WOODWORK | TURNING | TOOL TESTS | FEATURES

January 2024

The Woodworker

& Goodwoodworking

THE ORIGINAL & BEST SINCE 1901

HARP OF GOLD



Shaun Newman recreates the ancient lyre of Sutton Hoo



DOUBLE WIN



M POWER

SINGLE & DOUBLE-SIDED DIAMOND BENCH STONES – IN ALL 3 GRADES

Machine Mart

A CLARKE PEMBROKE II ECO-DESIGN MULTI FUEL STOVE – WORTH £958.90!



PLUS...

- WOODWORK FOUNDATIONS – PART 2: BOARD FLATTENING
- TURNED NARRA BOWL WITH INSET MOLECULAR STRUCTURES
- PALLASBOY IRON AGE VESSEL & WOODEN ARTEFACTS BY THE SEASIDE

www.thewoodworkermag.com

DHP 01 £4.99

Ironmongery Direct
Trusted to deliver

FAMILY MEMBER OF Manutan

Your project starts here!



Get what you need, when you need it with our latest catalogue out now!

- Over 18,000 products in stock, including top trade brands
- Minimum 5 year guarantee on all ironmongery
- Flexible delivery options to suit you, 7 days a week

Scan me

Request your FREE catalogue online:

IronmongeryDirect.co.uk



The 2023 'Harrogate' show attracted thousands of visitors over three days



Group Advertising Manager, Rhona Bolger, and avid woodworker, 92-year-old Ted



Professional Irish woodturner, Pat Carroll, demonstrated his skills throughout the show

Welcome

Welcome to the start of another new year here at *The Woodworker*, as we bring you the first issue of 2024! We've done our very best to present you with a January issue that entertains and inspires, and while the workshop may not seem like the most hospitable place at this chilly time of year, fear not – we've got you covered! Even if certain projects have to be put on hold until spring, there's still lots in store over the following pages, including a wide range of features, tests and technical pieces to keep you occupied until things warm up.

Shaun Newman's wonderful replica lyre graces this month's front cover, not to mention a host of other projects, covering general woodworking and woodturning, to name a few – take your pick!

Familiar faces & a few new ones

Since last month, the 2023 North of England Woodworking & Power Tool Show has been and gone, and what a weekend it was. Thank you to all who stopped by the stand to say hello and introduce yourselves; I have to admit that this is one of my favourite parts of the job and never fails to make my day. It was wonderful to see so many familiar faces – Gavin, Terry and Larry, in particular – as well as meeting lots of new ones, including long-term magazine reader and incredibly talented woodworker and woodturner, 92-year-old Ted, who's still very much practising his craft. Despite the fact he's been coming to the show for many years and known by many, this was the first time we'd met Ted, and in fact, my colleague was so taken with his turned pens and matching keyrings that she couldn't help buy one as an early Christmas present! While the photo above doesn't do it justice, the finish and shine Ted managed to impart on the Kirinite acrylic Stardust Series pen blank was a sight to behold!



Visitors were able to advantage of numerous show deals on various products and machinery and receive expert advice



One of Ted's wonderful turned pens with matching keyring, which really did add a touch of sparkle!

Hand-crafted brilliance

The show also presented a great opportunity to touch base with existing clients and also meet potential new authors. It was great to finally meet the team at Albion Timber – a feature on the company can be expected in the next few issues – as well as finding out more about Vetric's exciting CNC software. I was also lucky enough to be given a personal tour of Shane Skelton's wonderful new collection of saws, which now include the full range of premium Bronte saws, not to mention the Archer, Arc, London Long Stroke, Gent & Barron, Mallard, Chippendale, Kenyon and various other specialist models.

In addition to these hand-crafted masterpieces, Shane also demonstrated the growing range of Peacock finishing products, which now includes the Peacock Wax. Visitors to the stand were encouraged to pick up and try the saws for themselves, and Shane was eager to point out that these are in fact intended for use rather than purely collector's items. Each saw is lovingly handmade by Shane according to traditional methods, and while there's a waiting list for those wishing to own one, your patience will very much be rewarded!

All in all, the 2023 'Harrogate' show was a huge success with many people taking advantage of special show deals and going home with many new tools and various pieces of equipment. Andrew Hall certainly injected some light-hearted fun as he appeared with his band, The Wooden Tops, and gave performances using instruments he'd turned himself.

We'd like to take this opportunity to wish you all a very Happy New Year, and give thanks for your continued support despite the hard times faced by all.





Shane Skelton showing his extensive range of saws and Peacock finishing products



Tegan Foley
Group Editor



Rhona Bolger
Group Advertising Manager



Phil Davy
Technical & Consultant Editor

Email tegan.foley@dhpub.co.uk

We endeavour to ensure all techniques shown in this issue are safe, but take no responsibility for readers' actions.
Take care when woodworking and always use guards, goggles, masks, hold-down devices and ear protection, and above all, plenty of common sense. Do remember to enjoy yourself, though

CONTENTS What's inside?

DOUBLE WIN!

veritas

SEND IN YOUR TOP WORKSHOP HINT/TIP/POINTER OR PIECE OF ADVICE & YOU COULD BE IN WITH A CHANCE OF WINNING A **VERITAS APRON PLANE** – see page 61 for details

COMPETITION 1



MPOWER TOOLS' single & double-sided diamond bench stones

In conjunction with **MPower Tools**, we're giving two readers the chance to win either the **single-** or **double-sided diamond bench stones**, which provide all you need in one complete kit – see page 15

COMPETITION 2



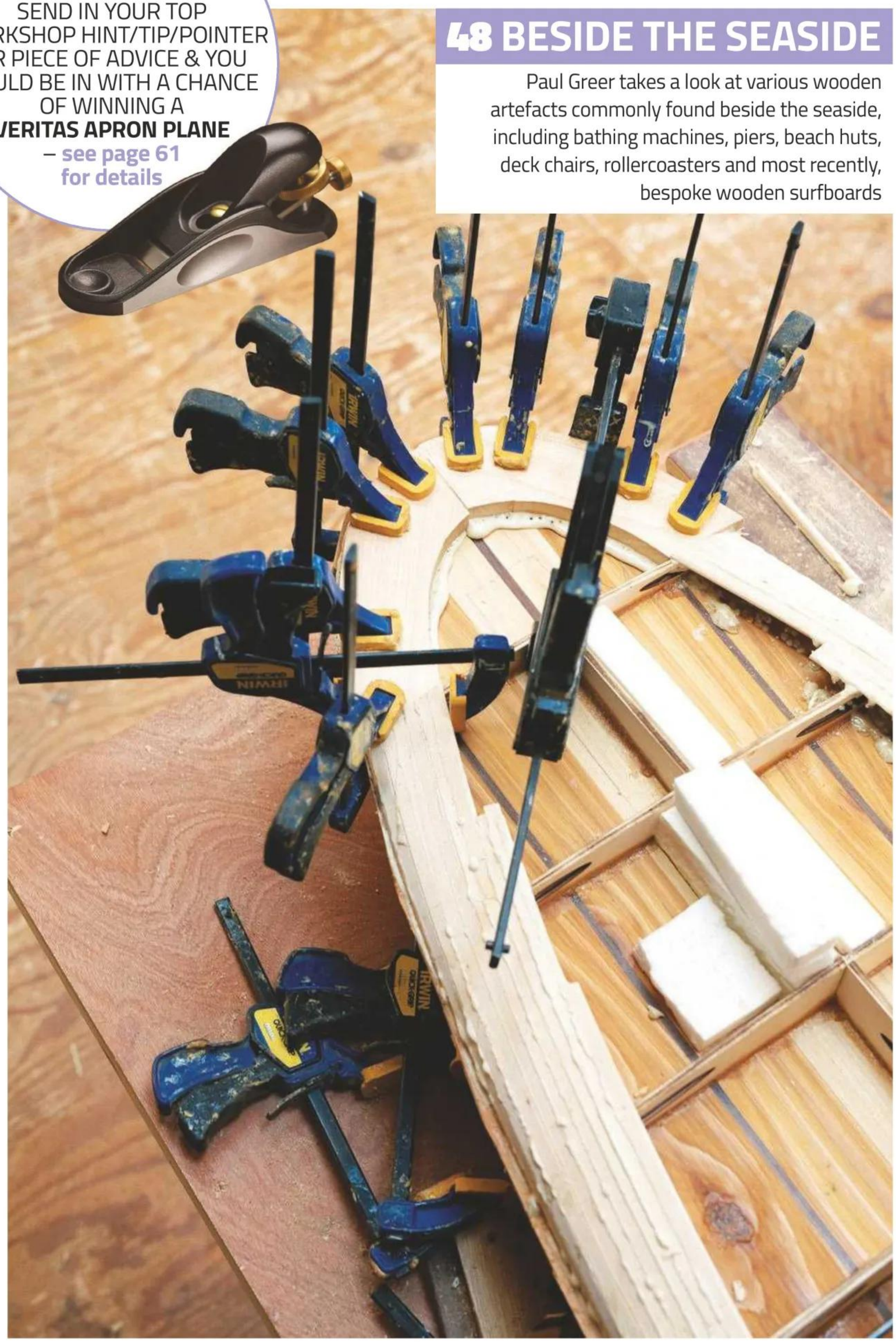
A **CLARKE Pembroke II Eco-Design Multi Fuel Stove** – worth **£958.90!**

In conjunction with **Machine Mart**, we're giving one lucky reader the chance to win the newest addition to Clarke's range of stoves: the **Pembroke II** – see page 45

Good luck!

48 BESIDE THE SEASIDE

Paul Greer takes a look at various wooden artefacts commonly found beside the seaside, including bathing machines, piers, beach huts, deck chairs, rollercoasters and most recently, bespoke wooden surfboards



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
JANUARY 2024

SUBSCRIBE TODAY!
visit https://subs.thewoodworkermag.com/
for all our subscription offers!

PROJECTS & TURNING

ON THE COVER **26 Recreating the Sutton Hoo Lyre**
Based on the 1948 Sutton Hoo reconstruction, Shaun Newman explains the steps involved in making a historic, though little known, musical instrument

40 Water work
Inspired by his background in teaching chemistry, Bob Chapman fuses science and woodturning to create a bowl that features models of molecular structures within its walls

55 A bee box for jewellery
Commissioned by a bee-keeping friend to make a three-section jewellery box, Peter Benson bases this on a hexagonal theme and takes us through the processes



74 Apto shoe rack
In an ongoing search for new takes on old ideas, this unusual piece of furniture by Hannah Knowles may inspire us all to explore things further

80 Open door policy
If you want to maximise room space by reversing the door, Phil Davy tells you how to do it with mortise & rim locks

84 Fit for royalty
Woodworkers love making things at less than their normal size – think dolls' house furniture, for example – but scaling down a caravan is one of the most unusual projects we've come across

86 Goblet of fire
Les Thorne makes use of a pleasing burr bowl offcut to turn a natural-edge goblet

TECHNICAL

36 Working flat out
In part 2 of this important series, Michael Huntley tackles board flattening prior to making a toolbox



52 Safety is in your hands
Pete Sartain, National Sales Manager – Industrial Mirka® UK, discusses the importance of using dust extraction and suggests some top tips for protecting yourself while reducing the risk of HAVS

64 Top tips for buying woodworking machinery
Alex Dalton, Managing Director of Daltons Wadkin, takes a closer look at some of the top things to consider when making a woodworking machinery purchase

ON TEST

16 MPower Tools' 8in single- & double-sided diamond bench stones

20 Veritas Jointer Blade Sharpener

REGULARS

3 Welcome
8 News
24 D&M editorial
32 Archive
60 Letters & readers' tips
66 Subscriptions
79 Around the House
92 Next month
97 Marketplace

FEATURES

32 Don't delay!
Robin Gates is tempted by tools at bargain prices in the *The Woodworker* of September 1911

34 The Alan Peters Online Furniture Award 2024 – 'Excellence without elitism'
The 2024 award returns as a biennial competition and is set to adopt an online format as before

46 Contemporary blanket chest
At first glance, this chest may look simple and minimalist but appearances can be deceptive. Behind the elegant exterior and sweeping curved front lies a complex design with mind boggling angles within the walnut frame components

62 Beside the seaside
Paul Greer takes a look at various wooden artefacts commonly found beside the seaside, such as bathing machines, piers, beach huts, deck chairs, roller coasters and most recently, bespoke wooden surfboards

62 Fusing pyrography & colour
Bob Neill's recently self-published book is one of few words and mostly photos, as Bob Chapman explains having taken a closer look and finding himself inspired, but wanting to know more

69 Connections to a lost age
Awarded a grant by the World Wood Day Foundation back in 2016, Mark Griffiths took on the huge task of rebuilding a replica Iron Age vessel discovered in a peat bog, using only a basic selection of reproduction tools and working methods from that era

98 Take 5
From a wonderful sculptural bird carving to a vintage piece made in 1967, this month's selection perfectly exemplifies the ability of woodworking to cover such a multitude of disciplines

FOLLOW US! www.facebook.com/thewoodworkermag www.instagram.com/woodworker_mag

www.thewoodworkermag.com
Published by David Hall Publishing,
1st Floor, Nene House, Sopwith Way,
Daventry NN11 8EA
UK and Overseas Tel: +44 (0) 0327 311 999

SUBSCRIPTIONS
UK – New, Renewals & Enquiries
Tel: 01858 438 436 (lines open Mon-Fri 9am-6pm)
Email: dhpub@subscription.co.uk
USA & Canada – New, Renewals & Enquiries
Tel: +44 (0) 1604 828 748
Rest of World – New, Renewals & Enquiries
Tel: +44 (0) 1604 828 748
Email: dhpub@subscription.co.uk

BACK ISSUES & BINDERS
Contact: 01795 662 976
Website: www.mags-uk.com

EDITORIAL
Group Editor: Tegan Foley
Technical & Consultant Editor: Phil Davy

CONTRIBUTORS
Jonathan Salisbury, Shaun Newman, Michael Huntley, Bob Chapman, Paul Greer, Pete Sartain, Peter Benson, Alex Dalton, Mark Griffiths, Hannah Knowles, Phil Davy, Les Thorne

PRODUCTION
Designer: Nik Harber

ADVERTISING
Group Advertising Manager: Rhona Bolger
Email: rhona.bolger@dhpub.co.uk
Tel: 0204 522 8221

SUBSCRIPTIONS
Marketing Manager: Beth Ashby
Email: beth.ashby@dhpub.co.uk

MANAGEMENT
Group Advertising Manager: Rhona Bolger
Email: rhona.bolger@dhpub.co.uk
Chief Executive: Owen Davies



© David Hall Publishing 2024 All rights reserved ISSN 2632-3370
The Publisher's written consent must be obtained before any part of this publication may be reproduced in any form whatsoever, including photocopiers, and information retrieval systems. All reasonable care is taken in the preparation of the magazine contents, but the publishers cannot be held legally responsible for errors in the contents of this magazine or for any loss however arising from such errors, including loss resulting from negligence of our staff. Reliance placed upon the contents of this magazine is at reader's own risk. *The Woodworker & Good Woodworking* ISSN 2632-3370, is published 13 times a year by David Hall Publishing, 1st Floor, Nene House, Sopwith Way, Daventry NN11 8EA. The US annual subscription price is 62GBP (equivalent to approximately 88USD). Airfreight and mailing in the USA by agent named Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. US Postmaster: Send address changes to *The Woodworker*, Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription records are maintained at CDS Global, Tower House, Lathkill Street, Market Harborough, Leicestershire LE16 9EF

recycle
When you have finished with this magazine please recycle it.

