painting, persuade someone else to finish this project for you. It's very tedious, especially as you'll need to apply at least two coats. If building another obelisk, I'd consider painting all the components before assembly. Alternatively, you could thin and spray the finish, though you're likely to waste quite a lot of paint if you do end up choosing this method.



1 Lay two of the rails across the legs to estimate the spacing. Around 200mm looks about right



2 If the timber looks too heavy and clunky, reduce the size of the leg material with a thicknesser



3 Use a board to set out the angle of each frame – this should be about 82°

4 To make the jig, screw a piece of MDF to battens placed either side of the legs, checking the angle

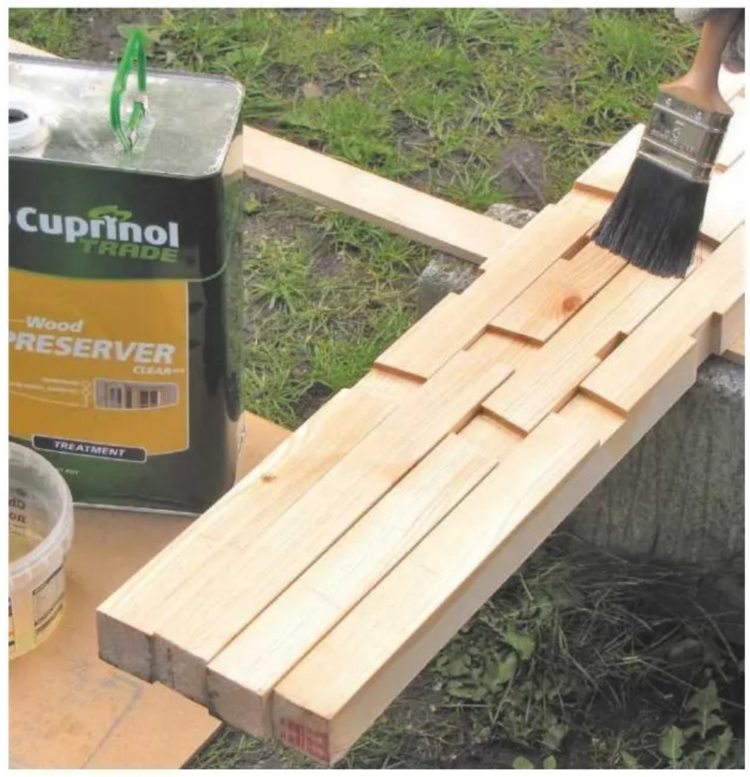
5 Fix the second piece of MDF so that your chosen router bit cuts the exact housing width required

6 Cramp the jig in position and make a test cut. Check the rail fits snugly and adjust the jig if needed

7 Align the marks on the legs and rout housings 6mm deep, keeping the router against the MDF edge

8 Slide a rail across the housings to keep the legs aligned while you move the jig along for the next cut

9 Saw legs to length, with compound mitres at the bottom. Sand after routing and remove the arrises



10 If using PAR timber, brush on two coats of a suitable preservative, such as Cuprinol Clear

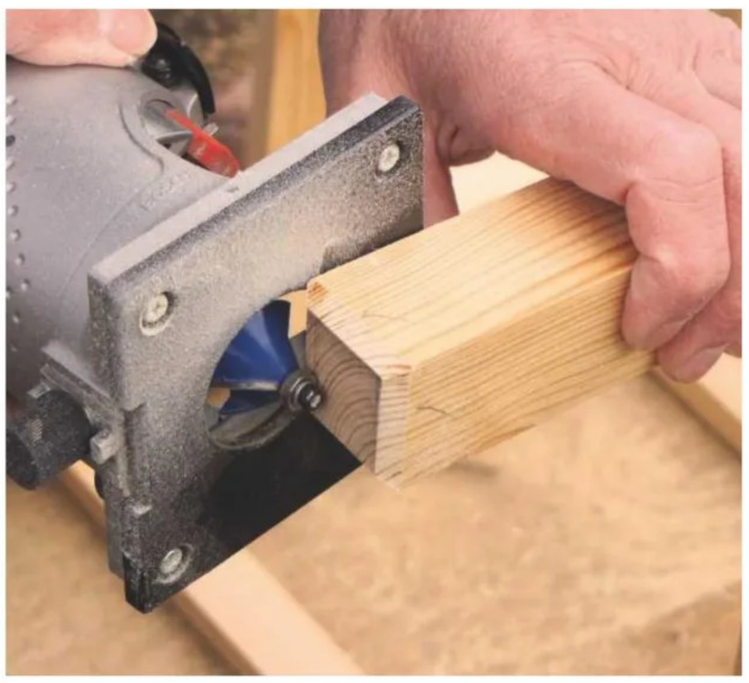
11 Cramp a pair of legs to the bench so they meet at the top. You can then mark the length of each rail in turn

12 Set the mitre saw blade to crosscut at 82°. You can then cut each rail exactly to length

13 Drill pilot holes at both ends of each rail, then screw to the legs. Fix top and bottom rails first

14 Once two opposite frames are assembled, join them together with the remaining rails

15 Using a block plane, trim ends that may be slightly proud, then sand the edges so they're ready for finishing

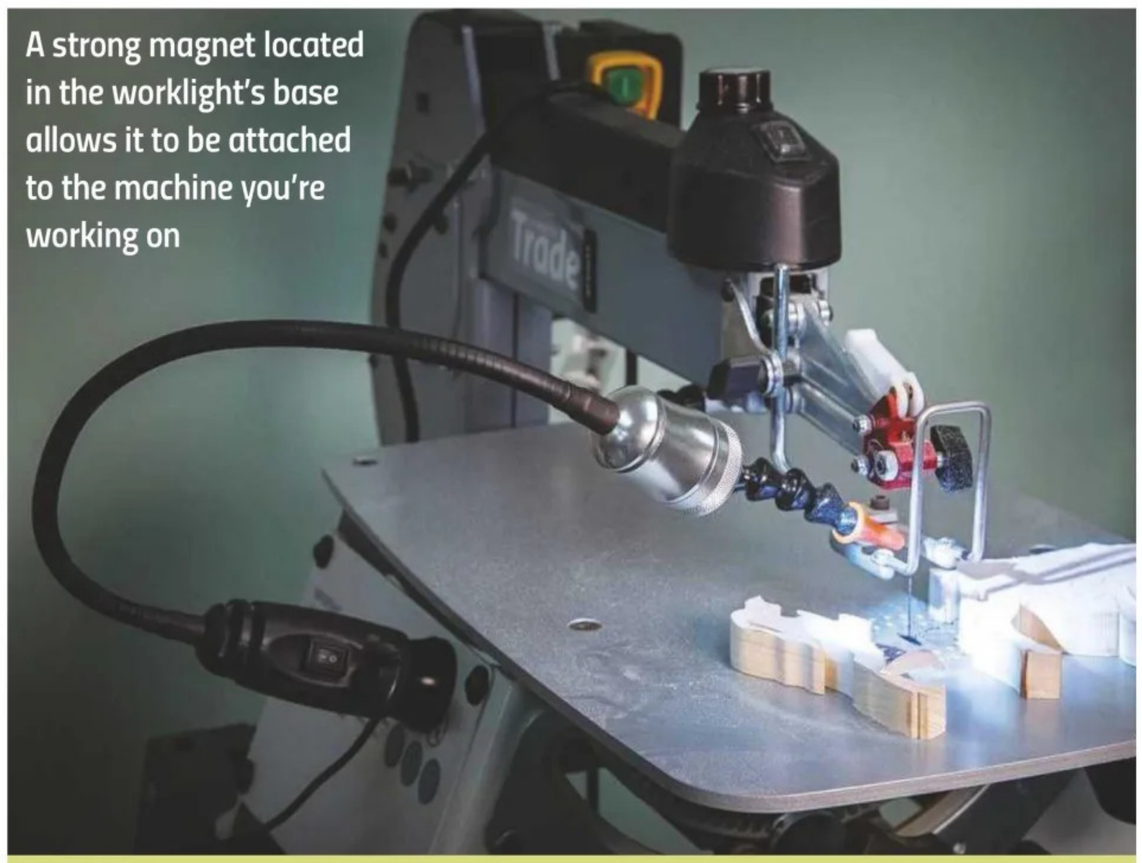


16 Carefully run a chamfer around the end of each leg, using either a small router or block plane

17 Trim upper ends of the legs level if necessary, taking care not to split the wood

18 Brush on two coats of a suitable exterior paint, such as Cuprinol Shades – spraying is much quicker!

19 To complete the trellis, add a decorative ball or tapered finial, glued into a cap that tops off the legs



A strong magnet located in the worklight's base allows it to be attached to the machine you're working on

USEFUL KIT/PRODUCT
AXMINSTER WORKSHOP 5W LED MAGNETIC WORKLIGHT

Localised lighting is particularly useful in the case of small machines such as bandsaws or scrollsaws. If the light is cordless and easy to move from one spot to another, then it's a bonus. This compact, solid LED magnetic worklight from Axminster's Workshop range features a strong magnet at one end, allowing it to be placed anywhere on a steel or iron surface; while at the other, the head contains 5W LEDs, which are activated by a slider switch that provides either a powerful, intense spotlight or widely diffused pool.

There's a range of power options available – either via three AAA batteries (not included) or plugging directly into a mains/USB socket – note: 3 pin mains adaptor and USB lead are supplied.

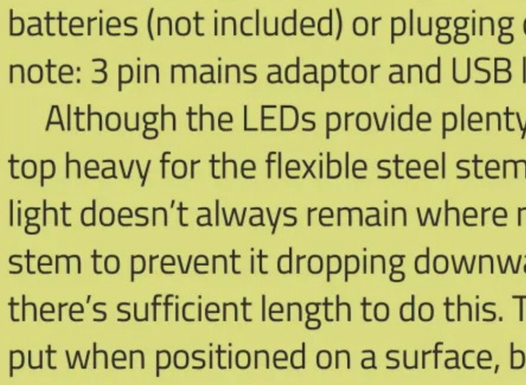
Although the LEDs provide plenty of illumination, the head is slightly top heavy for the flexible steel stem when fully extended. This means the light doesn't always remain where needed, so you need to loop head over stem to prevent it dropping downwards. As the device is 400mm overall, there's sufficient length to do this. The magnet is powerful enough to stay put when positioned on a surface, but if you'd rather fix in place, a back-up steel 'C' clamp allows you to attach it to a shelf or work table, for example.