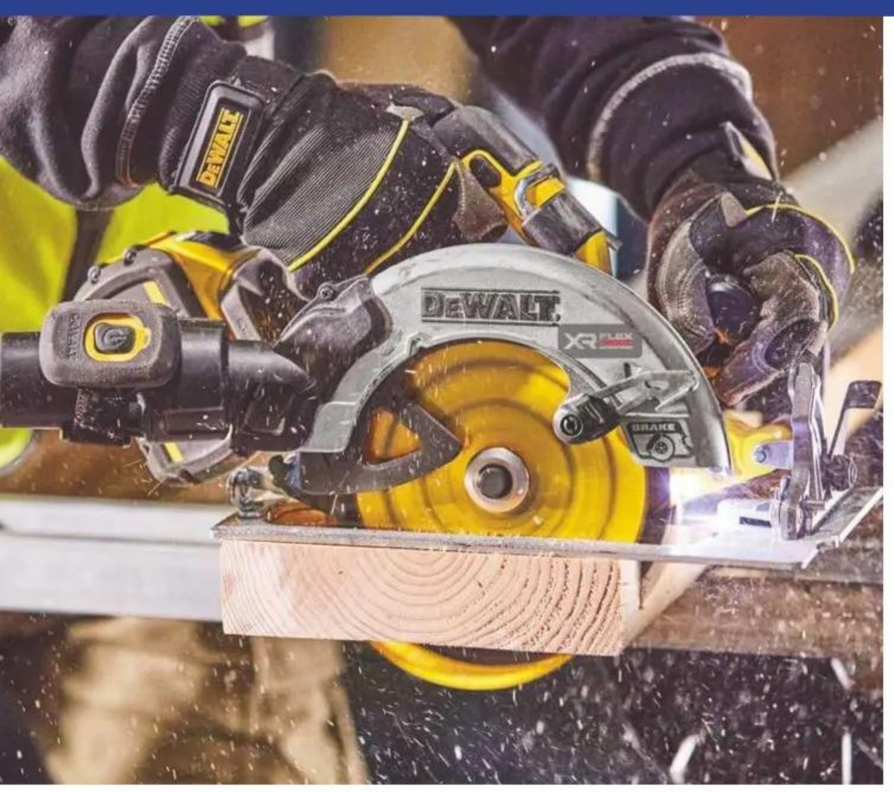
Paper supplied from wood grown in forests managed in a sustainable way.

D&M TOOLS

THE TOOL SUPERSTORE

HAND, POWER TOOLS & MACHINERY SPECIALIST

DM-TOOLS.CO.UK









Quality Tools, Trusted Service & Expert Advice

D&M Tools has been family owned and managed since 1978. During that time we have earned a reputation with our customers as a trusted partner. Whether you are a trade professional or a DIY enthusiast, our mission is a simple one - **to supply top quality tools at the best value for money, backed up by a service you can trust.**

LOW TRADE PRICES!

Whether you're buying online, by phone, email, post or visiting us in-store, D&M provides you with the widest range of quality hand, power tools and woodworking machinery all at the keenest prices.

OVER 10,000 LINES IN STOCK!

We hold massive stocks, meaning that most items are available for despatch the day you order it. Our website shows up to date stock availability, so you can order with confidence.

BROWSE OUR WEBSITE!

Visit our updated website - New responsive design - but familiar layout. **NEW** Kit Builder, **NEW** Multi-Buy features, **NEW** Buy at the Same Time options, plus **NEW** features to manage your account, and many more.

Subscribe to our regular emails to keep up with our latest deals and offers or join our **D&M Loyalty Scheme** and earn valuable loyalty points every time you shop on-line.

DM-TOOLS.CO.UK

Scan this QR code to subscribe to our email offers



73-81 HEATH ROAD • TWICKENHAM • TW1 4AW

020 8892 3813 • SALES@DM-TOOLS.CO.UK

FREE DELIVERY

Delivery to UK mainland addresses is **FREE for most orders over £99,** and for orders under £99 is only £5.95.
See the carriage rates on our website for full details.



020 8892 3813

MON-SAT 8.30am-5.30pm
(CLOSED BANK HOLIDAYS)

D&M TOOLS



VISIT OUR EXTENSIVE TWICKENHAM SUPERSTORE

OUR CUSTOMERS LOVE US!

We are regularly receiving 5 star reviews on the independent review site Trustpilot, as well as testimonials direct from our customers, here are just a few:

★★★★★
"**1st class tool company** to deal with always supplies products as described and on time. Highly recommended"

★★★★★
"**Brilliant shop well worth the drive** from Portsmouth. Staff super friendly and knowledgeable. A huge selection of tools and accessories. The best tool shop that there is."

★★★★★
"**Best prices for everything I needed**. When there was a fault with my Mafell dustbag, they rectified the problem immediately. Great customer service thank you."

★★★★★
"**Good value item**, easy to order, was able to track from day one. Speedy delivery. No problems. Good Service."

★★★★★
"**Easy to order for a novice** and the delivery was quick and no damage D and M tools have a multitude of stock of quality tools to chose from."

★★★★★
"**Easy website to use** next day delivery no messing about it was great."

★★★★★
"**Extremely fast and efficient service.** Great prices and product range. Very happy to recommend and will use again."

★★★★★
"**Great advice from sales.** Took time to explain possible options to suit my needs. Great service. Could have gone elsewhere but chose them due to the advice and customer service."

Trustpilot

SOME OF OUR LEADING BRANDS

BAHCO
BESSEY
BOSCH
DEWALT
FEIN
FESTOOL
IRWIN
Kreg
mafell creating excellence
makita
metabo PROFESSIONAL POWER TOOL SOLUTIONS
RECORD POWER ESTABLISHED 1909
Snickers WORKWEAR
STANLEY
trend tool technology

@DM_Tools DandMTools dm_tools DMTools1 dm_tools

CRAFTSMAN TRANSFORMS SHEPHERD'S HUT INTO PRACTICAL POULTRY PALACE

UK chickens and the growing breed of egg farm hobbyists will be egg-static at the launch of the very latest in bespoke chicken coop accommodation.

The Shepherd's Hut Chicken Coop is a market-first; a five-star home for fine feathered fowl that's designed to remove all the inconveniences of traditional chicken coops.



The chicken coop is situated high above the ground to avoid rats, fox-proof with joinery grade doors and insulated to avoid the heat and cold. There's also a stainless-steel floor and nest boxes for ease of cleaning and a whole side door allows full cleaning access

Traditional construction skills

Designed by young craftsman Rob McFagan – who was featured in the January 2023 issue – the practical poultry palace combines modern sustainable manufacturing techniques with traditional construction skills used to build shepherds' huts since the 16th century.

Rob formed Holmes Hill Shepherds Huts in 2019, and with no formal carpentry training, built his first commercial timber-framed shepherd's hut aged 21, as a labour of love. Since then, he's gone on to become one of the UK's leading manufacturers of bespoke shepherd's huts.



The Shepherd's Hut Chicken Coop is a market-first

Shepherd's Coop

With shepherd's huts becoming the go-to-choice for trendy, eco-friendly sustainable living in the back garden, Rob saw another potential use for the iconic rumbling wagon – down-sizing it as an upmarket chicken coop for the 21st century.

As a proud poultry owner himself, Rob was quick to see the potential of combining his love of shepherd's huts to solve the problem of looking after chickens.

"Keeping chickens is one of the easiest ways to live more sustainably," said Rob. "A steady supply of fresh eggs produced by chickens that are well looked after is by far the biggest reason people give for raising their own.

"But despite the boom, chicken coops have remained basic in terms of design and practicality and, although just as likely to be found in small urban gardens as sprawling farmyards, they often look pretty ugly.

"The Shepherd's Coop is designed to tackle all the inconveniences associated with keeping chickens in conventional coops. It's high above the ground to avoid rats, fox-proof with joinery grade doors and insulated to avoid the heat and cold. There's also a stainless-steel floor and nest boxes for ease of cleaning and a whole side door allows full cleaning access. It's built on iron wheels and a chassis, so is easily movable."

As with full-size Holmes Hill Shepherds' Huts, the Shepherd's Coop is handcrafted to order according to customers' personal requirements.

"Our standard coop houses up to 10 chickens, but we can customise to suit specific requirements, such as larger or smaller nest boxes, installing windows or simply making it bigger," Rob finishes.

A Holmes Hill Shepherd's Coop is built to last, totally fit for purpose, blends in and makes life a whole lot easier for both chickens and their owners. For further information and prices, call **01825 280 488** or visit **www.holmeshillsh.com**.



Rob McFagan and one of his Shepherd's Coops



Timber Suppliers Directory – January 2024

Adhectic Ltd (Berkshire)
Tel: 01235 5
Web: www.adhectic.co.uk

A Harrison (Northants)
Tel: 01536 725 192
Web: www.aharrisonwoodturning.co.uk

Bennetts Timber (Lincolnshire)
Tel: 01472 350 151
Web: www.bennettstimber.co.uk

Black Isle Woodturning (Scotland)
Tel: 07842 189 743
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)
Tel: 01730 816 941
Web: www.englishwoodlandstimber.co.uk

Exotic Hardwoods (Kent)
Tel: 01732 355 626
Web: www.exotichardwoods.co.uk

EO Burton, Thorndon Sawmills (Essex)
Tel: 01277 260 810
Web: www.eoburton.com

Eynsham Park Sawmill (Oxfordshire)
Tel: 01993 881 391
Web: www.eynshamparksawmill.co.uk

FH Ives (Essex)
Tel: 01268 732 373
Web: www.fhives.com

Fulham Timber (London)
Tel: 0208 685 5340
Web: www.fulhamtimber.co.uk

G&S Specialist Timber (Cumbria)
Tel: 01768 891 445
Web: www.toolsandtimber.co.uk

Good Timber (Northamptonshire)
Tel: 01327 344 550
Web: www.goodtimber.com

The Hardwood off cut shop (Essex)
The Wood Yard, Canterbury Tye Farm, Doddinghurst road, Brentwood, Essex, CM15 OSD
Tel: 01277 205990
Web: www.hardwoodoffcuts.co.uk
sales@hardwoodoffcuts.co.uk

Horndon Timber Products
Unit 8-9 Orsett Industrial Park
Stanford Road, Orsett, Grays
Essex. RM16 3BX
Tel: 01375 679 999
Web: sales@horndontimber.co.uk

Interesting Timbers (Somerset)
Tel: 01761 241 333
Web: www.interestingtimbers.co.uk

ISCA Woodcrafts (South Wales)
Tel: 01633 810 148/07854 349 045
Web: www.iscawoodcrafts.co.uk

Joyce Timber (London)
Tel: 0208 883 1610
Web: www.joycetimber.co.uk

Lincolnshire Woodcraft (Lincolnshire)
Tel: 01780 757 825
Web: www.lincolnshirewoodcraft.co.uk

Nottage Timber (South Wales)
Tel: 01656 745 959
Web: www.nottagetimber.co.uk

Ockenden Timber (Powys)
Tel: 01588 620 884
Web: www.ockenden-timber.co.uk

Olivers Woodturning (Kent)
Tel: 01622 370 280
Web: www.oliverswoodturning.co.uk

Oxford Wood Recycling (Oxfordshire)
Tel: 01235 861 228
Web: www.owr.org.uk

Stiles & Bates (Kent)
Tel: 01304 366 360
Web: www.stilesandbates.co.uk

Scadding Timber (Avon)
Tel: 01179 556 032
Web: www.scadding-son-ltd.co.uk

Scawton Sawmill (North Yorkshire)
Tel: 01845 597 733
Web: www.scawtonsawmill.co.uk

S.L. Hardwoods (Croydon)
Tel: 020 3051 4794
Web: www.slhardwoods.co.uk

St. Andrews Timber (Scotland)
Tel: 01316 611 333
Web: www.standrewstimbersupplies.co.uk

Surrey Timbers Ltd (Guildford)
Tel: 01483 457 826
Web: www.surreytimbers.co.uk

Sykes Timber (Warwickshire)
Tel: 01827 718 951
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
Web: www.timberman.co.uk

Tree Station (Lancashire)
Tel: 01612 313 333
Web: www.treestation.co.uk

UK Timber Ltd (Northamptonshire)
Tel: 01536 267 107
Web: www.uk-timber.co.uk

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

Wenban Smith (West Sussex)
Tel: 01903 230 311
Web: www.wenbans.com

Wentwood Timber Centre (South Wales)
Tel: 01633 400 720
Web: www.wentwoodtimbercentre.co.uk

W L West & Sons Ltd (Surrey)
Tel: 01798 861 611
Web: www.wlwest.co.uk

Yandle & Sons Ltd (Somerset)
Tel: 01935 822 207
Web: www.yandles.co.uk

Over 18,000 quality products
IN STOCK for next day delivery.

Request your **FREE** catalogue online
IronmongeryDirect.co.uk
or call **0300 303 88 21**

Ironmongery Direct
Trusted to deliver

FESTOOL launches new SYMC 70 cordless compound mitre saw

The new SYMC 70 cordless compound mitre saw from Festool allows you to cut skirting boards and other strips to size twice as fast when compared to using a regular compound mitre saw. You can do so accurately and without having to make calculations, and with no cable to impede progress, work can be completed more smoothly. Thanks to the bevel, it's easy to obtain interior and exterior angles and transfer them to the symmetrical stop system. Precise bisectors can be cut with just one setting for both skirting boards in a corner. Rollers allow the cordless compound mitre saw to be quickly and easily moved into the correct position, and when combined with the dual battery system, this affords maximum portability.



The bevel makes obtaining interior and exterior angles easier, transferring them to the symmetrical stop system

The SYMC 70 is a powerful, long-lasting tool that's suitable for daily use owing to its brushless EC-TEC motor and dual battery system – 2 × 18V. In addition, there's countless other clever design details, such as the user-friendly switch concept and LED spotlight, which illuminates cut line for the best possible workflow.

A separate dust collection bag collects dust precisely where it's produced, and the SYMC 70 can also be operated from both left and right. The switch and handle are centrally located, meaning it's just as easy for right- and left-handed users to work with. Festool is synonymous with perfect cutting results and the high-quality saw blades are precisely matched to both the saw and material. The SYMC 70 has synchronously swivelling stops for cuts exactly along the bisector. Exterior angles of up to 60° and interior angles up to 68° can be carried out effortlessly with just one setting.

Rollers on the SYMC 70 increase workbench height to precisely match that of the SYS 3 M 137 Systainer; it can then be used as a surface for supporting long workpieces safely and securely, and variable speed pre-selection adapts to match the material being worked.

The new cordless compound mitre saw is available to purchase from selected specialist retailers; visit the Festool website – **www.festool.co.uk** – for further information.



Using the new Festool SYMC 70, skirting boards and other strips can be cut to size twice as fast when compared to a regular compound mitre saw



CLARKE CWS250 250mm whetstone sharpener (230V) from Machine Mart

Now available from Machine Mart, the new Clarke CWS250 whetstone sharpener has been designed to produce razor-sharp cutting edges on chisels, planes, knives, scissors, etc. and is ideal for home, workshop and trade use. Powered by a 60W 230V motor, it benefits from an adjustable wheel speed of 30-150rpm.

The sharpener is fitted with a three-position switch – Forward, Backwards, Off – and supplied with a tool holding jig, F support, abrasive paste, angle plate and water tray for cooling. The grinding wheel measures Ø250 × 50 × 12mm while the leather honing wheel is Ø200 × 50 × 12mm.

Currently priced at £191.98, visit **www.machinemart.co.uk** for more information.

BESSEY EZR one-handed table clamp: Suitable for use with even more guide rail types

The EZR one-handed table clamp, from BESSEY, has been further developed and as a result, is capable of offering a greater number of possible applications. For example, Bosch and Mafell guide rails can now be safely fixed in place via an adaptor.

The new EZR15SET includes two one-handed clamps – with an attachment on the lower part and guide with 12 × 6.5mm to 12 × 8mm groove dimensions on the upper part – as well as two special adaptors. When mounted on the upper part, the clamp can also fix guide rails with 12 × 1.8mm groove dimensions. The complete set offers a uniquely wide range of applications thanks to tool-free conversion and attachment of individual parts. It's possible to use guide rails from Festool, Protool, Metabo, Makita, Hitachi/HiKOKI and DeWalt and now, thanks to the new adaptor, those from Bosch and Mafell can also be securely fixed. Benefitting from 75kg of power, these can be used as normal one-handed clamps for spreading and overlapping, in addition to profiles and on work tables.

The clamps are particularly ergonomic to use: a two-component plastic handle with pump lever behind the rail ensures safe access from both directions. Thanks to the release lever positioned in the handle, the sliding arm can be adjusted quickly and the clamp removed when work is complete. A cross prism integrated into the protective caps allows even round, pointed, angular parts to be fixed. BESSEY also makes no compromises when it comes to robustness. The upper and lower parts are made of fibreglass-reinforced polyamide and the profiled rail is manufactured from tempered and burnished steel. Furthermore, a plastic housing protects the handle mechanism from dust and chips. Clamps included with the EZR15SET feature 150mm clamping width – 120-310mm spreading width – and a 60mm throat depth.



Priced from £42, see **www.bessey.de** for further details.

Work effortlessly, even overhead.
With support from the ExoActive.



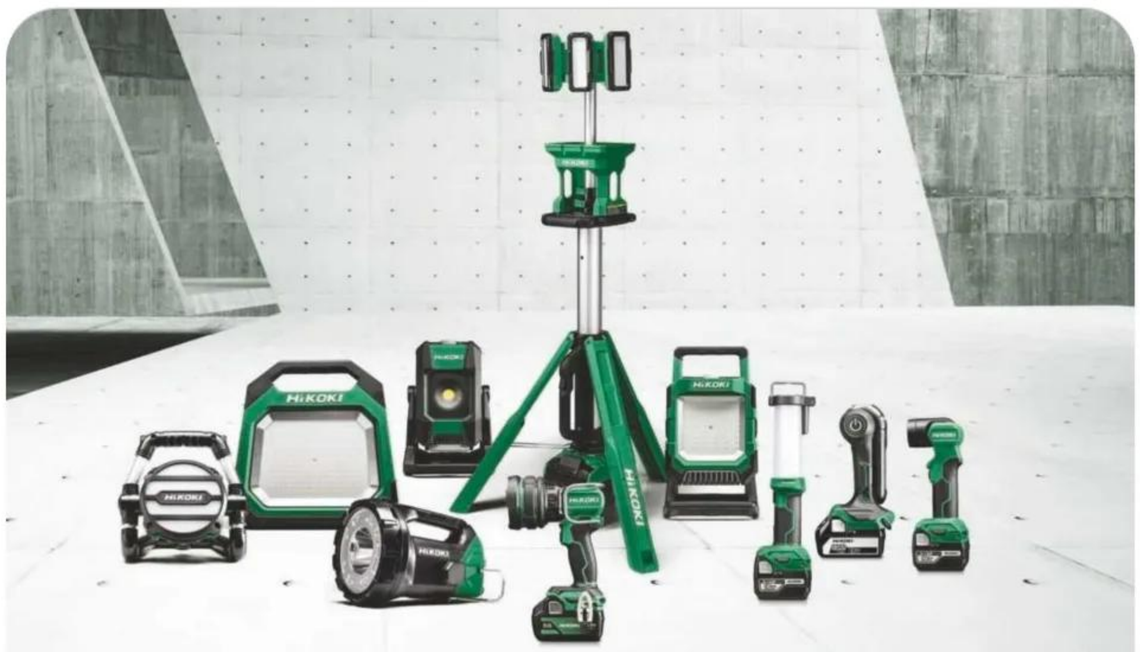
FESTOOL

Warranty all-inclusive

The ExoActive exoskeleton now makes light work of strenuous overhead tasks. It gives you power when your arms get tired and takes the load off your neck. For you, less physical exertion means greater efficiency, greater focus on the quality of your work and greater enjoyment of your work. You can choose between three working areas depending on the application and regulate the level of support in five different settings with maximum freedom of movement.
Visit our specialist ExoActive dealers to get your fitted in store.

Discover our new products:
www.festool.co.uk/exoactive

SCAN ME
Discover our new products



New cordless lighting range from **HIKOKI POWER TOOLS**

HiKOKI has launched a new range of cordless lighting solutions that are tough and robust enough for all types of construction work and applications – from really tight cramped spaces to larger sites requiring plenty of illumination. Boasting outstanding running times, all of the lights in HiKOKI's range work with the company's 18V or MultiVolt batteries, with some models even offering hybrid power options and the ability to run on both corded and cordless power.

UB18DG Cordless Tripod Light

The UB18DG is an 18V cordless LED option that's capable of producing up to 4,000 Lumens of brightness. This makes it ideal for illuminating large work areas, such as construction sites, warehouses and workshops. The light is mounted on a sturdy tripod, which can be adjusted to a height of up to 215cm, so it can be positioned exactly where required. A key feature of this model is its hybrid function, which allows it to be used both cordlessly and corded – use with a battery for maximum portability, or plug in for unlimited runtime. The light is also IP55 rated, meaning it's protected against dust and water jets, thus making it suitable for use in a wide range of environments.

UB18DB Cordless Construction Light

The UB18DB can be suspended and fixed wherever you work. Designed for the toughest construction sites, the dimmable light has a long run time of up to 51 hours and is dust-, water- and impact-resistant. The 360° adjustable angle allows the light to be directed as required and is also suitable for mounting on a tripod.

UB18DC Cordless Construction Light

The UB18DC benefits from having a USB port, meaning it's able to charge mobile phone and mobile devices. With a maximum output of 4,000 Lumens, it'll easily light up even the darkest corners of a work area. Capable of delivering 34 hours' use on an 8.0Ah battery, you can be sure that the light will last as long as needed. For the ultimate in lighting options, the IP65 rated UB18DDJ4Z has an even brighter 10,000 Lumen output together with a hybrid power option, so it can run corded or cordless. This particular model also has a spark protected lens.

UB18DEW4Z 18V cordless torchlight & UB18DFW4Z cordless lantern

The range also includes hand-held torches and lanterns, which are ideal for inspection jobs and help to ensure that every nook and cranny is well-lit. The UB18DEW4 features a head that can be angled as required together with a long runtime of 63 hours per charge, when paired with a 5.0Ah battery. In addition, the UB18DFW4Z features a large hook for suspended lighting and provides 360° lighting for work areas along with low and high lighting modes.

All models in the HiKOKI lighting range are covered by the company's three-year warranty; terms and conditions apply. For further details, visit **www.hikoki-powertools.co.uk**.

BOAT BUILDING ACADEMY bursaries make dreams come true

The Boat Building Academy (BBA) in Lyme Regis, Dorset, is now offering bursaries that cover up to 50% of course fees, with up to 100% covered where the need is greater. The new funding has been made possible due to the BBA achieving charitable status in 2020, along with subsequent fundraising and applications to foundations and trusts.

Bursaries are available for all BBA courses including the 12-week furniture course, which starts in January 2024, and the 40-week boat building course, which starts in February 2024.

A bursary for women aims to assist female students in furniture and boat building and extinguish the stigma surrounding women in practical skills industries. Funding is also available for short courses and taster days.

Janie Harper, Wendy Stephenson and Jill Booth are already using bursary funding to study under expert tutors on the academy's full time, 12-week furniture course.

Janie, 34, from Devon, said: "I was made redundant from my corporate role and set about building a tiny home and renovating a van, then I heard about the BBA's bursaries for local people. Until now, earning an actual living from making furniture has always been something I thought was out of reach, but with the bursary and having time to study, I can finally hone my skills with an expert tutor. It's amazing to be here."

Jill Booth, 50, from Wareham, Dorset, commented: "I came for an interview and was accepted onto the course with funding. I was absolutely stunned. I never would've been able to even consider doing this without a bursary. It's a chance to make a lifestyle change that I'd never have had, and I'm so grateful."

For 56-year-old Wendy, from Taunton, Somerset, the bursary has taken her out from behind a desk and one step closer to the career she's always dreamed of: "When I learned I'd been accepted and given a bursary, I burst into tears. The course is completely immersive, and we're learning so much. For me, it's like being reborn. I've always worked for big companies and been tied to a desk.

New from **TREND** – the **Concealed Screw Deck Jig**

Another new product from Trend Tool Technology is the DK/JIG Concealed Screw Deck Jig, which allows you to install decking with ease and precision.

The DK/JIG features built-in spacers to ensure accurate board spacing; a built-in clamp with adjustment for varied board widths; and hardened screw guides.



Features

- **Requires no additional clips or fixings** – just screws.
- **50° hardened screw guides create a concealed deck fixing** – which helps to prolong decking life while improving appearance.
- **Built-in board spacers** – create a consistent and accurate 3.5mm, 4.5mm, or 5.5mm gap between boards for drainage and expansion.
- **90-150mm board width adjustment** – suits a large range of standard and non-standard boards.
- **Quick-release clamping arm** – secures the jig to the decking board for easier, accurate installation.
- **On-board tool storage** – for storing the driver bit.
- Includes hex shank Robertson No.1 bit driver.



Blessed with bursaries – Jill Booth, Wendy Stephenson and Janie Harper – are already using bursary funding to study under expert tutors on the BBA's full time, 12-week furniture course

"Realistically, this is my last chance to do something I'm really passionate about – working with wood and making things – and I'm hoping to go on and study for a diploma. It's so great to feel the academy has faith in you and wants to help you succeed."

BBA Director, Will Reed, said: "Although some students receive grants from the likes of City & Guilds, most rely on savings, and for some people, taking a course is an unattainable dream.

"Being able to offer assisted places to extremely committed applicants who wouldn't otherwise be able to attend our courses and fundraising, has always been a primary objective, and the support of foundations and trusts is now letting us achieve that. We're thrilled to be turning dreams into reality through the bursary programme, and hope that more people come forward to see what we can offer them."

For further information on Boat Building Academy bursaries, visit **www.boatbuildingacademy.com**.

Ceramic Coated Deck Screws – No.10 × 60mm – 750 pack

The jig is designed for use with Trend's new Ceramic Coated Deck Screws – the self-drilling, solid steel wood variety – which allow installation without visible fasteners. Coated with ceramic for super corrosion protection, the 60mm length coarse thread suits material up to 38mm thick.

The self-drilling tip removes the need for pilot holes and prevents timber splitting, and a Robertson No.1 Square Head provides superior grip to prevent slipping when driving screws at an angle. EN 14592 Certified for use in timber structures.

The new Concealed Screw Deck Jig (DK/JIG) from Trend is currently priced at £49.99; visit **www.trend-uk.com** for more information.



The quick-release clamping arm secures the jig to the decking board for easier, accurate installation



A hex shank Robertson No.1 bit driver is included

Quality Tools to match our Service





Mouldings



Certified Hardwoods

Top quality Hand Tools

Lie-Nielsen TOOLWORKS INC.



Toishi-Ohishi Japanese Waterstones



Drilling Tools made to the highest standard

COLT PROFESSIONAL TOOLS



G&S Specialist Timber

TOOLS AND MACHINERY

www.toolsandtimber.co.uk

you can order online now





STAINLESS BOTTLE STOPPERS



Bottle Stoppers made from food safe stainless steel, **FREE** Blank included



Flexcut CARVING TOOLS

pfeil



WE ARE EASY TO FIND:
1½ miles from the M6, J40.
Take the A66 towards Keswick, turn left at first roundabout, follow the Brown Signs to The Alpaca Centre.

Open 8am to 5pm daily.
10am to 5pm Saturday.
Closed Sunday.

G&S SPECIALIST TIMBER

The Alpaca Centre, Snuff Mill Lane, Stainton, Penrith, Cumbria CA11 0ES.
Tel: 01768 891445. Fax: 01768 891443. email: info@toolsandtimber.co.uk

ALBION TIMBER

- Native and imported hardwoods
- Self selection timber racks
- Woodturning and carving section
- Tools, finishes and accessories shop
- Open Monday-Friday 8am-5pm, Saturday 9am-1pm

Tel: 07580 627 921
info@albiontimber.co.uk
www.albiontimber.co.uk
Upper Hurst Farm, Hirst Common Lane,
Birley Carr, Sheffield, S6 1EX







trend®
tool technology

PERFECT TOOLS FOR CABINET DOORS

NEW

35mm CONCEALED CABINET HINGE JIG

A precision drilling jig for installing concealed cabinet hinges accurately and quickly

- 3, 4, 5 & 6mm Hinge Inset Positions
- In-built Depth Stop
- Pilot Hole Plate
- Pin Guide System

Ref: **CAB/JIG/B**

www.trend-uk.com/concealed-cabinet-hinge-jig

CABINET HARDWARE DRILLING JIG

A versatile jig that assists on a wide variety of door and drawer fronts

- Self-Centring Scales
- Reversible Design
- Protective Rubber Over-Mould
- 4mm Tool-Steel Drilling Guides

Ref: **CAB/JIG/A**

www.trend-uk.com/cabinet-hardware-drilling-jig



TIME SAVING WOODWORKING SOLUTIONS

www.trend-uk.com

WIN!



SINGLE & DOUBLE-SIDED DIAMOND BENCH STONES

In conjunction with **MPower Tools**, we're giving two readers the chance to win either the **single-** or **double-sided diamond bench stones**, which provide all you need in one complete kit

Single-sided diamond bench stones

MPower's new single-sided diamond bench stones are designed specifically for woodworkers wishing to custom build their own sharpening stations, or who simply prefer using single- over double-sided diamond stones.

The single-sided stones have an integral clamping feature, which allows them to be temporarily or permanently screwed down to either a jig plate or bench.

To offer every mounting option, the single-sided stones also have four non-slip, nitrile rubber feet, which offer great stability for straight-up resting on the bench and sharpening.

Double-sided diamond bench stones

Launched over seven years ago, MPower's unique hybrid laminate manufacturing process has stood the test of time. Since then, many aspects of the 8in bench stone have been improved, not least with the development of 'rust free' aluminium cores.

Aluminium extrusion has proven to be a super consistent material, which supersedes the accuracy achieved by machining tool steel as a core. It also has the added advantage of being 100% rust free. The core is anodised, which again is a superior hard-wearing finish, and tougher than that of either black oxide or nickel plating. Anodising provides an incredibly flat finish, which allows these diamond stones to be the flattest available.