Conclusion

As the beam can be refocused, this magnetic worklight is ideal for detail work. Bright in use, compact in size and very versatile.

SPECIFICATION

Typical price: £29.98
Web: www.axminstertools.com
RATING – PERFORMANCE: 4 OUT OF 5
RATING – VALUE: 4 OUT OF 5



The alloy lamp head can be adjusted and positioned accordingly

This handy worklight features a flexible steel stem, which can be bent into position

90mm long and 20.5mm wide, this third scale bevel-up smoothing plane is fitted with an A2 tool steel blade

USEFUL KIT/PRODUCT
VERITAS MINIATURE BENCH PLANE

If you've always lusted after a full-size Veritas plane but couldn't justify the high price tag, maybe here's the answer. Another addition to their growing range of diminutive hand tools, this plane is a third scale version of the bevel-up smoother, which would currently set you back nearly £300. With a cast stainless steel body, it's just 90mm in length and 20.5mm wide. The 16mm wide polished blade is from A2 tool steel and comes with a finely ground 25° bevel. This seats neatly on the bed, a tiny hole locating over a Norris pattern adjuster, providing lateral as well as depth adjustment. The cast lever cap secures the blade with a thumbscrew. Setting blade depth is a tad fiddly even with small hands, but it's quite possible.

Conclusion

Fitted with polished bubinga handles, this plane isn't only for display purposes. You may struggle to find a use for it, but at least it functions properly! I managed to get some fine shavings without even honing the blade. Like the grown up Veritas tools, it's really well finished and supplied in a fitted leatherette box. It's a delightful little tool that's bound to make any woodworker smile.

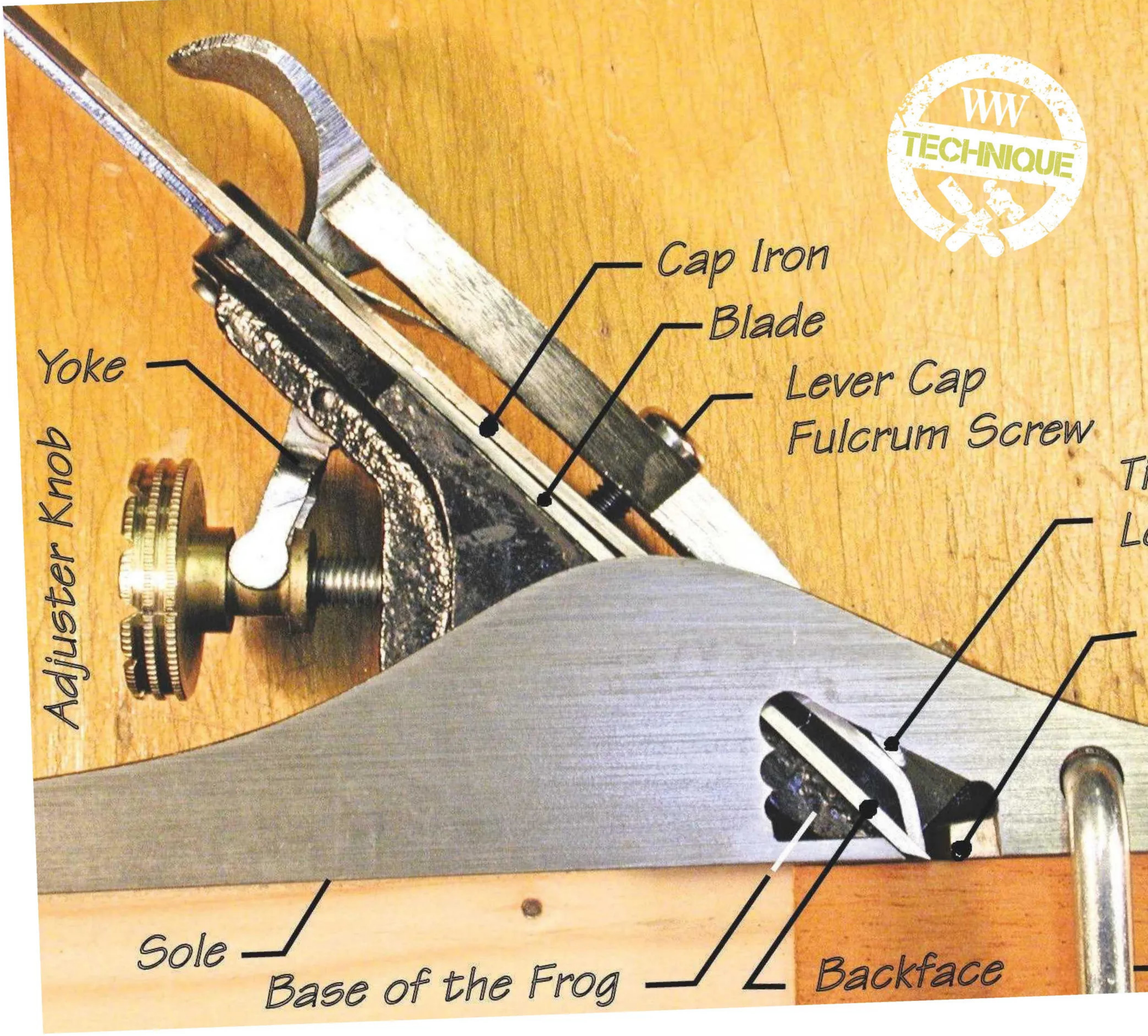
The miniature bench plane is a delightful little tool that's bound to make any woodworker smile

I managed to get some fine shavings without even honing the blade

SPECIFICATION

Typical price: £59.98
Web: www.axminstertools.com
RATING – PERFORMANCE: 4 OUT OF 5
RATING – VALUE: 4 OUT OF 5

The plane is supplied in a French-fitted leatherette case



ANATOMY OF A PLANE

Jeff Gorman dissects a plane to see what the 'chipbreaker' really does

1 I've made a jig that lets me check the cap iron's fit while under pressure

It was around the end of the 18th century when 'back irons' began to be screwed onto the 'irons' of wooden 'bench' planes. I was taught – many years later – to call them 'cap irons', but some people, including many of my online contacts, call them 'chipbreakers' because they see that as their intended purpose.

A wooden bench plane's deep-throat construction actually makes it impossible for the user to closely observe how the irons work together. But this hasn't prevented people from writing very similar and quite dogmatic accounts of what happens as a shaving is peeled from a workpiece.

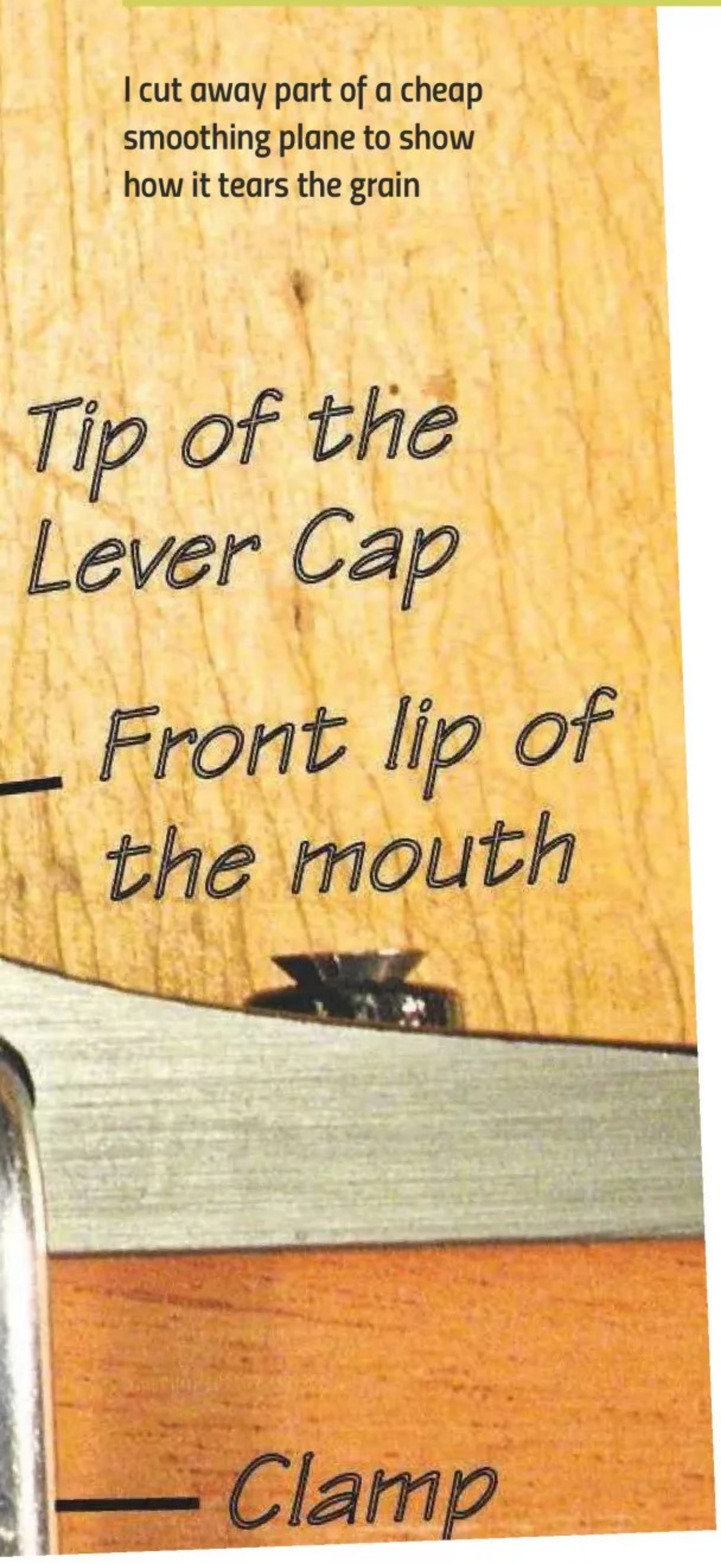
In his book, *Tools for Woodwork*, Charles H Hayward, describes the splitting action (see **photos 3** & **4**), then goes on to say that the back iron "breaks the shaving almost as soon as it is raised. Being thus robbed of this strength, the shaving can't lever up the wood in front of the cutter, and a split is thus avoided."