10-year bench stone guarantee

MPower's new diamond bench stone kits are so tough that they're covered by a 'no quibble' 10-year guarantee, which is double that of the industry standard. Even if damage occurs over time as a result of regular sharpening, MPower will supply free replacement diamond plates and only charge for the shipping costs incurred.





MPower's new diamond bench stone kits are so tough that they're covered by a 'no quibble' 10-year guarantee

Two prizes

PRIZE 1: 8in double-sided diamond bench stone – in all three grades: **300,600, 300/1,200 & 600/1,200** – worth £300.

PRIZE 2: 8in single-sided diamond bench stone – in all three grades: **300, 600 & 1,200** – worth over £230.

Each kit contains either the 8in single- or double-sided bench stone; 1 × diamond stone holder clamps & fixings; 1 × cleaning block; 1 × canvas case; 1 × magnetic leather strop cover; 1 × wax polishing stick; 1 × fully synthetic lapping fluid

For further information on MPower Tools, visit the website: **www.mpower-tools.co.uk**.

HOW TO ENTER

To be in with a chance of winning either the **8in single-** or **8in double-sided diamond bench stones**, in all three grades, visit **www.thewoodworkermag.com/category/win** and answer the multiple choice question below:

QUESTION: The single-sided bench stones are available in which grade kit option?

A: 300, 600 & 1,200
B: 220, 600 & 1,000
C: 400, 600 & 2,000

The winners will be randomly drawn from all correct entries: the winner of the 8in single-sided bench stones will be chosen first, followed by the 8in double-sided bench stones. The closing date for the competition is **19 January 2024**. Only one entry per person; multiple entries will be discarded. Employees of David Hall Publishing Ltd and MPower Tools are not eligible to enter this competition

MPOWER TOOLS' 8IN SINGLE- & DOUBLE-SIDED DIAMOND BENCHSTONES



When it comes to keeping cutting edges sharp, a good set of stones is essential. Having already tested **MPower Tools**' Side-By-Side system, **Jonathan Salisbury** takes a look at the rest of the 8in stone range

Some time ago I bought a 'budget' set of chisels for £12.99; they're far better than their price would suggest and I sharpened and polished them frequently to ensure cutting ability was kept as efficient as possible. My set of waterstones cost more than £200. How many people with a budget of £12.99 for a set of three chisels would think of spending that amount in order to keep them sharp?

Diamond 'stones' have become one of the most common sharpening methods as they're quick, effective and reasonably clean, although there's no getting away from black fingers. There's a range of prices and it's definitely worth paying more for quality – you want stability, a flat base, and a long lasting, properly prepared, bonded diamond surface. I've bought several cheaper sets of diamond plates and they've all been relegated to rough garden-tool and axe sharpening duties. If all you have are a few cheap chisels, then cheap stones are probably fine, but for anything else, investing in something like the MPower range is a wise move.



The standard storage case contains all you need



The single-sided set

Separate units

I tested MPower's Side-by-Side system in the January 2023 edition. I concluded that it was an excellent set for almost all situations – especially chisels and plane irons. There were only two problems, the first being that since the medium stone in the middle wasn't accessible from the side, sharpening knives or flattening the backs of chisels and plane irons was more difficult. The second was that the rubber feet kept coming out of the grooves, which meant there was nothing to stop the unit from moving around. The solution is, of course, to glue them in place.

MPower also produce stones as separate units, which are made in the same way as the side-by-side, with a thin diamond surface plate pressure-bonded to a high tolerance (+/- 0.00175in or 0.044mm along the length), extruded and anodised aluminium alloy base.

To keep it still while being used, the single-sided comes with small clips that screw to the work surface; rubber feet cushion the base and



Clips, screws and cleaning block



Non-slip cushions aid gripping...



... but the clips keep it in place

keep it level, and once fixed in place there's no room for movement. The double-sided stone could be fixed in the same way, but removing and replacing one of the clips each time you wanted to turn it over would be a nuisance. Instead, two nitrile rubber covered magnetic holders attach at the ends of the plate – which is steel – to lift it up, provide support and prevent movement; I was a bit sceptical about these, but they work really well, provided the bench-top isn't dusty or freshly oiled.

Stones at a glance

The abrasive surface is covered in a non-linear recessed pattern that resembles flowing water, or wild wood grain. This isn't for appearance, but ensures that there's always an intersecting channel for the non-toxic, mineral oil-free lapping fluid to flow, taking the suspended steel dust with it, regardless of blade position or how it's being moved. By reducing clogging of the plate, the diamonds can continue to work efficiently for longer periods of time. Both sets contain a small eraser for cleaning off the dried residue.

Each single stone comes with a leather strop cover that matches its grinding sequence. The stones progress from 300, to 600, to 1,200 and the strop covers are 1,800, 2,500 and 5,000. The strop grade is down to the wax used; the leather for the 5,000 grade blue wax is softer and has the smooth side up, whereas the others are harder and make use of the rough side. At the time of the test, double-sided stones were only available as a 300/600 or 300/1,200 pairing; I contacted MPower about this, and was told that a 600/1,200 was likely to be offered – and this combination has subsequently been added to the UK catalogue.

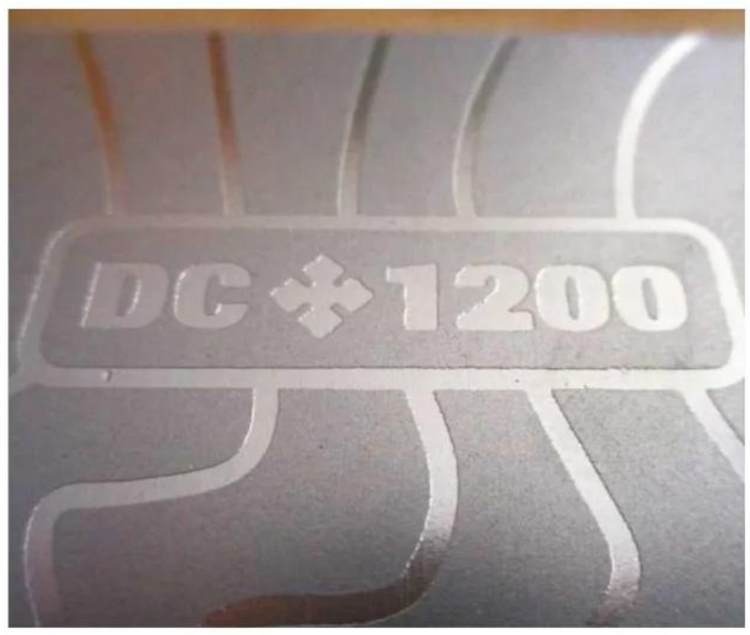


The double-sided set


The same extruded core for both models



The recess pattern aids swarf removal



Similar surface on the smoother plate



Rough leather for initial stropping



Smooth for final polishing



There's no mistaking which wax to use



Fixed down and not going anywhere



Magnetic stands don't slip on clean surfaces...



... and stay in place until they need to be moved

One disadvantage with double-sided stones is that you get two diamond surfaces but only one strop cover; the wax provided matches the cover for the two finest stones, so the 300/600 stone has white wax – 2,500 – and the 300/1200 has blue – 5,000. Optimum results are achieved when using all surfaces in sequence, and I discovered that it was possible to use the 300/600 stone's strop surface with the two coarser waxes, provided a quick clean is made between them. The lid upon which the leather is attached also uses magnets to anchor it in place and is good for keeping the diamond surface free of dust – although it might need vacuuming before use!

Conclusion

I do like my waterstones, but they need a lot of looking after and maintenance; keeping them flat can be very time-consuming.

They're more suitable for laminated blades that have a high proportion of softer, low-carbon steel and most tools will be solid high-carbon steel alloyed with other elements to increase hardness and durability. Diamond stones are therefore a more practical choice, especially in a professional workshop setting.

Above all, a high-quality diamond surface is essential, and I have no complaints with MPower's products. I tested the side-by-side 3-in-1 set extensively, and the single- and double-sided versions are just as good. I could achieve the same sharpness using waterstones, but the MPower diamond stones are quicker to use and need only to be cleaned afterwards.

Everything required is supplied in each storage case, and replacement fluid and wax sticks are also available. The spare parts store also stocks the universal magnetic holders as a separate item, and these would be ideal if you already have a suitably-sized double-sided stone.

All models use the same type of plates, so it's only the preferred style of support that you have to choose. If I had enough space to



A quick spray of the safe lapping fluid



Flatten the back first



Moving on to the bevel



Easy cleaning of residue



Loading up the strop with wax

fix them down, I'd possibly go for the single-sided set; they're fairly low profile, so might need to be raised if you find that chisel handles hit the bench surface while flattening the backs. On the other hand, the double-sided stones are higher and, owing to their portability, take up less space and can be more easily placed to provide side-clearance. Of course, you could buy some of each – the choice is yours!

SPECIFICATION

Features

- Anodised aluminium alloy base allows for improved stability
- Interconnected non-linear diamond recess pattern for excellent swarf removal
- Three grades of monocrystalline diamond: 300, 600 & 1,200 grit
- Replaceable diamond surfaces
- +/- 0.00175 inch (0.044mm) CNC machined base surfaces for incredibly flat sharpening
- 'On board' click-on, click-off, magnetic leather strop covers
- Three grades of polishing wax: 1,800, 2,500 & 5,000 grit
- Bespoke tough carry and storage case
- 30ml fully synthetic lapping fluid
- Industry leading 10-year guarantee
- Made in the UK
- Join MPOWER's VIP club to receive exclusive promotions, tool news and product launch updates. Sign up to receive your 10% discount code for use in store – **www.mpowertools.co.uk join_vip_club/**



Single stones provide good side access for knives



Almost ready to use

Each kit contains

1 × 8in diamond stone
2 × nitrile rubber magnetic diamond stone holders
1 × 2.1oz strop polishing wax bar
1 × 30ml lapping fluid
1 × storage case
1 × cleaning block

Typical prices: 8in single-sided diamond bench stone options: 300, 600 & 1,200 kit – £79.95 each; 8in double-sided diamond bench stone options: 300/600, 300/1,200 & 600/1,200 kit – £99.95 each; lapping fluid: 30ml – £9.95; 100ml– £13.95; 250ml – £17.95; wax blocks – £4.95 each
Web: www.mpower-tools.co.uk

THE VERDICT

PROS

- Separate stones to match individual sharpening requirements; diamond plates are flat and replaceable; every set includes lapping fluid, strop wax and a cleaning block; single stone clips are screwed to the bench to prevent movement; magnetic holders for double-sided stones don't slip on clean surfaces; carry bag for convenient storage when not in use; 10-year no-quibble guarantee

CONS

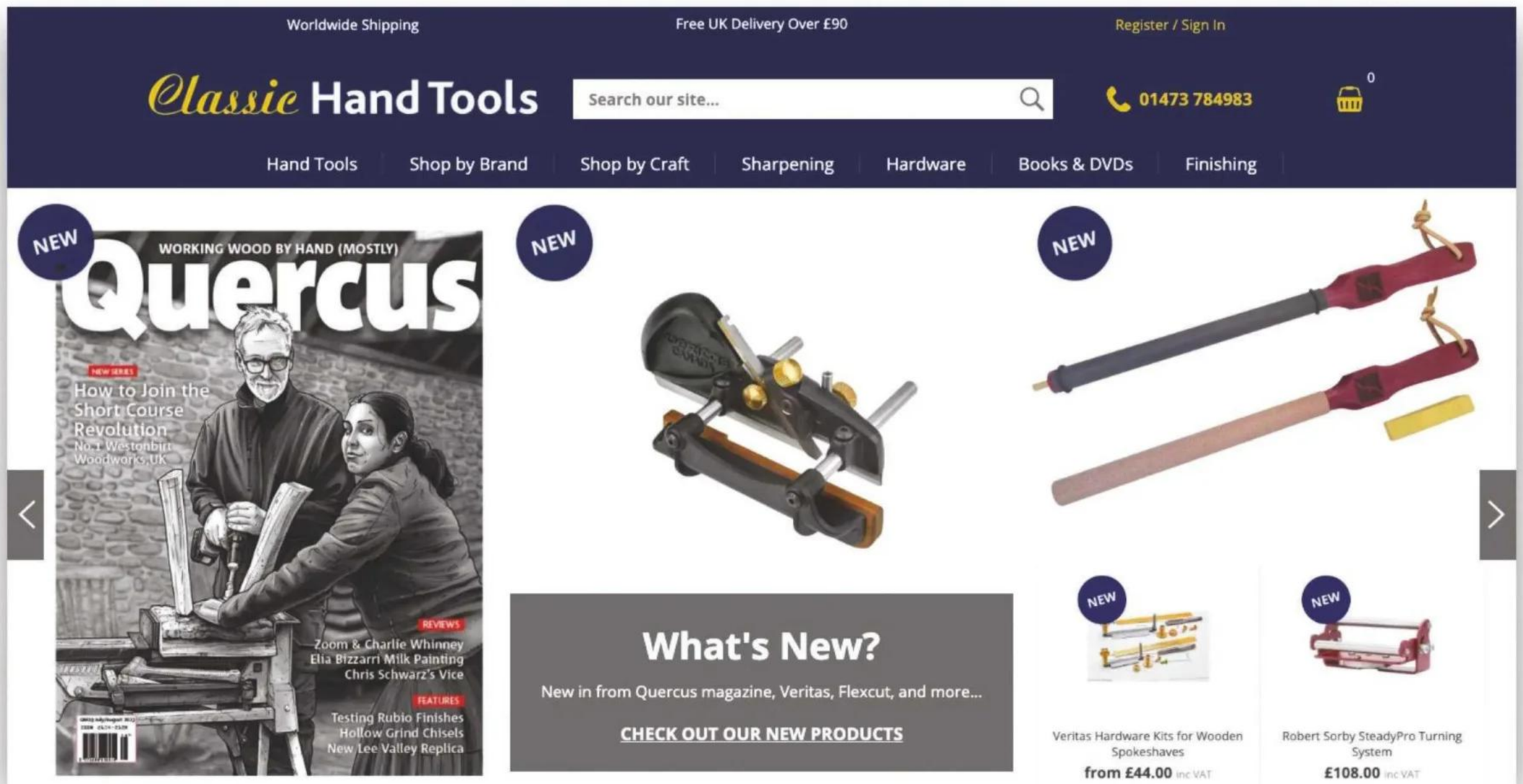
- Lapping fluid is a little pricey

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

Classic Hand Tools

The finest hand tools for your *finest woodwork*

Visit our **website** at **www.classichandtools.com**



VERITAS JOINTER BLADE SHARPENER

This useful tool from **Veritas** is designed to restore blades dulled from normal use, even if they contain minor nicks



What a pleasure it is to set up a planer with fresh, surgically sharp knives. What a pain it is to be as careful as possible and to find nonetheless little nicks appearing, thus resulting in timber surface ridges. You don't have to hit a nail or barbed wire for this to happen; a tough knot will do. Sometimes it appears that nothing at all will also cause the damage. Small nicks/ridges can be tolerated if the work is large scale and then be sanded, but it always worries me that larger ridges will throw the timber out of parallel during thicknessing. You spend the subsequent weeks choosing that bit of the block that doesn't have nicks for preparing smaller stuff, but you know that the days of those knives are numbered.

Nothing beats taking damaged – or simply blunted – knives to a saw doctor and having them professionally retouched. If you want to keep the operation in-house, the best solution would be a water-cooled sharpening system with a knife jig, such as the Tormek T-8. My Sedgwick planer takes 12in knives. I had these sharpened by an expert on the Tormek and could measure a discrepancy of only 1,000th of an inch. He volunteered that good though this device was, it wasn't as precise as a saw doctor. The grinding wheel's action produces a hollow bevel rather than a flat one, which gives, I suppose, a slightly weaker edge, but I don't think it's significant.

Helpful solution

But if you don't want to spend £600 or more, what's next? Well, I've had some idle moments imagining home-made plywood jigs and sliding diamond blocks, but imagining is as far as that's gone. Then I was introduced to the Veritas Jointer Sharpener – or 'planer' to you and me – and have to admit that I was immediately disappointed. It's designed for blades up to 8in long. Rats! But then, looking at it, I thought how so? A 12in knife overhangs, that's all, so I gave it a go.

All praise to Veritas for coming straight out with it: 'A commercial sharpening service or a sophisticated home grinder is necessary for badly nicked blades. The Veritas Jointer Blade Sharpener is designed to restore blades dulled from normal use, even if they contain minor nicks.' It comes with a sheet of 15 micron – 1,200 grit – adhesive-backed abrasive film. 1,200 is far too fine for anything but polishing, so I acquired one each in 400 and 1,000 grit. Being only 8in wide, I cut them down the middle and stuck them side-by-side on a kitchen worktop offcut. Veritas recommends plate glass because it's flatter. Bizarrely they also suggest sticking it to your planer's feed table! In hindsight, plate glass would've been a better bet, as I discovered – to my cost – that my piece of worktop wasn't perfectly flat.

Simple & elegant

As you'd expect from Veritas, the jig is a beautiful thing. Made of cast aluminium and finely machined brass and steel, it's simple and elegant. Three knurled bosses clamp the knife in place; two more provide backstops for accurate positioning of subsequent blades as pairs – or triplets – of knives should be cut identically. With my all but new knives, these two positioning bosses didn't come into play, but were I to eat away the metal, they would eventually.

The long back screw with locking collar adjusts the angle. There's no calibration offered or needed here as it's sufficient to copy the bevel's existing angle. A micro bevel can be achieved by turning the screw – half a turn equals a quarter of a degree – thus removing metal where it matters – on the very edge – that much faster.

The 400 grit diamond film is ferociously sharp when new. Nevertheless – and with an overlong knife – it took a while to cover the ground and achieve a burr on the flat side. The bottom of the long adjusting screw has a rubber pad as a foot: this wore a tiny flat on its first outing, so I'm not sure how long it'll last – not that it matters much on a worktop offcut. I played with various patterns of movement and found the – reshaped – abrasive sheets to be plenty big enough. The 1,000 grit film produced a finer edge – so fine in fact that the 1,200 grit sheet remained unused.

Conclusion

The jig is good and obvious but it's not sufficient. I'm sure that when I bought my planer – quite a few years ago – knives were relatively much more expensive than they are now. For £15 or so I can buy a brand-new pair, and have done so several times. Now, of course, I have a collection, and it seems profligate to keep buying more. I used to know a local saw doctor, but presently I don't. Until I do, the Veritas jig is a useful tool, which, with a spare 10 minutes or so – and another 10 for refitting the knives – could easily save the day. And was it less effective over 12in than it would've been over 8? I didn't see that it was.

SPECIFICATION

- Designed to restore blades dulled from normal use
- Clamps blades up to 200mm wide
- Two position stops ensure successive blades are honed identically
- Cast aluminium with brass and steel fittings
- Includes a half sheet of 15 micron 3M micro-abrasive film

Typical prices: Veritas Jointer Blade Sharpener – £85.98; Veritas Glass Lapping Plate – £20.88
Web: www.axminstertools.com

THE VERDICT

RATING – *PERFORMANCE*: 4.5 OUT OF 5
RATING – *VALUE*: 4 OUT OF 5



The Veritas Jointer Blade Sharpener is designed to restore blades dulled from normal use, even if they contain minor nicks

NEW 3 PIECE BOWL TURNING SET

Set Includes:

- Bottom Feeder Bowl Gouge
- 1” Heavy Duty Negative Rake Curved Profile Scraper
- Fingernail Bowl Gouge

Available with matched sized bottom feeder and fingernail bowl gouges 3/8” or 1/2”

Contact your nearest stockist for availability!

The ideal tool combination for turning bowls.

Robert Sorby

MADE IN SHEFFIELD, ENGLAND - SINCE 1828

PROUDLY MADE IN SHEFFIELD, ENGLAND

MADE IN SHEFFIELD

MADE IN BRITAIN

www.robert-sorby.co.uk

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

FOLLOW US ON SOCIAL @ROBERTSORBY

Made by Craftsmen for Craftsmen

34144

Machine Mart®

65 SUPERSTORES NATIONWIDE



Britain's Tools & Machinery Specialist

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

Clarke 10" EXTENDABLE TABLE SAW WITH STAND



PRICE CUT £179.00 exc.VAT £214.80 inc.VAT WAS £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

BEST SELLER

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



PRICE CUT £119.98 exc.VAT £143.98 inc.VAT WAS £149.99 inc.VAT

Clarke DUST EXTRACTOR/CHIP COLLECTORS



CWVE2

CDE7B

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

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

* WAS £263.98 inc.VAT

Model	Motor	Flow Rate	Bag Cap.	exc.VAT	inc.VAT
CWVE2	1100W	183 M3/h	50Ltrs	£99.98	£119.98
CDE35B	750W	450 M3/h	56Ltrs	£189.98	£227.98
CDE7B*	750W	850 M3/h	114Ltrs	£209.00	£250.80

Clarke 8" TABLE SAW

- 500W motor
- 200mm Blade Dia.

NEW

CTS800C

£89.98 exc.VAT £107.98 inc.VAT



Clarke CONTRACTOR TABLE SAW WITH SLIDING CARRIAGE

NEW

CCS12B



PRICE CUT £319.00 exc.VAT £382.80 inc.VAT WAS £406.80 inc.VAT

230 VOLT

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

Clarke TOOL CHESTS /CABINETS

FROM ONLY £89.98 exc.VAT £107.98 inc.VAT

OVER 50 MODELS IN THE RANGE

BALL BEARING ROLLER DRAWERS



* WAS £239.98 inc.VAT

Model		Desc.	exc.VAT	inc.VAT
①	CTC600C	6 Dr chest	£89.98	£107.98
	CTC900C	9 Dr chest	£89.98	£107.98
	CTC500C	5 Dr cabinet	£149.98	£179.98
	CTC800C	8 Dr chest/cab set	£149.98	£179.98
②	CTC700C	7 Dr cabinet	£169.98	£203.98
	CTC1300C*	13 Dr chest/cab	£189.98	£227.98

Clarke GARAGES/WORKSHOPS



PRICE CUT £249.00 exc.VAT £298.80 inc.VAT WAS £310.80 inc.VAT

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

Model	size (LxWxH)	exc.VAT	WAS inc.VAT	inc.VAT
CIG81212	3.6x3.6x2.5m	£249.00	£310.80	£298.80
CIG81015	4.5x3x2.4m	£279.00		£334.80
CIG81216	4.9x3.7x2.5m	£329.00		£394.80
CIG81020	6.1x3x2.4m	£349.00		£418.80
CIG81220	6.1x3.7x2.5m	£399.00		£478.80
CIG81224	7.3x3.7x2.5m	£499.00		£598.80
CIG1432	9.7x4.3x3.65m	£1099.00		£1318.80
CIG1640	12x4.9x4.3m	£2599.00	£3478.80	£3118.80

Clarke 1" BELT/ 5" DISC SANDER

CBS1-5B



- Includes 2 tables that tilt & lock • Quality Induction 250W motor

PRICE CUT £89.98 exc.VAT £107.98 inc.VAT WAS £112.78 inc.VAT

Clarke 4" BELT/ 8" DISC SANDER

CS48



- Includes two tables • 550W 230V motor

PRICE CUT £199.98 exc.VAT £239.98 inc.VAT WAS £246.00 inc.VAT

Clarke 18V CORDLESS LI-ION STAPLE / NAIL GUN

1x2Ah

SPARE NAILS / STAPLES IN STOCK



powered by Li-Ion

CONSN18LIC

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

ELECTRIC AND CORDLESS MODELS IN STOCK

£129.98 exc.VAT £155.98 inc.VAT

Clarke PLUNGE SAWS

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

INC. 2X 700MM GUIDE RAILS



CPS160

Model	Motor	exc.VAT	inc.VAT
CPS85	550W	£69.98	£83.98
CPS160	1200W	£132.99	£159.59

Clarke BELT SANDERS

Makita

ABRASIVE SANDING BELTS IN STOCK

FROM ONLY £45.99 exc.VAT £55.19 inc.VAT



CBS2

- Ideal for surface removal, sanding and finishing

Model	Motor	M/Min	exc.VAT	inc.VAT
Clarke BS1	900W	380	£45.99	£55.19
Clarke CBS2	1200W	480	£94.99	£113.99
Makita 9911	650W	75-270	£104.99	£125.99

Clarke 6" BELT / 9" DISC SANDER

CS6-9D



- 1100W motor
- Use vertically or horizontally

PRICE CUT £329.00 exc.VAT £394.80 inc.VAT WAS £418.80 inc.VAT

DUST PORT

BELT/DISC TABLE ADJUSTS 0-45°

INCLUDES STAND

VAC KING WET & DRY VACUUM CLEANERS



PRICE CUT NOW FROM £59.98 exc.VAT £71.98 inc.VAT WAS £75.59 inc.VAT

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

* SS = Stainless Steel

WAS £75.59 inc.VAT

Model	Motor	Dry/Wet Capacity	exc.VAT	inc.VAT
CVAC20P#	1250W	17/13 ltr	£59.98	£71.98
CVAC20PR2	1400W	14/12 ltr	£72.99	£87.59
CVAC30SSR*	1400W	24/22 ltr	£109.98	£131.98

Clarke CONTRACTOR 18V BRUSHLESS COMBI DRILLS

- 2 forward and reverse gears



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

powered by Li-Ion

2x2Ah

CON180LI

4Ah Li-ion

Clarke CIRCULAR SAWS

AVAILABLE IN 230 & 110 VOLT



CON185B

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

*Includes laser guide

NEW

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

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



CPS125

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

PRICE CUT £21.99 exc.VAT £26.39 inc.VAT WAS £27.59 inc.VAT

INC DUST EXTRACTION

Clarke DISC SANDER (305MM)

CDS300B



PRICE CUT £179.98 exc.VAT £215.98 inc.VAT WAS £227.98 inc.VAT

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

Clarke DRILL PRESSES

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

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



CDP102B

B = Bench mounted
F = Floor standing

Model	Motor (W) Speeds	exc.VAT	WAS inc.VAT	NOW inc.VAT
CDP5EB	350 / 5	£99.95		£119.94
CDP102B	350 / 5	£115.95		£139.14
CDP152B	450 / 12	£209.00		£250.80
CDP202B	450 / 16	£269.00		£322.80
CDP352F	550 / 16	£339.00		£406.80
CDP452B	550 / 16	£299.00	£406.80	£358.80
CDP502F	1100 / 12	£699.00	£934.80	£838.80

Clarke SHEET SANDERS



CON320

- Ergonomic design for optimum comfort

VARIABLE SPEED

FROM ONLY £27.99 exc.VAT £33.59 inc.VAT

Model	Sheet Size	Motor	exc.VAT	inc.VAT
COS210	190x90mm	200W	£27.99	£33.59
CON320	230x115mm	320W	£39.98	£47.98

Clarke 3-IN-1 MULTI SANDER

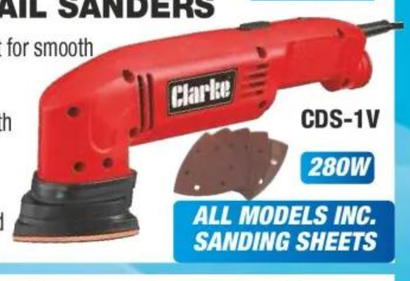


CMS200

£47.99 exc.VAT £57.59 inc.VAT

Clarke DETAIL SANDERS

£27.99 exc.VAT £33.59 inc.VAT



CDS-1V

280W

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

ALL MODELS INC. SANDING SHEETS

Clarke WHETSTONE SHARPENER (200MM)



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

£139.98 exc.VAT £167.98 inc.VAT

CWS200B

Clarke POWER PLANERS

PRICE CUT NOW FROM £34.99 exc.VAT £41.99 inc.VAT WAS £44.39 inc.VAT



* WAS £44.39 inc.VAT

CON950

Model	Width of Cut	Motor	exc. VAT	inc.VAT
CEP450*	60mm	450W	£34.99	£41.99
CEP720B	82mm	720W	£44.99	£53.99
CON950	110mm	950W	£74.99	£89.99

Clarke OSCILLATING BOBBIN SANDER

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

PRICE CUT £149.98 exc.VAT £179.98 inc.VAT WAS £190.80 inc.VAT



COBS1

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 RANDOM ORBITAL SANDER

- Adjustable front handle improves control
- 7000-14000rpm

CROS3



£39.98 exc.VAT £47.98 inc.VAT

INC DUST BAG AND SELECTION OF 125MM DIAMETER SANDING DISCS

Clarke PLANERS & THICKNESSERS

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

* WAS £359.98 inc.VAT

Model	Planing Width	Max Thick Capacity	exc. VAT	inc.VAT
CPT600	6" (152mm)	120mm	£249.98	£299.98
CPT800*	8" (204mm)	120mm	£299.00	£358.80
CPT1000	10" (254mm)	120mm	£399.00	£478.80



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

CPT800

Clarke OSCILLATING BELT & BOBBIN SANDER

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

PRICE CUT £209.98 exc.VAT £251.98 inc.VAT WAS £262.80 inc.VAT



COEBS1

PAY Monthly

- Spread the cost over 12, 24, 36, 48 or 60 months
- Any mix of products over £300
- 17.9% APR

5 MIN APPLICATION!

EASY TO USE WEBSITE

NOW OVER **21,000** PRODUCTS ONLINE!



For 15,000 hard to find items vist the **Xtra** section on:

machinemart.co.uk



FREE 492 PAGE CATALOGUE OUT NOW!