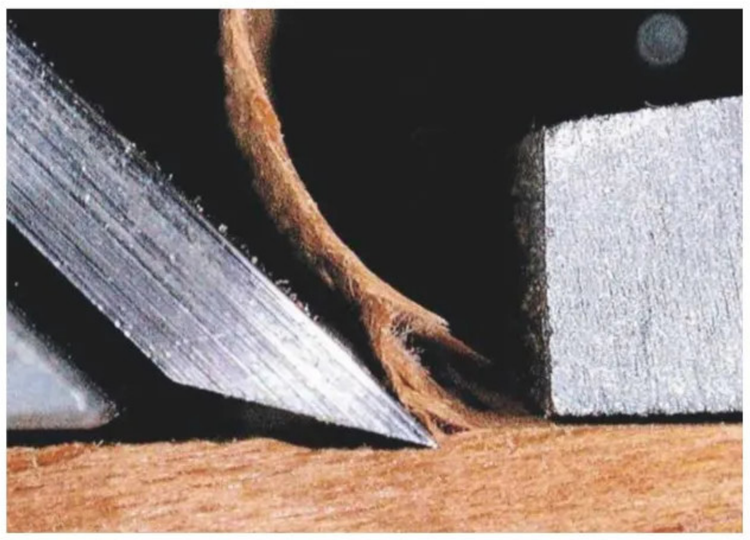
I've never understood this, so I recently bought a cheap, Bailey-pattern smoothing plane and used close-up digital photography – a modern-day magic that was not, of course, an option for Hayward – to get a slow-motion look at what actually happens. The only limitation imposed by this photographic experiment was that I had to set the plane to make shavings thicker than we'd usually use. However, the statement I'm querying can only apply to shavings that are thick enough to act as a rigid beam.

UP CLOSE

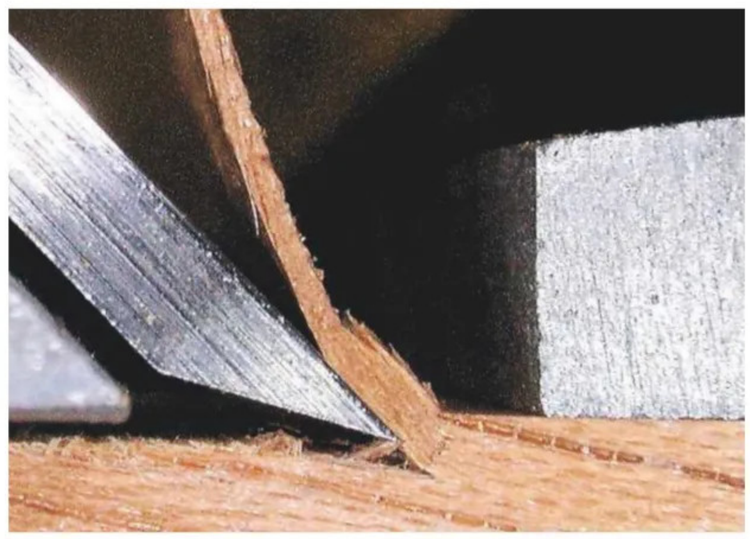
Removing part of a flank on a cheap smoothing plane has allowed me to use a digital camera to get a magnified view of this double-iron's action. The plane is fixed to a support that's secured to the base of a camera stand. I used the screw of a cramp head to feed the workpiece along the plane

I cut away part of a cheap smoothing plane to show how it tears the grain

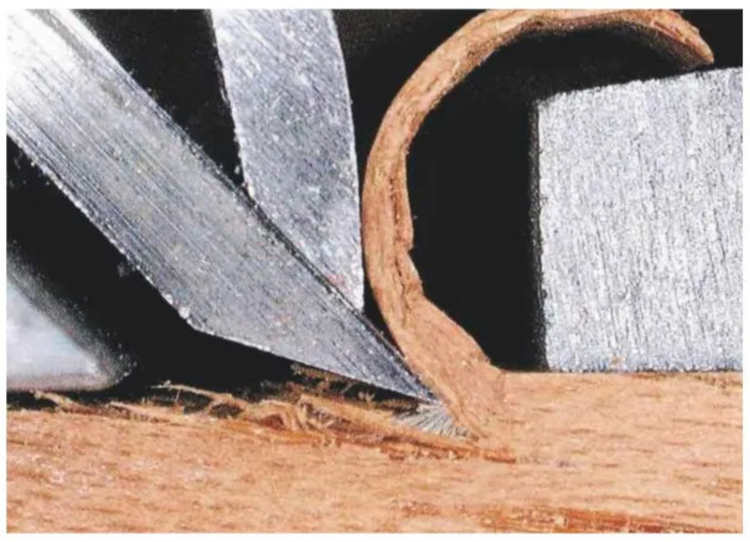




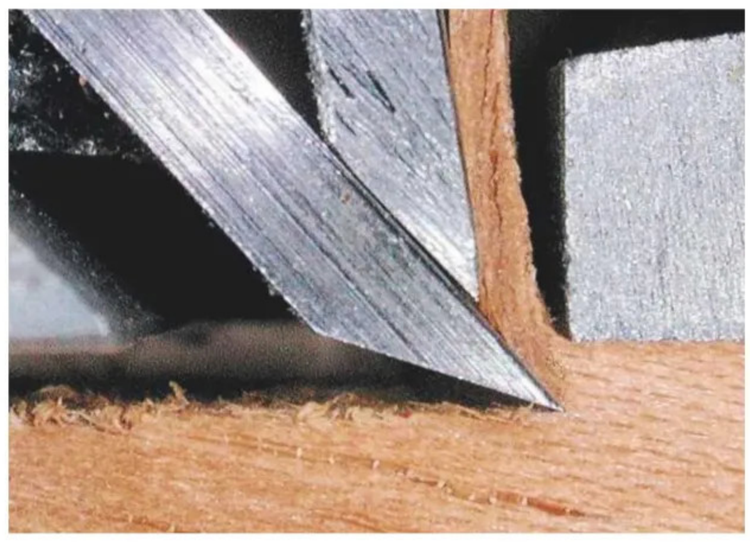
2 Moving to the right, cutting with the grain, the edge has cleanly severed some fibres while the back face pushed them upwards



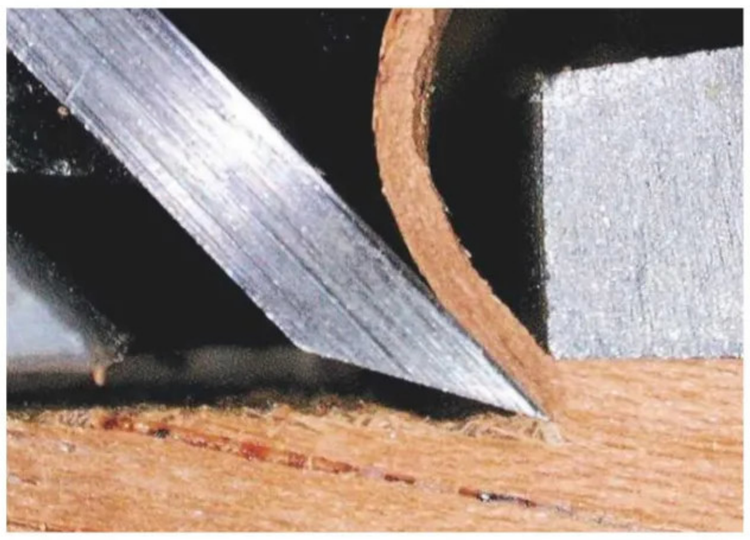
3 Here I'm planing against the grain without a cap iron; note the stress marks at the shaving's root



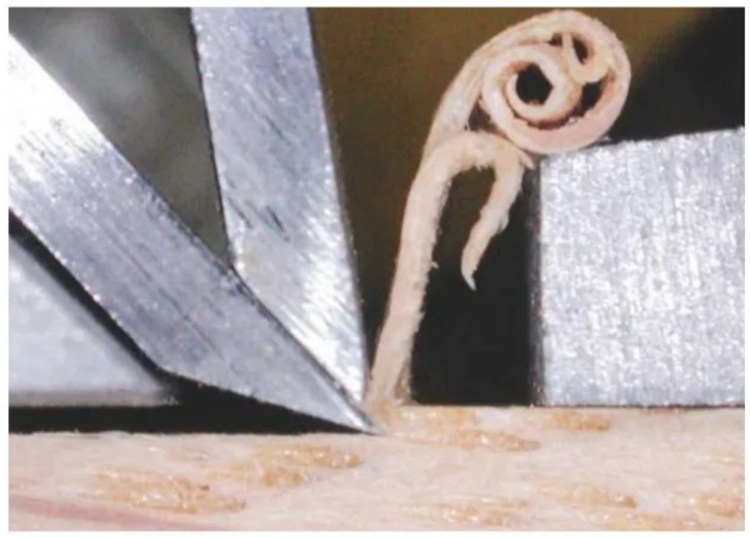
4 Planing against the grain using a cap iron. Note the torn surface, stress marks and kinks in the shaving



5 Planing against the grain, using a cap iron and fine shaving aperture



6 Planing against the grain without a cap iron and very fine shaving aperture



7 Planing oak against the grain with a very finely set cap iron

Cap iron action

In **photos 3** & **4**, you can see a wide space between the front lip of the mouth and cutting edge – the shaving aperture. The cap iron's 'setback' was about 1.6mm from the cutting edge. In this situation, the blade's edge is acting as a cleaver and has created a split.

As the fibres, which in this example lie at about 10° to the workpiece edge, were raised, they were turned clockwise through 35°. Here the split reached the point where after less than 1mm of further travel, the shaving broke, leaving behind a torn surface.

In both close-ups, the roots of the shavings show marks where they're fractured, telling me that, cap iron or no cap iron, shavings are ruptured only by the blade itself. If you follow the advice to set the cap iron and blade edges very close (**photo 7**), a rather different shaving is generated. It looks to me as though fibres couldn't be lifted because they were pressed downwards by the cap iron's tip. One penalty is that the plane becomes harder to push and shavings are therefore more likely to be forced between the cap iron and back face.

In the wide-shaving aperture (**photos 3** & **4**), you can see the splitting that causes tear-out. However, if the fibres can't be lifted, they can't be split. In **photos 5** & **6**, the mouth's front lip has been reset so close to the edge that it positively holds down the fibres immediately in front of the edge. Instead of acting as a cleaver, the sharp edge does a proper surgical job.