- IN-STORE
- ONLINE
- PHONE

0844 880 1265

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

BEST SELLER

PRICE CUT £159.98 exc.VAT £191.98 inc.VAT WAS £203.98 inc.VAT

Clarke 40" WOODTURNING LATHE



CWL1000B

Clarke 40" WOODTURNING LATHE WITH COPY FOLLOWER

Ideal for DIY, furniture or joinery workshops where repeat quantities are required
- Large 980mm distance between centres speeds 600-2200rpm
- Inc. copy follower assembly, tool rest, drive centre tail stock assembly, face plate, eye shield & stand

PRICE CUT £439.00 exc.VAT £526.80 inc.VAT WAS £562.80 inc.VAT





CWL1000CF

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

CBS205

PRICE CUT £124.99 exc.VAT £149.99 inc.VAT WAS £155.98 inc.VAT





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

£239.98 exc.VAT £287.98 inc.VAT

REMOVABLE DUST TRAY



CBS225

Clarke PROFESSIONAL BANDSAWS

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

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

MODELS ALSO FEATURE:
- MULTI-STEP DUST EXTRACTION OUTLET
- FLEXIBLE LED WORKLIGHT
- REMOVABLE DUST TRAY
- BLADE TENSIONING CONTROL





CBS300

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

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
- Superb range ideal for hobby & semi-professional use

TIGER 16/550

FROM ONLY £119.98 exc.VAT £143.98 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

Clarke 13" MINI WOOD LATHE

£189.00 exc.VAT £226.80 inc.VAT



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

CWL325V

Clarke 3/8" MORTICING MACHINE
- Ideal for the serious DIY woodworker, craftsman & woodworking enthusiast.
- Max. chuck capacity: 13mm
- Max. mortice chisel stroke: 76mm

£229.98 exc.VAT £275.98 inc.VAT

NEW

230 VOLT



CBM1C

Clarke CONTRACTOR ROUTERS
- Powerful heavy duty machines ideal for trade and DIY use

PRICE CUT NOW FROM £47.99 exc.VAT £57.59 inc.VAT WAS £59.98 inc.VAT



CR4

Model	Motor (W)	Plunge (mm)	exc. VAT	WAS inc.VAT	NOW inc.VAT
CR1200	1200	0-55	£47.99	£59.98	£57.59
CR4	2000	0-66	£94.99	£117.59	£113.99

Clarke GRINDERS & STANDS
- Stands come complete with bolt mountings and feet anchor holes

6" & 8" AVAILABLE WITH LIGHT

PRICE CUT £64.99 exc.VAT £77.99 inc.VAT WAS £80.39 inc.VAT

STANDS FROM ONLY £75.59 INC.VAT



* WAS £80.39 inc.VAT
# WAS £119.98 inc.VAT

Model	Duty	Wheel Dia.	exc.VAT	inc.VAT
CBG6RZ*	PRO	150mm	£64.99	£77.99
CBG6250LW	HD	150mm	£69.98	£83.98
CBG6250L	HD	150mm	£72.99	£87.59
CBG6SB	PRO	150mm	£94.99	£113.99
CBG8370LW#	HD	200mm	£96.99	£116.39

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 JIGSAWS

CONTRACTOR

BEST SELLER



CON750

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

BEST SELLER

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



CSS400C

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

* WAS £155.98 inc.VAT # WAS £189.59 inc.VAT

Model	Motor	Speed RPM	exc.VAT	inc.VAT
CSS400D	120W	400-1600	£99.98	£119.98
CSS16VB*	90W	550-1600	£124.99	£149.99
CSS400C#	90W	550-1600	£154.99	£185.99

Clarke ELECTRIC POWER FILE
- Variable belt speed
- Tilting head

CPF13

*Black & Decker

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

WAS £76.74 inc.VAT



Model	Motor	Belt Size(mm)	exc.VAT	inc.VAT
CPF13	400W/230V	13x457	£54.99	£65.99
KA900E*#	350W/230V	13x455	£59.98	£71.98

Clarke MULTI FUNCTION TOOL WITH ACCESSORY KIT

£39.98 exc.VAT £47.98 inc.VAT



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

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 £79.95 exc.VAT £95.94 inc.VAT WAS £107.98 inc.VAT

LASER GUIDE



* WAS £107.98 inc.VAT
# WAS £209.99 inc.VAT

Model	Blade Dia/Bore (mm)	Max Cut Depth/ Cross	exc. VAT	inc.VAT
CMS210B*	210	60/120	£79.95	£95.94
CMS10S2B#	255/3	90/340	£169.00	£202.80

VISIT YOUR LOCAL SUPERSTORE

Open Mon-Fri 8.30-6.00, Sat 8.30-5.30, Sun 10.00-4.00

BARNSLEY Pontefract Rd, Barnsley, S71 1EZ	01226 732297	**EXETER** 16 Trusham Rd. EX2 8QG	01392 256 744	**NORWICH** 282a Heigham St. NR2 4LZ	01603 766402
B'HAM GREAT BARR 4 Birmingham Rd.	0121 358 7977	**GATESHEAD** 50 Lobley Hill Rd. NE8 4YJ	0191 493 2520	**NORTHAMPTON** Beckett Retail Park, St James' Mill Rd	01604 267840
B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills	0121 7713433	**GLASGOW** 280 Gt Western Rd. G4 9EJ	0141 332 9231	**NOTTINGHAM** 211 Lower Parliament St.	0115 956 1811
BOLTON 1 Thynne St. BL3 6BD	01204 365799	**GLOUCESTER** 221A Barton St. GL1 4HY	01452 417 948	**PETERBOROUGH** 417 Lincoln Rd. Millfield	01733 311770
BRADFORD 105-107 Manningham Lane. BD1 3BN	01274 390962	**GRIMSBY ELLIS WAY,** DN32 9BD	01472 354435	**PLYMOUTH** 58-64 Embankment Rd. PL4 9HY	01752 254050
BRIGHTON 123 Lewes Rd, BN2 3QB	01273 915999	**HULL** 8-10 Holderness Rd. HU9 1EG	01482 223161	**POOLE** 137-139 Bournemouth Rd. Parkstone	01202 717913
BRISTOL 1-3 Church Rd, Lawrence Hill. BS5 9JJ	0117 935 1060	**ILFORD** 746-748 Eastern Ave. IG2 7HU	0208 518 4286	**PORTSMOUTH** 277-283 Copnor Rd. Copnor	023 9265 4777
BURTON UPON TRENT 12a Lichfield St. DE14 3QZ	01283 564 708	**IPSWICH** Unit 1 Ipswich Trade Centre, Commercial Road	01473 221253	**PRESTON** 53 Blackpool Rd. PR2 6BU	01772 703263
CAMBRIDGE 181-183 Histon Road, Cambridge. CB4 3HL	01223 322675	**LEEDS** 227-229 Kirkstall Rd. LS4 2AS	0113 231 0400	**SHEFFIELD** 453 London Rd. Heeley. S2 4HJ	0114 258 0831
CARDIFF 44-46 City Rd. CF24 3DN	029 2046 5424	**LEICESTER** 69 Melton Rd. LE4 6PN	0116 261 0688	**SIDCUP** 13 Blackfen Parade, Blackfen Rd	0208 3042069
CARLISLE 85 London Rd. CA1 2LG	01228 591666	**LINCOLN** Unit 5. The Pelham Centre. LN5 8HG	01522 543 036	**SOUTHAMPTON** 516-518 Portswood Rd.	023 8055 7788
CHELTENHAM 84 Fairview Road. GL52 2EH	01242 514 402	**LIVERPOOL** 80-88 London Rd. L3 5NF	0151 709 4484	**SOUTHEND** 1139-1141 London Rd. Leigh on Sea	01702 483 742
CHESTER 43-45 St. James Street. CH1 3EY	01244 311258	**LONDON CATFORD** 289/291 Southend Lane SE6 3RS	0208 695 5684	**STOKE-ON-TRENT** 382-396 Waterloo Rd. Hanley	01782 287321
COLCHESTER 4 North Station Rd. CO1 1RE	01206 762831	**LONDON** 6 Kendal Parade, Edmonton N18	020 8803 0861	**SUNDERLAND** 13-15 Ryhope Rd. Grangetown	0191 510 8773
COVENTRY Bishop St. CV1 1HT	024 7622 4227	**LONDON** 503-507 Lea Bridge Rd. Leyton, E10	020 8558 8284	**SWANSEA** 7 Samlet Rd. Llansamlet. SA7 9AG	01792 792969
CROYDON 423-427 Brighton Rd, Sth Croydon	020 8763 0640	**LUTON** Unit 1, 326 Dunstable Rd, Luton LU4 8JS	01582 728 063	**SWINDON** 21 Victoria Rd. SN1 3AW	01793 491717
DARLINGTON 214 Northgate. DL1 1RB	01325 380 841	**MAIDSTONE** 57 Upper Stone St. ME15 6HE	01622 769 572	**TWICKENHAM** 83-85 Heath Rd.TW1 4AW	020 8892 9117
DEAL (KENT) 182-186 High St. CT14 6BQ	01304 373 434	**MANCHESTER ALTRINCHAM** 71 Manchester Rd. Altrincham	0161 9412 666	**WARRINGTON** Unit 3, Hawley's Trade Pk.	01925 630 937
DERBY Derwent St. DE1 2ED	01332 290 931	**MANCHESTER CENTRAL** 209 Bury New Road M8 8DU	0161 241 1851	**WIGAN** 2 Harrison Street, WN5 9AU	01942 323 785
DONCASTER Wheatley Hall Road	01302 245 999	**MANCHESTER OPENSHAW** Unit 5, Tower Mill, Ashton Old Rd	0161 223 8376	**WOLVERHAMPTON** Parkfield Rd. Bilston	01902 494186
DUNDEE 24-26 Trades Lane. DD1 3ET	01382 225 140	**MANSFIELD** 169 Chesterfield Rd. South	01623 622160	**WORCESTER** 48a Upper Tything. WR1 1JZ	01905 723451
EDINBURGH 163-171 Piersfield Terrace	0131 659 5919	**MIDDLESBROUGH** Mandale Triangle, Thornaby	01642 677881		

5 EASY WAYS TO BUY...

SUPERSTORES
SUPERSTORES NATIONWIDE

ONLINE
www.machinemart.co.uk

TELESALES
0115 956 5555

CLICK & COLLECT
OVER 10,500 LOCATIONS

CALL & COLLECT
AT STORES TODAY

Calls to the catalogue request number above (0844 880 1265) cost 7p per minute plus your telephone company's network access charge. For security reasons, calls may be monitored. All prices correct at time of going to press. We reserve the right to change products and prices at any time. Check online for latest prices. All offers subject to availability, E&OE. *Terms & conditions apply see machinemart.co.uk/finance for more details

IN ASSOCIATION WITH

What's new from D&M TOOLS

'THE' TOOL SPECIALISTS • WWW.DM-TOOLS.CO.UK • 0208 892 3813

RECORD POWER 'CARVING BY NUMBERS' HAND CARVING CHISELS

MANUFACTURER: Record Power
D&M GUIDE PRICE: From £39.99-£139.99 (inc VAT)

Record Power has launched a new range of quality hand-carving chisels, with chrome-vanadium alloy steel blades and European beech handles – a premium grade hardwood with dense grain – that's suitable for both fine and delicate carving, or can be struck with a mallet for heavier sculpting.

The tools are designed to be used in conjunction with a new 'Carving by Numbers' website – a simple to follow programme that guides woodworkers of all skill levels to create beautiful carved patterns and designs.

Each tool set is accompanied by a comprehensive online resource of technique tutorials, plans, projects and videos. Simply match the numbered carving tools to the step-by-step guidance from internationally acclaimed woodcarver, Mike Davies.

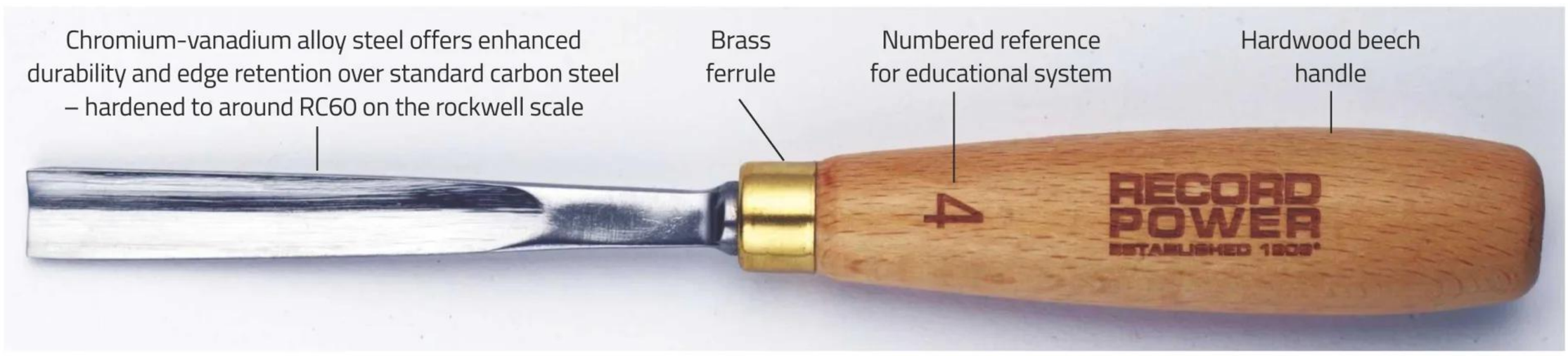
As a bonus, you'll have online access to the contents of best-selling *Woodcarving by Numbers* books, in addition to the Foundation Skills DVD.

The range consists of four sets: the **50001 12-piece Comprehensive Collection set**, supplied in a canvas tool roll; the **50002 five-piece Essential Collection**; the **50003 three-piece pattern Carving Set**; and the **50004 three-piece Spoon Carving Set**.









PLEASE CHECK OUR WEBSITE – WWW.DM-TOOLS.CO.UK – FOR THE LATEST PRICES AND DEALS

D&M TOOLS

THE TOOL SUPERSTORE

HAND, POWER TOOLS & MACHINERY SPECIALIST

DM-TOOLS.CO.UK



Have you visited us at our Twickenham Superstore?

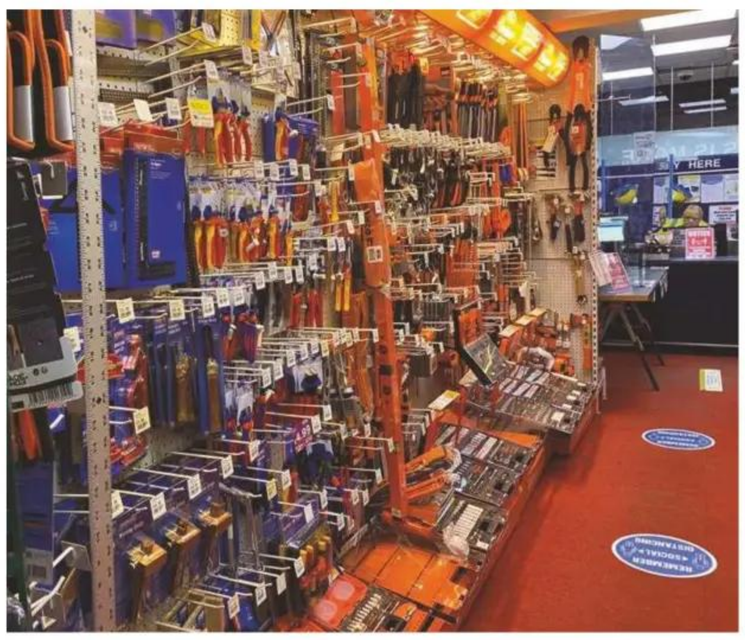
With over 600 power tools on display from all the leading manufacturers, as well as an extensive range of hand tools and accessories our Superstore is well worth a visit!

A highlight is our new **Record Power Showroom** which features a huge range of woodworking machinery, including bandsaws and lathes plus a huge selection of turning tools and accessories on display.