Best practice

When aiming to avoid tear-out on tricky grain:

- Set the cap iron edge about 1.5mm from the cutting edge;
- Use the finest practicable cut;
- Adjust the shaving aperture to comfortably allow the passage of a 0.1mm – 4thou – feeler gauge when inserted parallel to the blade.

Of course, there are times when progress is more important than finesse and a very fine aperture can be inconvenient.

If you care to invest in a thicker blade, the necessary method involves inserting a new blade and resetting the frog to create the above shaving aperture. For run-of-the-mill jobs, revert to the wider shaving aperture achieved when fitting a standard blade.

Cap iron lore

Because the adjustment yoke operates via the cap iron, too much setback can make the edge project so far beyond the sole that the adjuster knob can't wind it right back. Given half a chance, a shaving will try to climb up the back face and jam between a badly fitting cap iron and blade. To effectively check my filing of a cap iron's contact area, I simulated the actual working situation by making a simple jig from a lever cap and a piece of 50 × 25mm.

Also check the contact area at the lever cap tip. Unless the tip rides on the crest of the cap iron's curve, the operation of the blade-setting knob can become erratic.

One last point: 'low-angle, bevel-up' bench planes have a cutter geometry that's very similar to bevel-down planes. They have a reputation for leaving an excellent finish… and don't employ cap irons!

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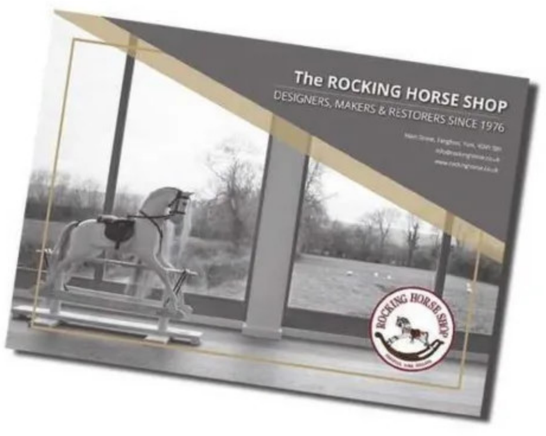

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SQUARING UP

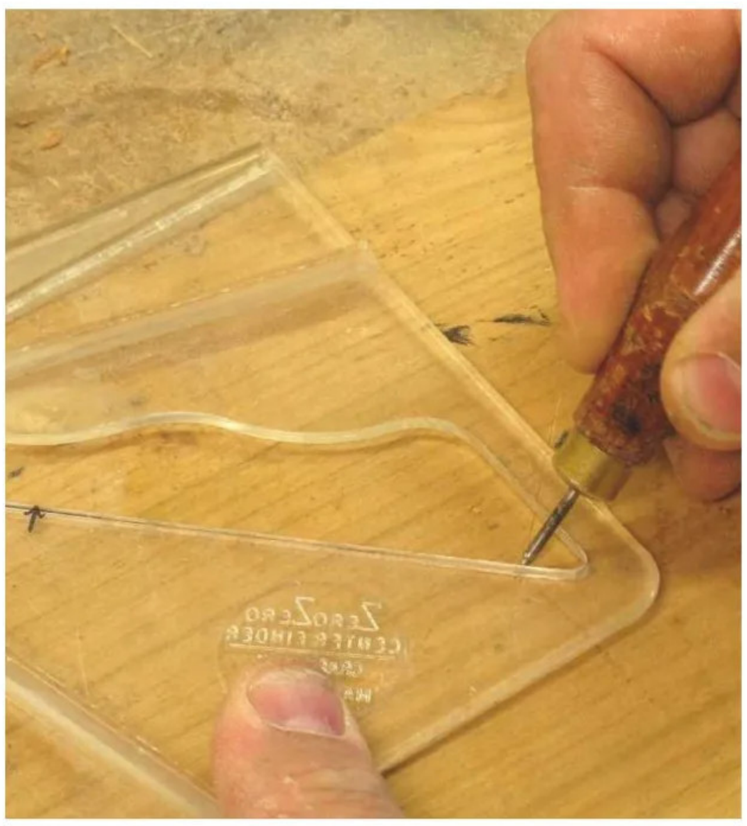
Les Thorne takes a square blank of American cherry and turns it into an attractive winged bowl

A common phrase is that "woodturners only make round things," which is something I hope to dispel in this article. When thinking of a bowl, the majority of people imagine a round one, so although the centre part will match their expectations, the outside is left square. Turning square stock is more dangerous than turning round, so this brings a few safety considerations to the fore. It's important to keep an eye on your fingers throughout the turning process and maintain concentration at all times.

Project size really depends on your lathe's stability – square timber will obviously be more out of balance than its round counterpart, so picking the right timber is paramount. Don't use a blank that's half sapwood and heartwood as this will accentuate problems with vibration. You want to choose a timber that's not too brittle – I found this out to my cost when turning the project shown here; this involved having to think on my feet and modify the design slightly due to the wood letting me down. I always thought that air-dried timber was better than kiln-dried, but apparently not!

Having a lathe with electronic variable speed will aid the turning process, as it'll allow you to increase the speed so that it's rotating as fast as possible. This always makes intermittent cutting much easier. In the case of square-turned bowls, there's many design variations – have a look online for inspiration – although the making process is similar to that shown here.

1 Choose a piece of American cherry or similar, measuring just under 200mm square and cut so that it's dead square. Any curly grain on the corners may cause a problem during turning – we'll have to see

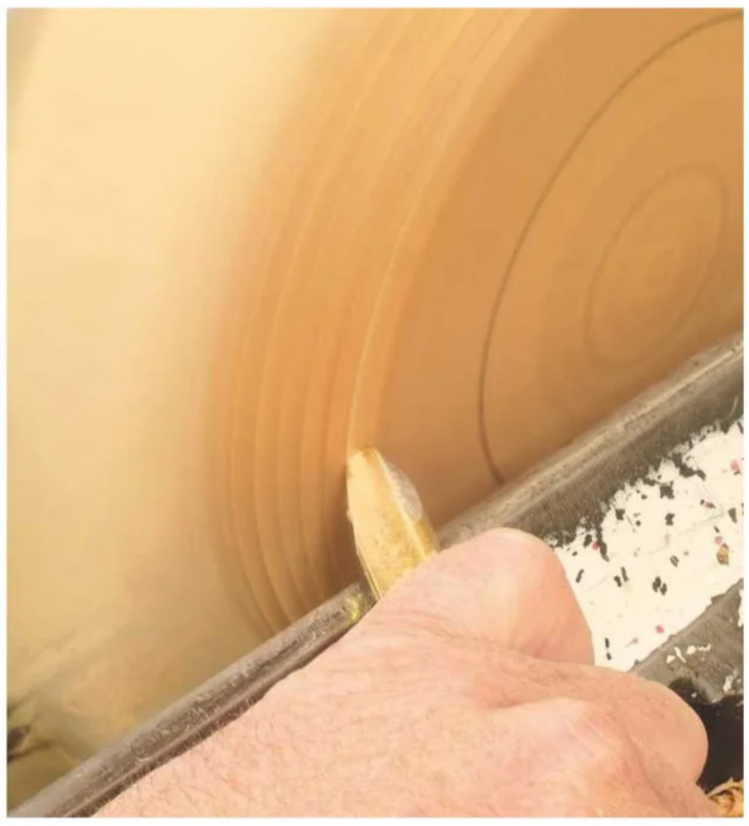


2 Using a bradawl will allow you to achieve the best accuracy while marking the centre – this is better than a pencil. A cheap plastic centre finder is perfect for this job

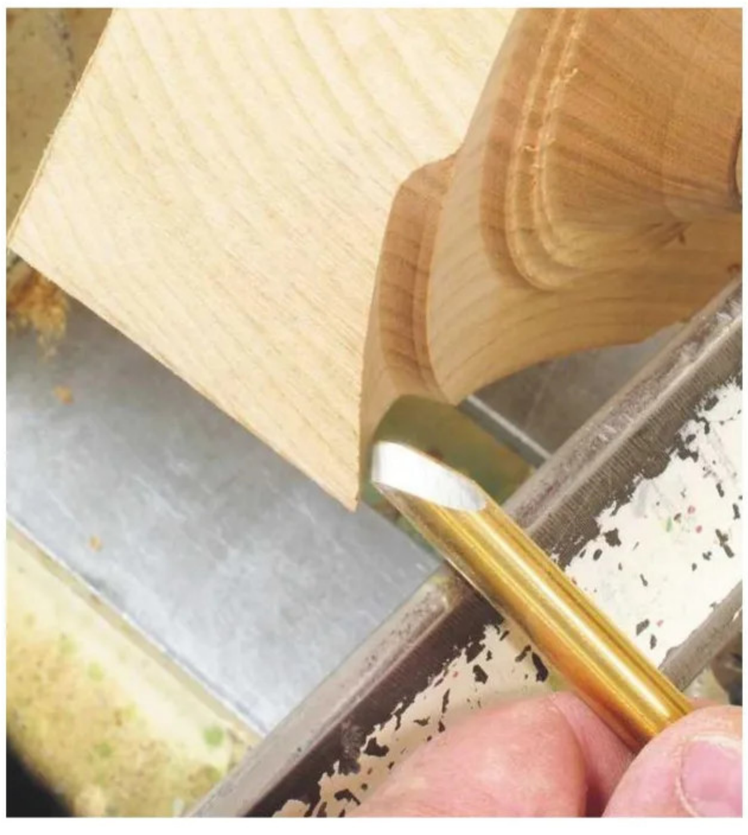
3 Most of the turning can be carried out using just three tools: 10mm bowl gouge with long grind; 6mm bowl gouge with traditional straight grind; 10mm gouge with the bevel angled at 60°

4 Watch those fingers! Here, lathe speed is set at around 1,000rpm, so anything that makes its way over the toolrest is liable to injury, so be careful!

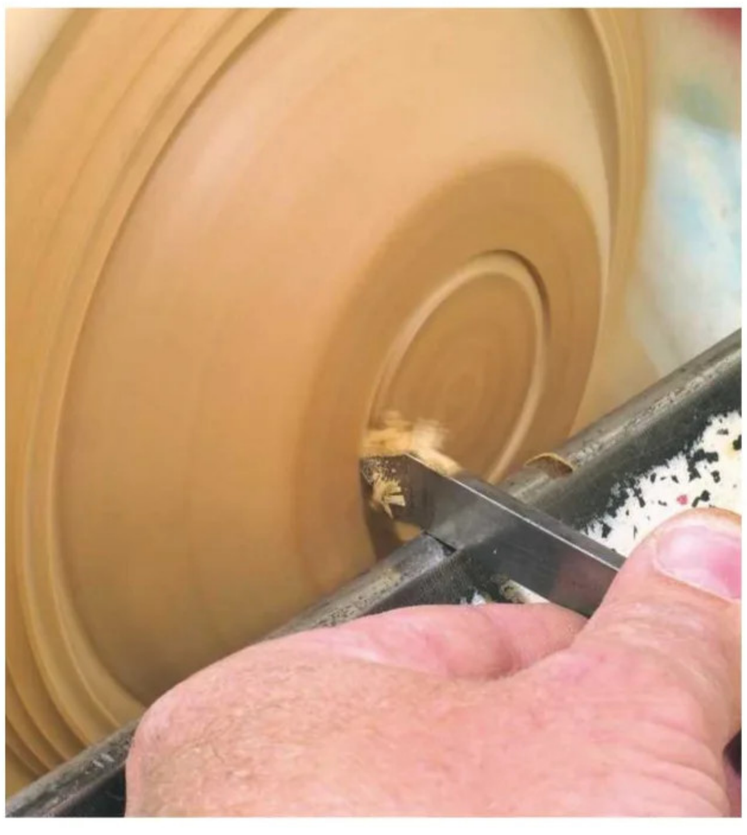
5 The shape will need to be worked in two ways, hence the need for a long-grind bowl gouge. To form the shape on the wings, work the tool in from left to right



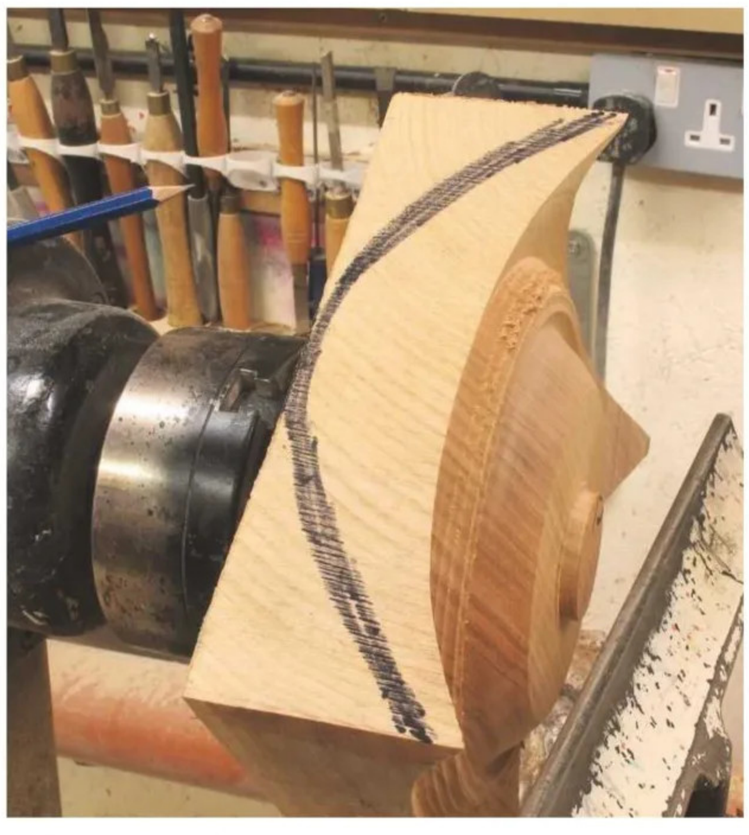
6 Once clearance has been established, you can work the bowl shape from right to left with the tool's bevel held on the wood. This is the same method used when forming a normal bowl and the secret here is to forget about the square part



7 The gouge's angle of presentation is very important. Here I'm demonstrating how the bevel lines up with the direction of cut

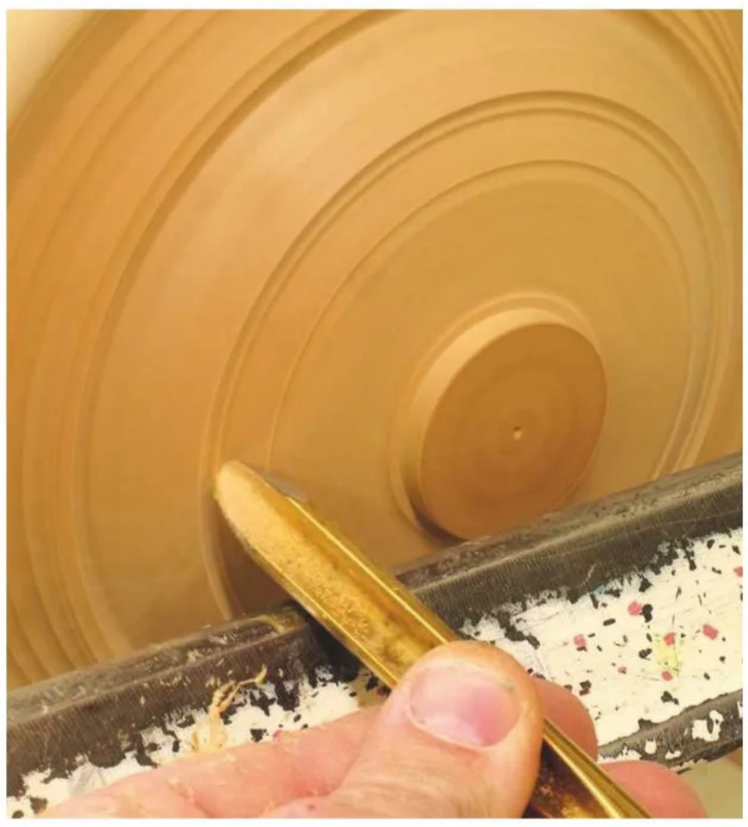


8 Once you've marked up the size required, forming the chuck holding spigot is a simple matter of just cutting in around 6mm with a parting tool. Opting for a foot instead of a recess will help with establishing the bowl's shape



9 Here's a rough outline of the shape I'm trying to achieve. Drawing the outline gives an indication as to where you're going

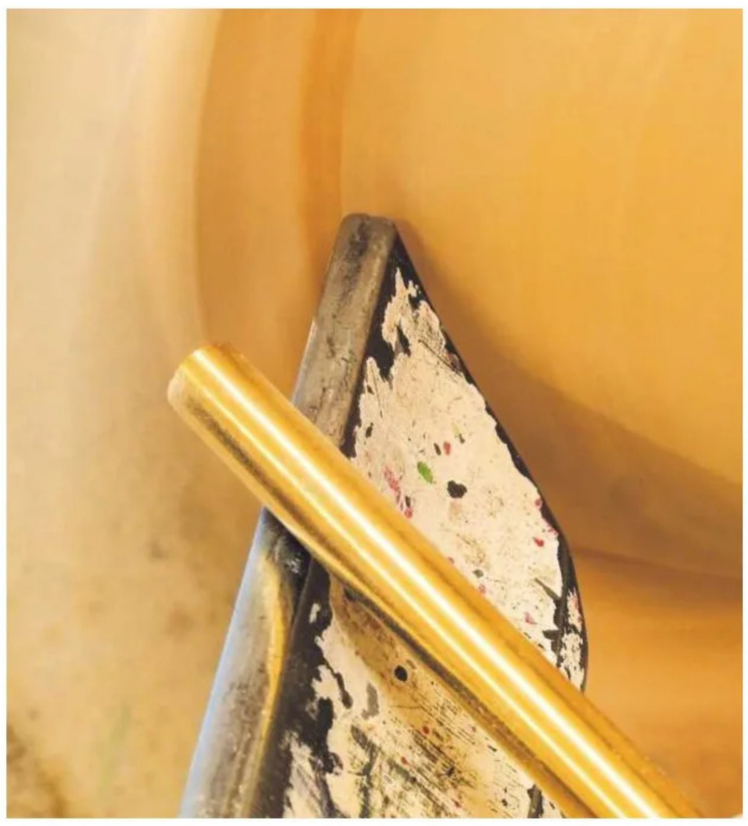
10 Drawing a thick line – as I've done here – allows you to see it as the lathe spins. To produce the desired shape, the tool's bevel needs to follow this line around



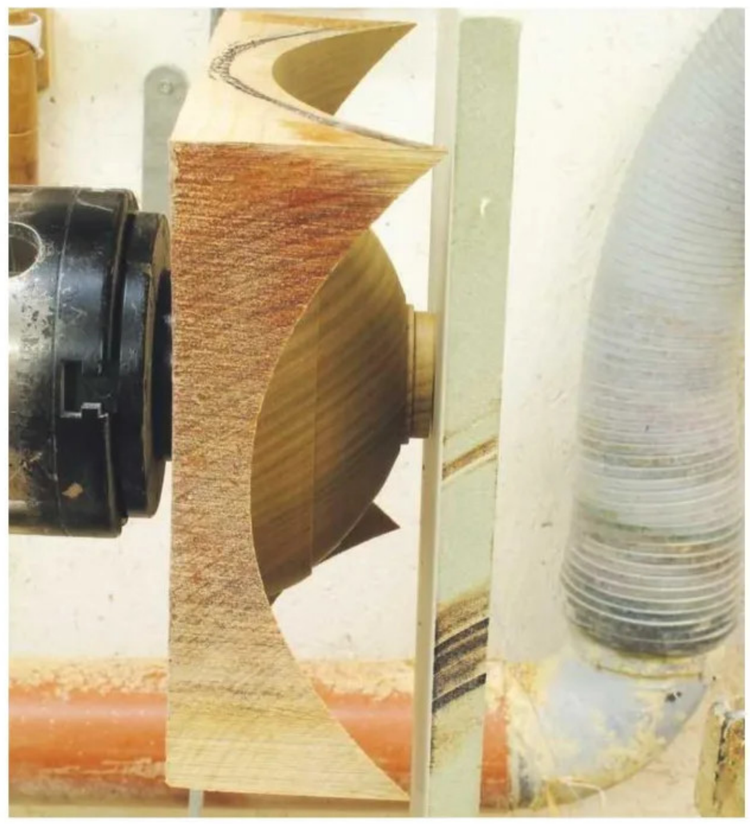
11 I usually prefer to carry out final shaping of the bowl exterior using a 6mm bowl gouge, but as I couldn't get the toolrest close enough, the strength of a bigger tool was therefore required