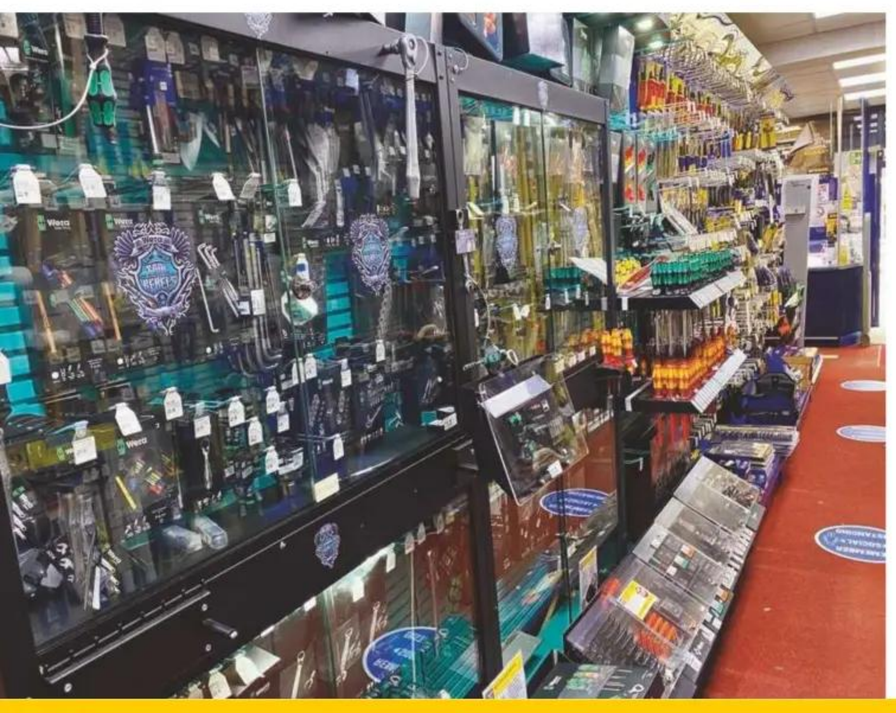
Our fully trained and experienced staff are always on hand to help or advise you on your purchase.

So whether you are shopping with us on-line or in-store you can be assured of the highest level of service and care.











73-81 HEATH ROAD • TWICKENHAM • TW1 4AW

020 8892 3813 • SALES@DM-TOOLS.CO.UK

MON-SAT 8.30am-5.30pm (CLOSED BANK HOLIDAYS)

PROJECT

The Sutton Hoo Lyre



SUPPLIERS

www.earlymusicshop.com – for gut strings if chosen; wrest pins and wrenches; and hitch pins if needed

www.stringsdirect – for steel strings, ball- or loop-ended. Strings may be bought as singles, half or full sets

www.luthierssupplies.co.uk– for all types of timber, purflings and fret wire to suit any luthier's needs

www.capitalcrispin.com – for high-quality veneer sheets

SOME DIMENSIONS

The lyre described is a little smaller than the Sutton Hoo example. However, the maker can really decide what size to make it, and indeed whether to stay with six strings or increase this to seven, which would offer a wider range of playing possibilities. I think the structure would atually tolerate eight strings, but there's always the possibility that an extra one could cause the body to warp

Overall length	60cm
Width at pin bar	17cm
Width at tail end	15.5cm
Length of sound chamber – external	31cm
Body depth	27mm
Length × width × depth of case – exterior	64cm; 22.5cm; 8cm

RECREATING THE SUTTON HOO LYRE

Based on the 1948 Sutton Hoo reconstruction, **Shaun Newman** explains the steps involved in making a historic, though little known, musical instrument



1 Instrument fragments found in the burial ship

Whenever we hear about the astounding finds from the famous Anglo Saxon burial ship, discovered in Sutton Hoo, Suffolk during the 1930s, we immediately think of the priceless gold and other precious metal artefacts. Other treasures, however, included some extraordinary examples of Anglo Saxon art and craft that'd ever been seen. Notably among them all is the beautiful, though rather menacing, full-face helmet, which was crafted from iron, bronze and silver and likely coated in copper. Then there were buckles of garnet and gold, ornaments, a magnificent sword, Byzantine silverware, not to mention a lavish feasting set.

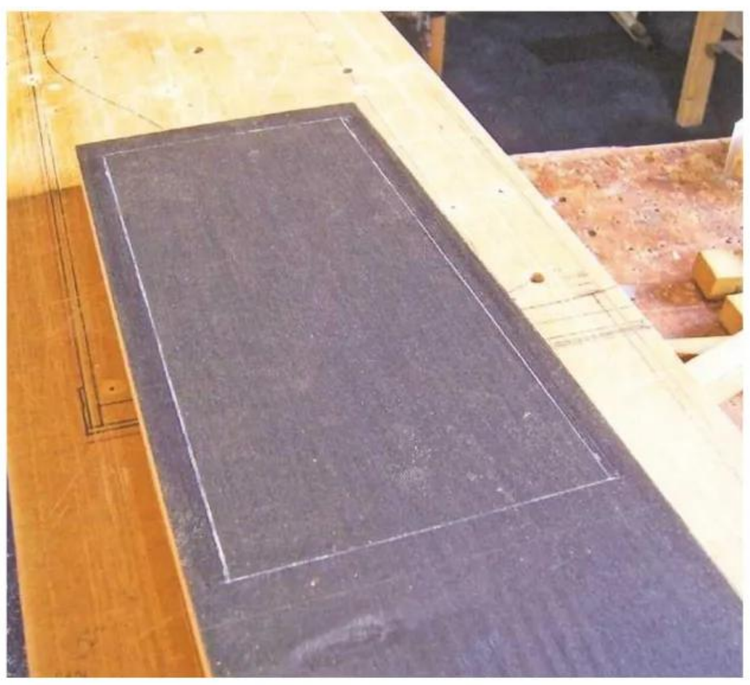
Of course, designing and building a ship of this scale was a huge task in itself, and during the excavation, only the imprinted outline of the vessel could be detected. In a dedicated feature that appeared in the July 2022 issue, John Greeves looked extensively at building a replica of the Sutton Hoo 'ghost ship'. Progress on the reconstruction's development can be followed here: **www.saxonship.org**. The build's expected completion date, which was seriously disrupted owing to the COVID-19 pandemic, is now scheduled for 2024.

Musical instrument fragments

Similarly, mention is rarely made of the musical instrument fragments whose remains were found with two metal brackets, scraps of preserved wood (**photo 1**) and traces of animal hair. Excavators soon established that the animal hair was almost certainly from a fur-lined carrying case, which had been made from beaver skin. Further research revealed that the instrument would've had just six strings, tuned with wooden pegs, and made from a hardwood – most likely maple.

While this artefact is actually one of the lesser known finds, it nevertheless holds an intriguing history. Initially identified as a harp by archaeologist/historian, Rupert Bruce-Milford – whose job it was to identify and catalogue the finds – little more attention was given to it for many years. The fact that most harps had a sound box, pillar and peg bar, with the strings running at an angle from the box, was somehow overlooked. The remains here, however badly decomposed, didn't suggest such a structure, and as such, there was little to go on.

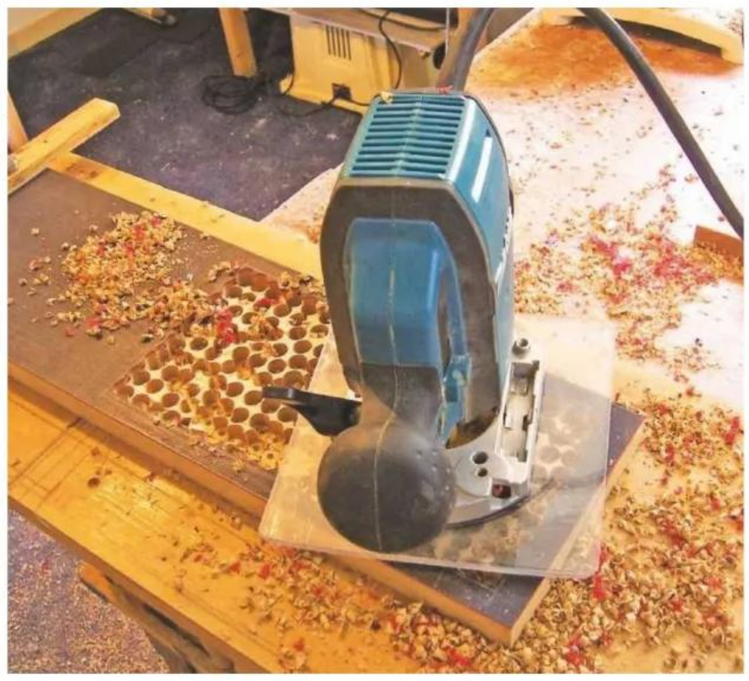
In 1948, an attempt at a reconstruction based on current thoughts at the time – in terms of the instrument's correct shape – was made, which has since been described by some historians and musicologists as 'awkward and unconvincing'. But despite these comments, the reconstruction was put on show at the British Museum, and it wasn't until 1970 that the remains were truly identified as a lyre. Indeed, it's now simply known as an Anglo Saxon lyre. The chief reasons for the shift in understanding



2 Veneers attached to the lyre's body



3 Drilling out waste from the sound box



4 Further clearing with a router...



5 ... followed by a gouge



6 Soundboard edges being squared



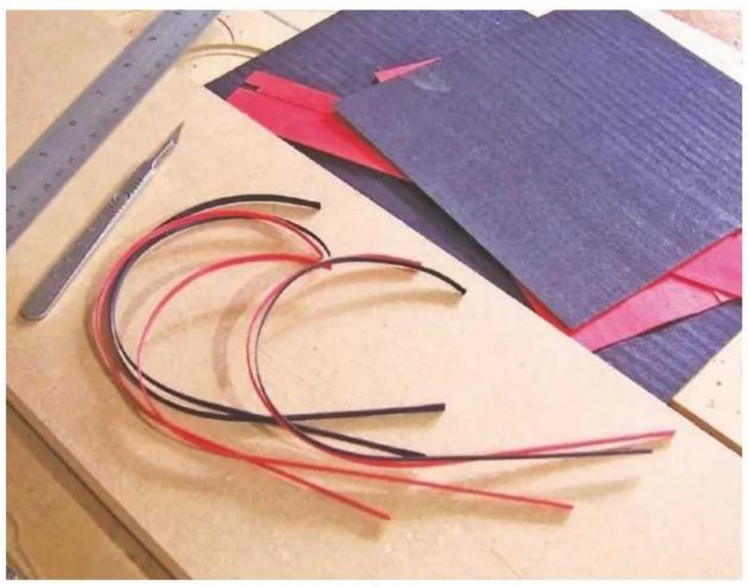
7 Soundboard components in the wedge and lace jig



8 The wedge and lace jig

and the more accurate identification were due to finds of other such instruments in Europe – for example, Oberflacht in Germany, where more than one was found, and Taplow in Buckinghamshire – both of which were discovered in the 1800s; this gave historians firm evidence well in advance of the Sutton Hoo excavation although somehow the link wasn't immediately established.

Accuracy of the 1970 identification was further confirmed by examples found in 1939 – Cologne, Germany – followed by Trossingen, Germany and Prittlewell, Essex in 2001 and 2003 respectively. These instruments are now



11 2mm wide veneer strips are used to make up the rosette



9 Basic soundboard construction

known by such names as the 'Germanic' or even 'Viking' lyres. In total, some 30 examples have been recorded from England, Germany, Denmark, Holland, Sweden, France and Norway. A new reconstruction of the Sutton Hoo lyre was made in 1970 – to replace the former – and is still on display at the British Museum.

Last one standing

One of the Oberflacht examples and the Cologne lyre were both destroyed during World War II. The former had been moved to Berlin for safety and stored in a large jar filled with liquid. This was broken open by Russian soldiers who drank the preservative – which was almost neat alcohol – and the harp disintegrated! Similarly, the Cologne lyre was destroyed in an allied bombing raid towards the end of the war.

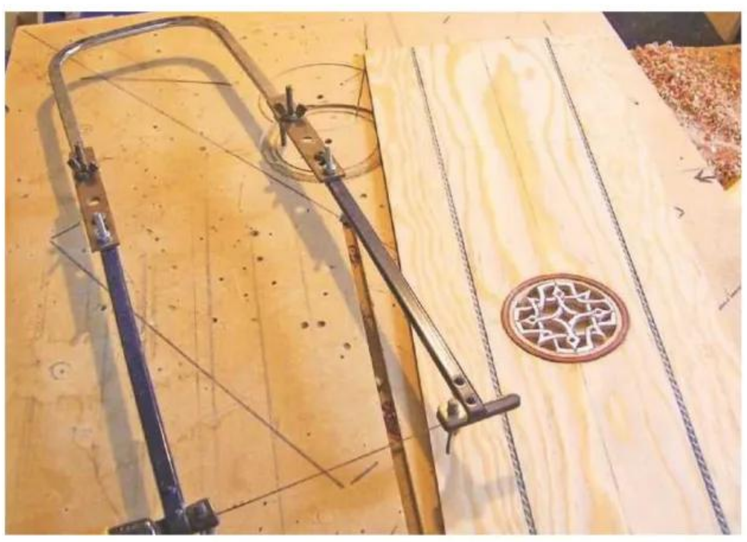
So, it's the Sutton Hoo reconstruction that prompted the build described here. Although my lyre is a little smaller than the original and doesn't have bronze brackets either side of the string bar, it's extremely straightforward to make and has a beautifully clear sound.

Choice of materials

My first consideration before embarking on the project build was which timbers to use.



12 Using a thumb plane, the rosette is levelled



13 The sound hole pattern is cut out with a 'long reach' fretsaw...



10 The rosette channel is cut

Upon closer analysis, the Sutton Hoo version was, as mentioned earlier, found to be made almost certainly of maple, while others were from oak. As I had a piece of oak available that seemed likely to fit the bill, I opted for that. I felt I should give the soundboard its best chance, so chose spruce as it's resonant and also in plentiful supply. The remainder of my cutting list included some red and black veneer sheets, a few smaller pieces of mahogany and some purfling scraps left over from a recent guitar build. I also needed six tuning pins, a set of six light gauge strings, and a small piece of fret wire for the bridge's top.

Preparing the lyre body

In order effectively to create the lyre's body, I started to prepare the oak board by attaching some black and red veneer sheets; these would stand out around the edges once the shape had been cut, the soundboard fitted and the outline dressed (**photo 2**). Next, it was necessary to mark out the location of the body's hollow section to create a rudimentary sound chamber, which would later be covered by the front. I used a china pencil to make the profile stand out, then set about removing material from what would become the box's interior.