12 I find it's best to work each shape by doing a bit on one side, followed by a little on the other. My right hand has to go towards the floor during this cut, which raises the cutting tip and keeps the tool's bevel in contact with the wood

13 I've managed to position the toolrest inside the wings, but the problem now is that I'll have to work right on the blank's end. Ensure everything is tight here as if it moves, you'll break the piece



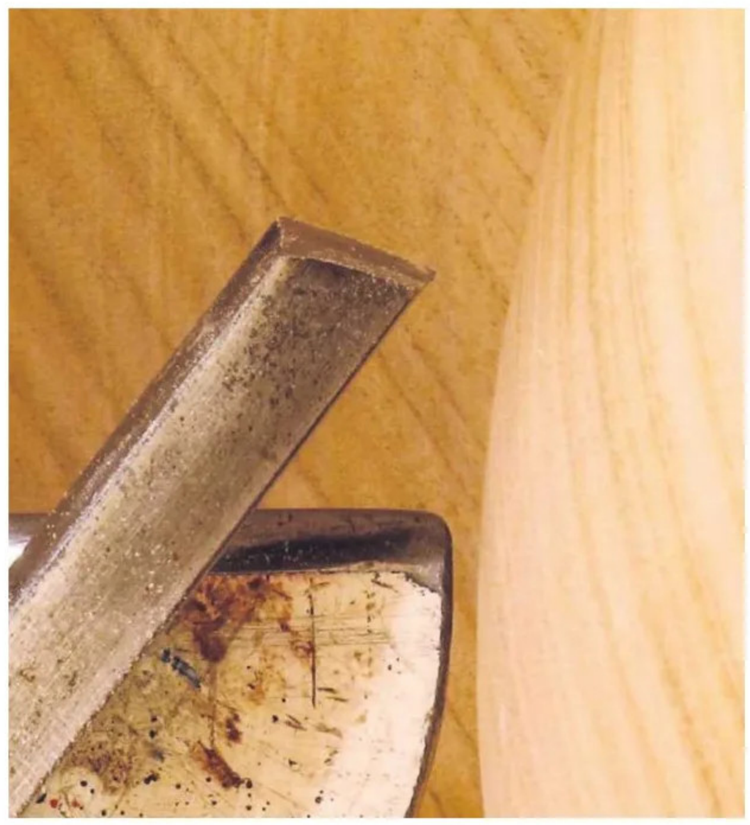
14 Set lathe speed to 1,800rpm for the final finishing cuts. This technique is so much easier at a higher speed, but if you don't feel safe, reduce it and do the rest of the sanding off the lathe



15 There's a variety of designs you could choose here, such as having the bowl sat on its four corners. Due to the timber's brittleness, however, I decided to sit the bowl on the central foot

16 It's difficult to achieve a good finish, so I decided to revert to using the 6mm bowl gouge with a light bevel rubbing cut, which will result in a good, sandable finish. Vibration may pose a problem as you near completion

17 I like to have a sharp punctuation point between shape transitions. To get into this tight spot, I changed to my signature gouge, which has a sharper bevel angle of around 40°

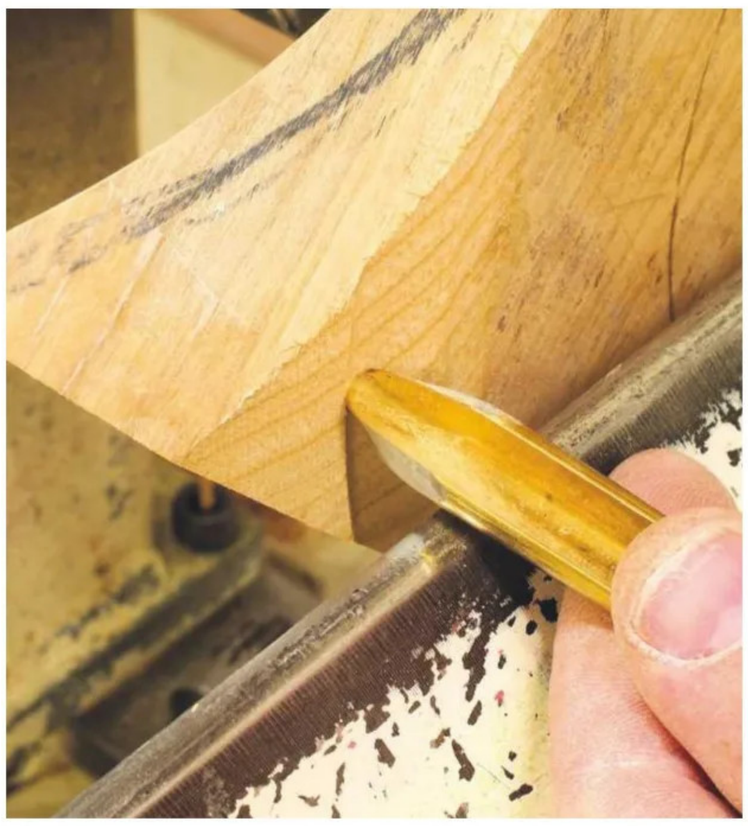


18 I couldn't quite achieve the angle required to carry out the final bit of turning using the gouge, so I changed to a diamond-shaped point tool. You only have one chance at this, so make sure it's positive

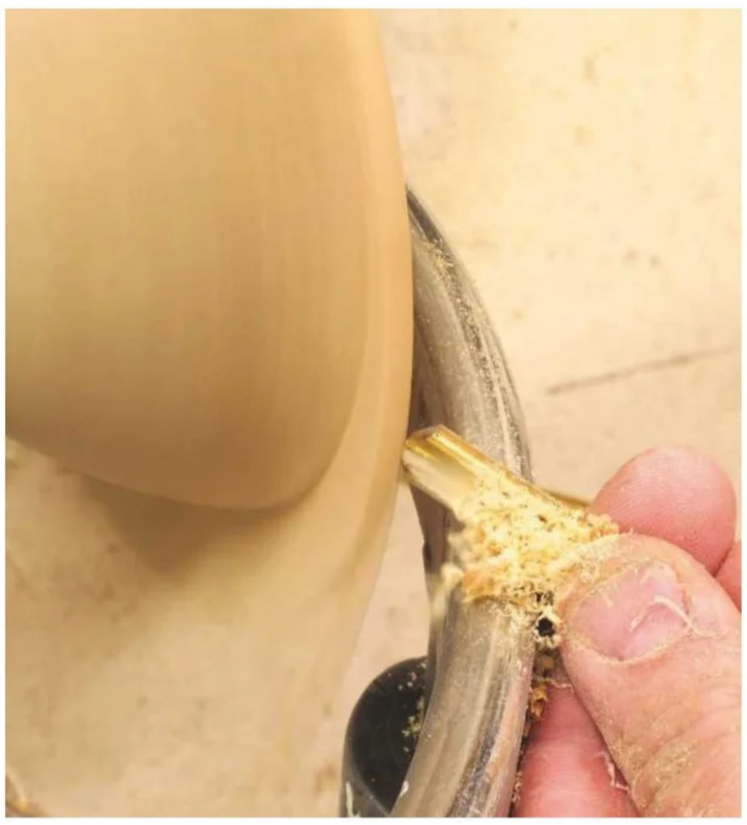
19 Sanding the piece's underside isn't so easy as you have to consider the safest and most effective place to sand. I found that the majority of this had to be completed with the lathe switched off

20 Next, mount the bowl in the chuck jaws. Mark the bowl's diameter and position the toolrest so that it's straight across the front, which acts as a guard

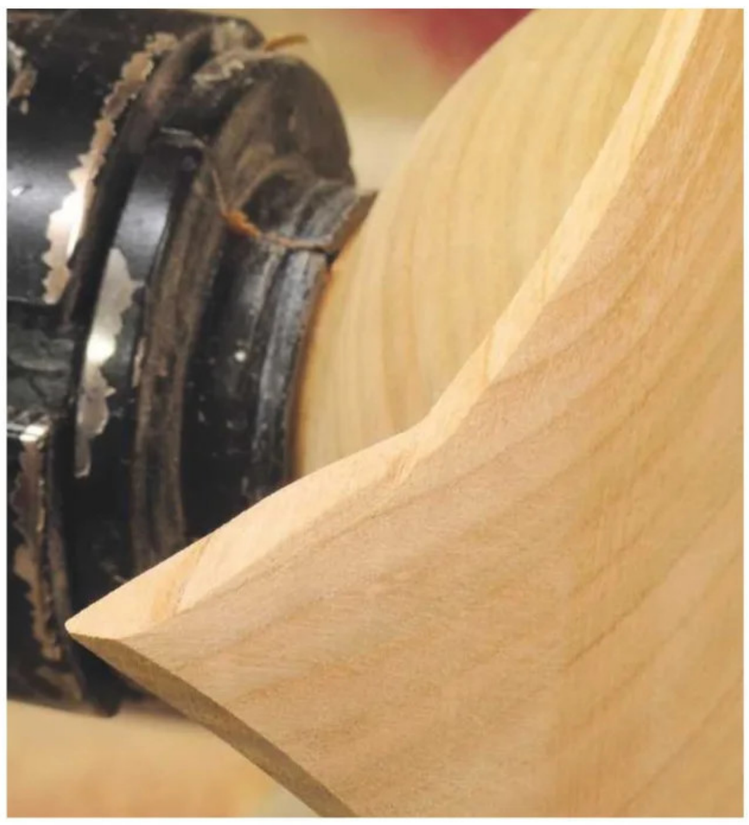
21 It's absolutely imperative to wear personal protection equipment when turning, especially on pieces such as this. Grip the tool firmly and ensure your hand is always behind the toolrest



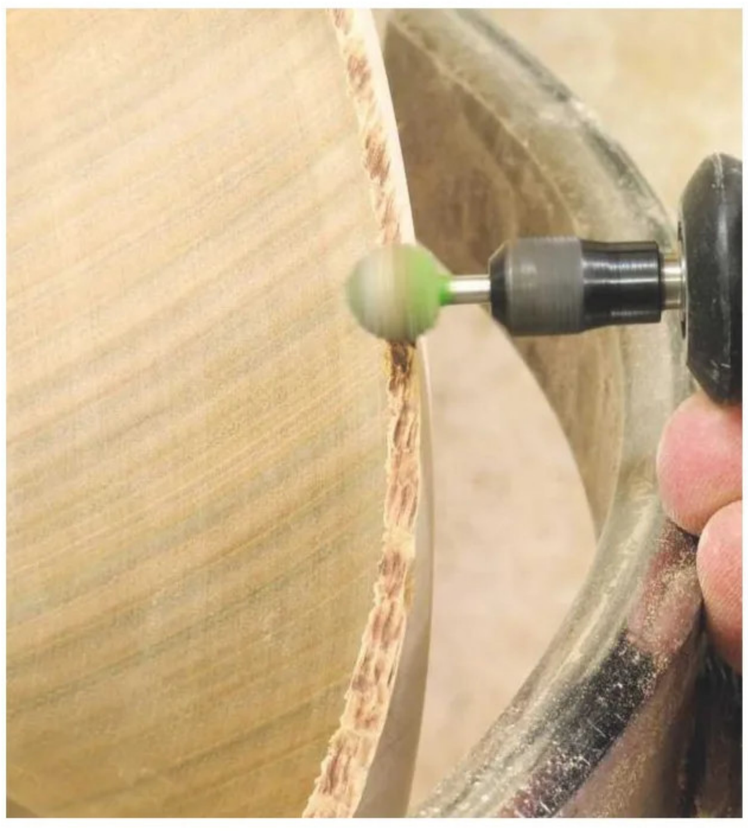
22 Flute position is critical here: if too far open and pointing upwards, you run the risk of catching the unsupported right-hand cutting edge and breaking the piece. The correct orientation is shown above



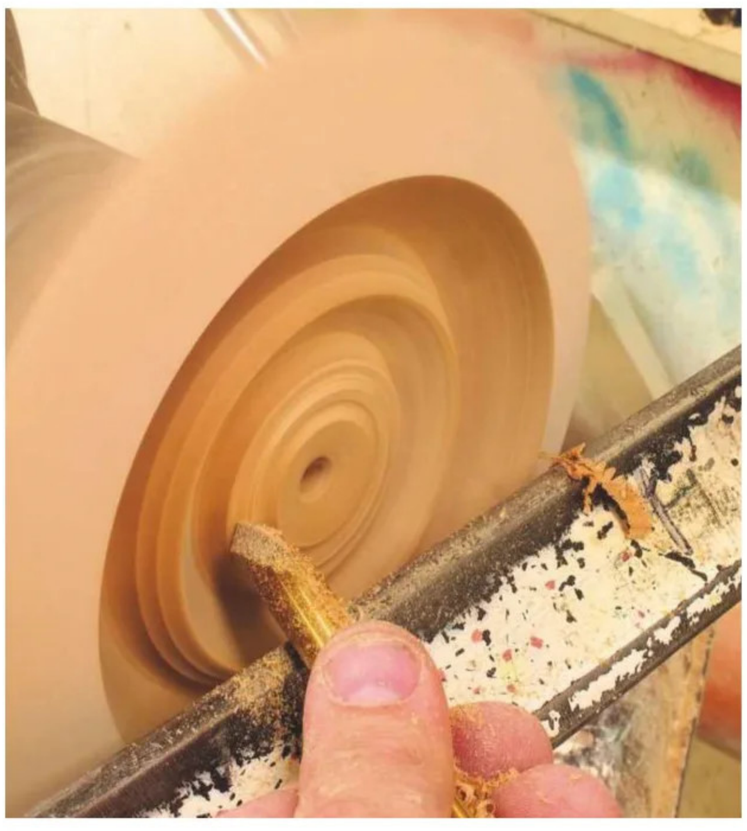
23 As the piece gets thinner, having too much bevel in contact with the wood will become a problem. Using the smaller bowl gouge in pull-cutting mode puts less pressure on the bowl's surface and causes less vibration



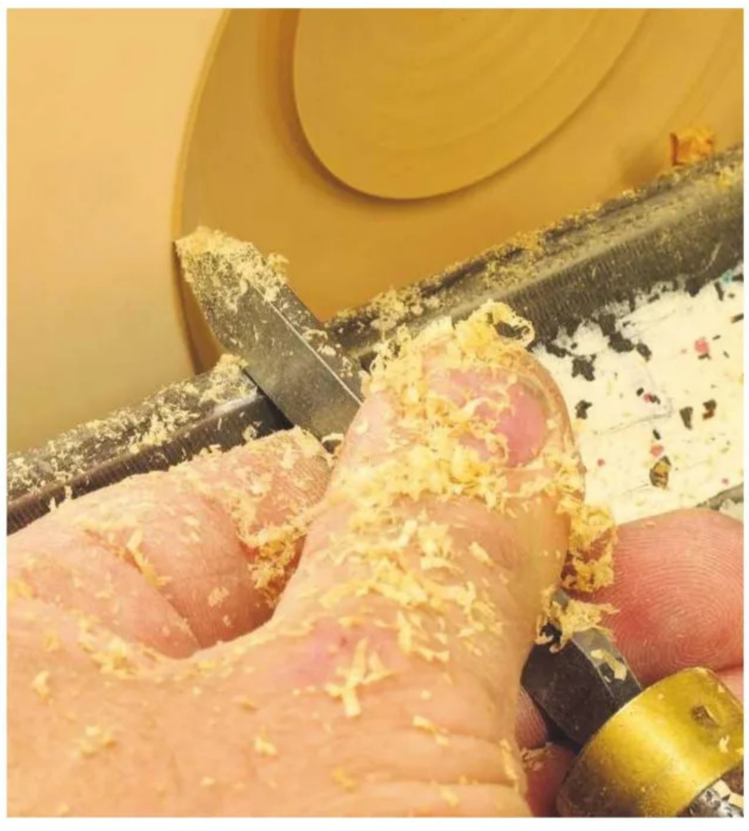
24 DISASTER! As you can see, a piece has broken off my bowl, but I'm going to blame the brittle timber! In such cases, you need to think about what to do – decreasing the square will lessen the bowl's overall impact



25 Sorted. I made a feature of the fault by adding some texturing on the edge using a pineapple burr followed by a light burning with a small blow torch. This should create an interesting contrast with the natural wood, and nobody will know!



26 Approach the hollowing just as you would when working on a normal bowl. Work the shape down in steps with the majority of the cutting coming from larger to smaller diameter

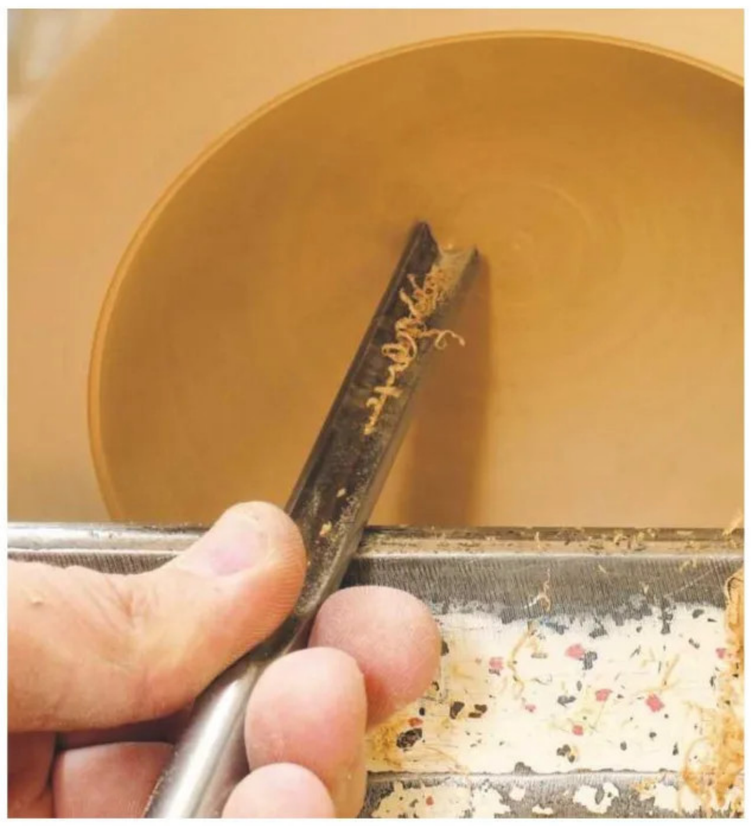


27 Creating a slight step with a freshly sharpened parting tool will add a little detail that breaks the transition between the rim's upward curve and the convex curve into the bowl – good to know!

28 I like to finish the bowl interior in stages. I use the 6mm bowl gouge for all finishing cuts until the overhang becomes too great and causes vibration

29 Keeping the bevel in contact with the wood requires working the tool in the direction shown above. Start horizontal and as you go through the shape, raise the tool tip higher, then lower down as you near the centre

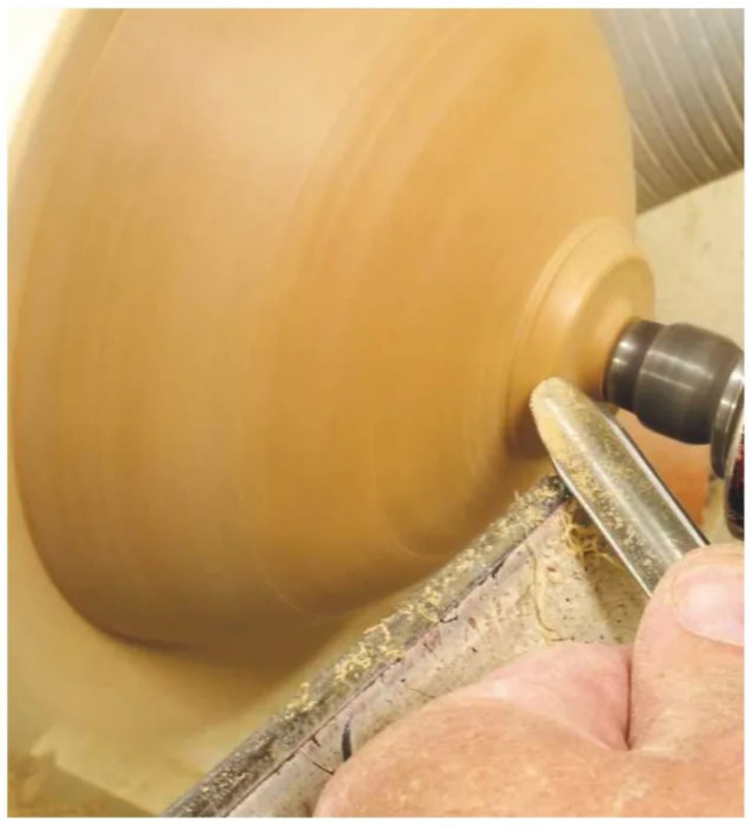
30 Take the wall thickness down to a fairly even 5mm. Using figure-of-eight callipers will allow you to measure this easily as they basically repeat the bowl's thickness on the end nearest you



31 The area right in the middle of the bowl can cause problems as sometimes it's not possible to get your normal bowl gouge in a suitable cutting position. The 60° bevel used here allows me to make small, effective cuts

32 You might find it difficult to power sand the interior. For safety reasons, I used a cordless drill in the 3 o'clock position, which kept everything out of the way. With the lathe switched off, sand the bowl's edge using an abrasive block

33 In order to remove the chucking marks, you need to remount the bowl. A dolly made from a piece of wood covered in bubble wrap, held in place with masking tape, will act as a friction chuck



34 Mount the bowl between centres with just enough pressure to drive the piece. Using a small tool, take light cuts to clean up and shape the bowl's foot

35 Remove as much material as possible while the piece is mounted on the lathe and take off any remaining timber with a carving or sanding tool – the Proxxon mini angle grinder fitted with a sanding pad is perfect for this

36 The completed winged bowl in American cherry should look something like this

NEXT MONTH

Coming up in the next issue...

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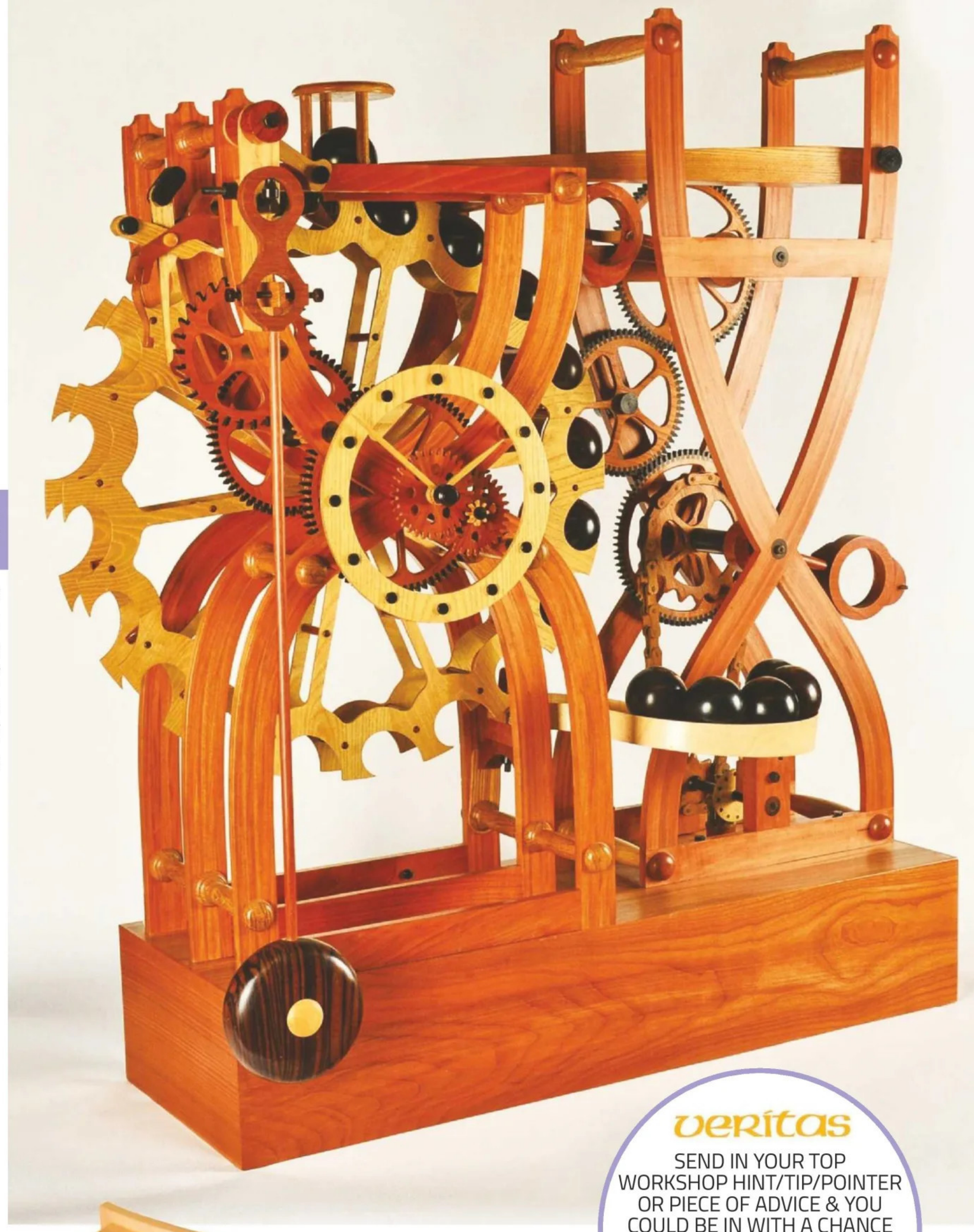

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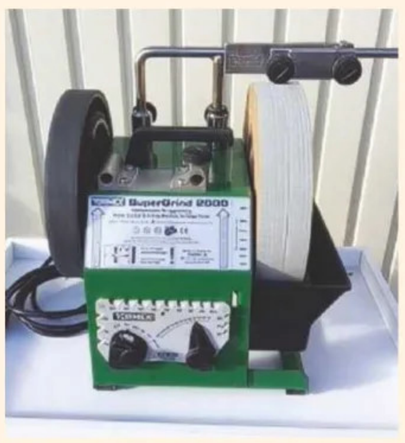

Tormek 2000 – precursor to the T-8, with the same basic features – in very good condition; only £150. Also, WoodRat WR5 – also in very good condition; £150
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Bosch GOF 2000 CE professional router – unused; £125. Also, antique Stanley 50 plough plane – boxed; appears to be unused; £100
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Sedgwick planer/ thicknesser – 12 × 9in, 50in table, cast-iron, single-phase, heavy duty machine, but not heavily used, in great condition; £1,250 – buyer collects
07976 352 408 / 01707 331 834 (Herts)

Self-contained workshop space to rent – 48sq.ft: 7'5 × 6'4 × 7'ceiling. Would suit hobbyist, musical instrument makers, etc. The space is within a larger open plan railway arch workshop in East London – home to friendly community of an inventor/manufacturer and two furniture makers; access to woodworking machinery. Eight-minute walk to Mile End tube station and adjacent to Cemetery Park. It's basic – no running water – but there's access to a washroom and toilet. Secure off-street parking and 24 hour access; £300pcm & £50 key deposit
darcyturner180@hotmail.com (East London)

Axminster AWVSL 1000 lathe – no chuck – with 10 various chisels, tailstock chuck and Axminster CH39FE magnetic light; £450 (ONO)
01892 770 921 (Cheshire)

WANTED

Tyre for Tormek 2000/T-8 drive wheel, or complete drive wheel
01793 771 898 (Wiltshire)

Kity combination machine (or similar) – must feature saw, planer, mortiser, spindle moulder, etc. Carriage paid
+087 2275266 (Ireland)

Australian-made Symtec woodturning lathe; in sound condition; must be complete with toolrest – excellent price paid
01454 260 395 (Berkeley)

Three-jaw chuck for mortiser attachment Kit K5. Attaches to planer cutterblock with left-hand thread – both 12mm
01302 817 889 (Doncaster)

Stanley No.1 plane & Stanley No.2 plane – one of each wanted by novice collector
01572 723 976 (Rutland)

Woodworking tools: planes by Norris, Spiers, Mathieson, Preston, Slater, etc. brass braces, interesting rules & spirit levels; top prices paid, auction prices beaten
01647 432 841 (Devon)

Woodworking hand tools, especially old wood & metal planes, wanted by collector. Write to Mr B Jackson, 10 Ayr Close, Stamford PE9 2TS or call
01780 751 768 (Lincs)

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TAKE 5

From a cremation urn that celebrates the importance of democracy to a dismantlable rocking chair with gentle sleek curves, the natural materials used in this month's selection exude beauty and showcase skill across many disciplines

1 Hand-carved and turned chess pieces in black ebonised ash and maple, by Paul Joshua – **@paul.joshua_** – all measurements match the standards set by the World Chess Federation (FIDE): "I consciously forgo copy attachments and instead meticulously check the measurements, shape and quality of each piece. The knight's head is carved by hand. In the final stages, the pieces are drilled out and completed by adding a brass weight. The wooden surface is finely sanded, oiled, and polished"

2 Seed cabinet with 40 individual drawers, by Anna Bertran – **@annafurnituredesign**. Made as a commission for Letham Plants – **@lethamplants**

3 'Peaking Twist', 2023, end-grain bowl turned from dry birch, painted with egg-oil-tempera, by Ulf Jansson – **@svarvulf**

4 'Tessen' rocking chair by Dane Sampson – **@gingerbeardwoodwork** – inspired by the work of mid-century Scandinavian furniture designer, Bruno Mathsson, and the shapes of Art Nouveau. American rock maple frame with cotton webbing upholstery and complex mortise & tenon joinery; dismantles into three pieces for easy packing and freight

5 'The Donald' cremation urn – maple body (stained black), French walnut interior with custom-made Twitter bird feet cast in yellow bronze. Designed and made by Chris Binns – **@chrisscottbinns** – for the ashes of the US Constitution – conceived while watching the events of 6 Jan 2021 unfold in Washington

Follow us on Instagram – **@woodworker_mag** – for regular magazine updates and posts

NEW

COMPACT MULTIFUNCTION WORKBENCH

Our brand new **UJK Compact Multifunction Workbench** allows you to work on a quality surface, wherever you are. Small enough to be stored conveniently under a permanent bench or transported to site, the versatile design provides a generous working area. The bench top is crafted from thick Valchromat and the frame from strong, laminated birch ply. Featuring a grid of 20mm dog holes ideal for utilising many UJK accessories, this bench will pair perfectly with all your UJK favourites.

UJK Compact Multifunction Workbench

Code: 109405 | **£229.98**

- Ensures projects are square when cutting, clamping or assembling
- Perfect for work on site or in domestic situations
- T-Track for hold downs, doubles as a 'going bar' when sawing
- Overall dimensions: L 785mm x W 465mm x H 160mm

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