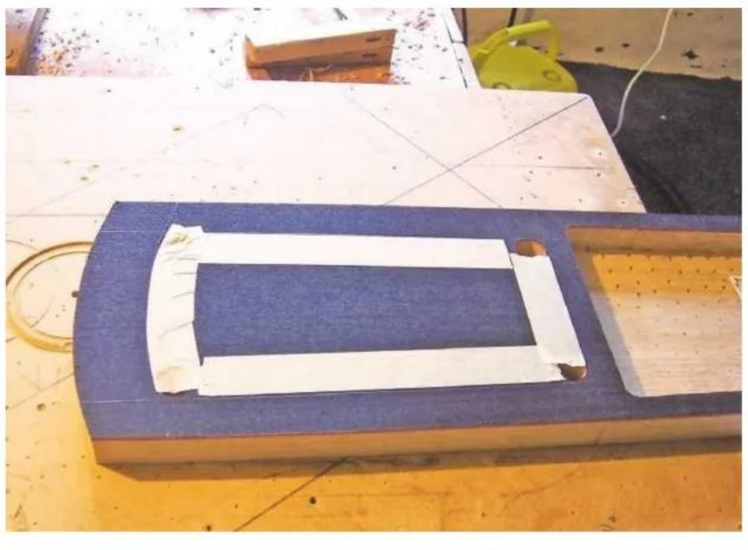
The first operation involved drilling out as much waste as I dared (**photo 3**). I needed to leave the sound box's edges and bottom thin enough to enhance the resonance, but strong enough to keep the body rigid and flat when the strings are brought to tension. Once the many holes had been drilled, the hollowing out process could be completed using a hand-held router. Fitting an extra wide Perspex base ensured I could see the china pencil lines clearly and avoid getting too close to the edges. Depth of cut was obviously governed by the depth



14 ... and finally cleaned up with needle files and a small chisel



15 Achieving the correct soundboard shape



16 Marking where the top part of the lyre should be removed



17 The instrument is much lighter as a result

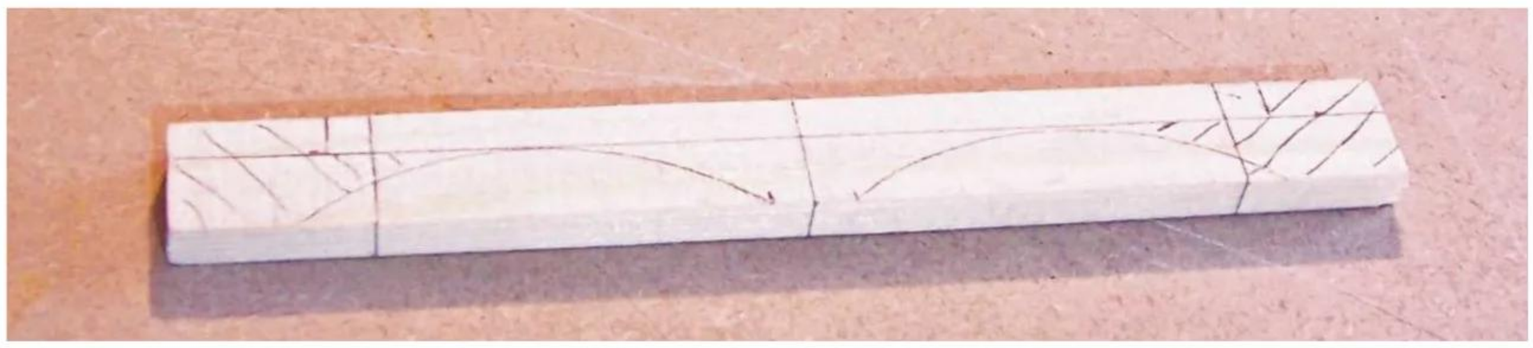
gauge on the router itself (**photo 4**). Once I'd removed most of the surplus material, this could then be cleaned up with a sharp gouge (**photo 5**).

The soundboard

The next task involved preparation of the spruce soundboard. As the instrument's body slightly tapers along its front outline, I thought some purflings that matched the taper's angle would look effective. There's no evidence whatsoever that such designs were present in the Sutton Hoo lyre, though the Trossingen one did show some signs of artistry with etched lines and relief carving. I always like to think of such decisions as the luthier's privilege!

I first planed the spruce until it was just 2.5mm thick – anything thicker will begin to reduce both sound quality and volume. Next, I planed all edges to be joined at exactly 90° and dead straight along surfaces that'd meet. My 50-year-old Record 042 shoulder plane was exactly right for the job (**photo 6**). I made the soundboard in three pieces with the purfling strips sandwiched between the edges, then held the entire soundboard in a 'wedge and lace' jig (**photo 7**). This type of jig has been used by stringed instrument makers for hundreds of years and is extremely easy to make. It comprises a series of 2 × 1in pieces of pine, which are set into a cross bar made from a piece of roofing rafter. The long wedges were taken from an old coffee table top, made from mahogany and 19mm thick, so they're very strong (**photo 8**).

Once removed from the jig (**photo 9**), I could then start to think about how to make this look attractive, while giving it some kind of sound hole. I chose to do a little fretwork and found a series of copyright-free designs online. Having chosen an appropriate one, I printed a copy and attached it to the front with wood glue – this would act as a guide for the fretsaw blade.



18 Marking out the soundboard support

I'd intended to fit a rosette into the soundboard, so cut a channel in advance, but later placed some coloured purflings into the channel using a side edge seam roller along with Titebond glue (**photo 10**). To make up the rosette, I used strips of dyed tulipwood – some black and others red (**photo 11**) – before trimming flush with a small thumb plane (**photo 12**). Of course, it's also possible to fit a ready-made, commercially available rosette, though in this case, I'd suggest one made for a ukulele, or perhaps a mandolin. However, one intended for a classical guitar, for example, would look far too big.

Once the rosette was fitted, I could now move on to fretting out the sound hole pattern. Owing to the long reach required for this task, I used a fretsaw that I'd put together some 25 years ago. I'd taken the spring steel arc from an old one and attached it, using small bolts, to a new one with part of the back end cut off in preparation. This saw gives an overall reach of over 40cm (**photo 13**), which is ideal for a gorilla aspiring to be a woodworker…! I then cleaned up the fretwork detail using needle files along with a 1.5mm chisel (**photo 14**).

Initial assembly steps

My next consideration was the best method for attaching the soundboard to the lyre's body. Firstly, I had to cut out the spruce, following the profile created when the arms and tuning block were marked out above the body's main part and sides. The spruce doesn't cover what's left of the whole instrument, but extends around two thirds up towards the tuning block. This feature is visible in some of the finds, with other examples being better preserved than the Sutton Hoo one. I found that a slight angle in the spruce arms looked attractive (**photo 15**) – the spruce will eventually be glued in place and the remaining trim made from scraps of mahogany, similarly planed down to 2.5mm thick.

At this stage, however, it was too early to attach the soundboard as the upper part – across which the strings will pass – first has to be removed. I started by drilling four 20mm holes – one in each corner, thus offering a simple curve – then placed masking tape across the inner edges of



19 Cramping the soundboard in place



20 Mahogany trims for the remaining front are placed in cramps



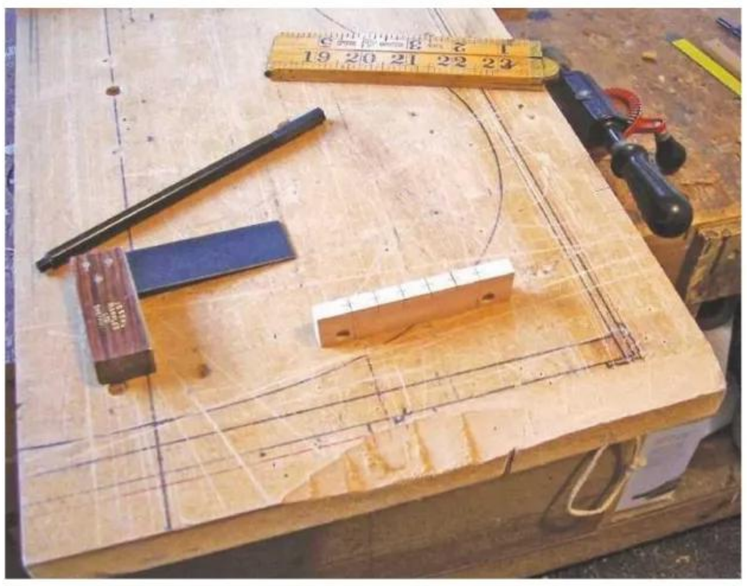
21 The spindle moulder in use



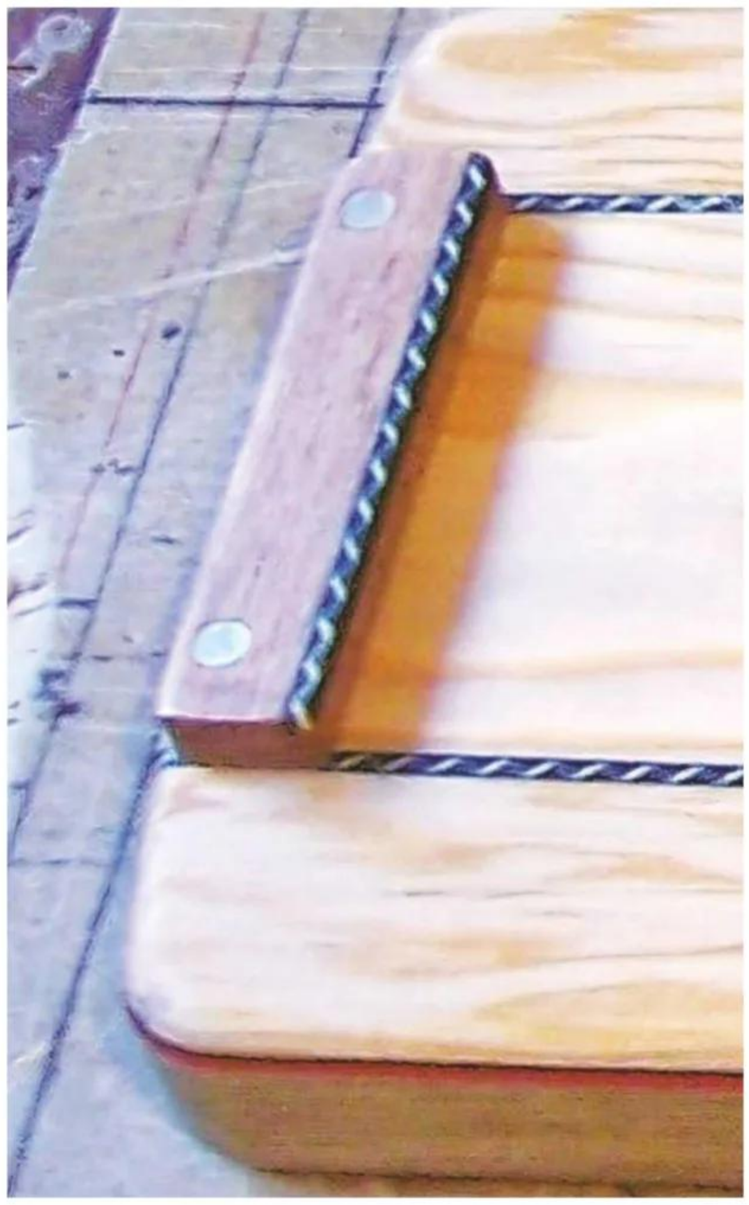
22 Tie block dry fit for the string ends



23 Lining up the string positions



24 The tie block holes once marked out



25 The tie block in place

the part to be removed (**photo 16**). I used a jigsaw to follow the tape's edges and managed to achieve a good edge, which was then cleaned up with sanding sticks and a 1in chisel (**photo 17**). To prevent the soundboard from collapsing inwards due to string pressure exerted after putting the bridge in place, I made a support that'd sit directly under the bridge position – acting in a similar way to a violin sound post. The supporting piece needed to have exactly the equivalent depth to that of the sound box interior. To lighten the support's weight, I cutaway some wood with a fretsaw and dabbed a little glue onto where it'd meet the back's insides and front respectively (**photo 18**).

To fit the soundboard, I used a series of cramps placed around the edges, which worked well (**photo 19**). There are other methods for doing this as it's generally no thicker than 2.5-3mm, and therefore easy to hold down. Strong and long elastic bands, weights and even twill tape pulled tight will do. The most important thing is to ensure that all edges and corners fit flush. I then fitted 2.5mm mahogany trims to the remainder of the lyre's front.

With everything in place, I drilled six 4.5mm holes through the pin bar located at the instrument's top, which allow the wrest pins to be housed. The holes are a fraction smaller than the pins, which have a very fine thread, so they're tight and can hold the strings firmly. But if you make the holes too big, the pins will slip and everything then goes out of tune.

Ensuring smooth, slightly curved edges around the structure so far was aided by my home-made spindle moulder. This gadget is made from an old hand-held router, attached to an MDF board through which the cutter can pass. It's then placed over the opening to a folding workbench, with the cutter facing upwards. The downward pressure exerted during use helps to keep it stable – you just need to watch your fingers (**photo 21**)!

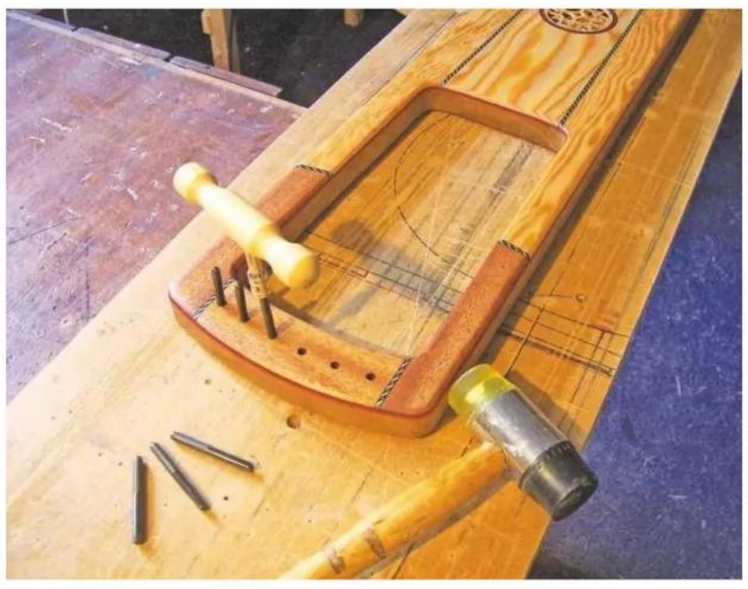
String tie block & wrest pins

At this stage, the lyre was looking both sleek and elegant, and my next task was making a tie block for the strings. With an instrument of this nature, two types of string can be fitted: the first is 'ball-ended' – requiring 1.5mm holes to be drilled through which the strings can pass until the ball traps them – or held by bridge pins such as those used on an acoustic guitar; and the second is 'loop-ended' – which requires hitch pins to be hammered into the tie block, or in some cases, into the tail end of the instrument itself. The latter method means that the tie block also acts as a bridge, and is fixed. I chose ball-ended strings of differing gauges as these allow for a separate bridge, that's moveable both backwards and forwards by a fraction to lengthen or shorten the strings, and angled clockwise or anti-clockwise to allow for slight tuning changes to pitch.

From carrying out previous builds, I know that a string block can pull off from the instrument as the strings are brought to tension, so I felt it'd be wise to fit this with strong beech dowels. As Einstein is once purported to have said: 'A clever person may solve a problem, but a wise one avoids it in the first place...' Using dowels, I started by dry fitting the block to the front (**photo 22**). As shown, the block's length allows it to sit neatly between purfling lines at the lyre's lower end. The holes' position through which the strings pass are marked using a long steel ruler, placed to the left-hand edge of the string hole (**photo 23**), as the pin would be turned clockwise. Each string would then be similarly wound on. Holes through the pin block are drilled along a centreline. If these are placed too close to the soundboard, it can be difficult for the ball-end to sit properly and if too close to the top, the block can split away. Over the last 35 years, I've had my fair share of experience with all these fun moments (**photo 24**).

To make the tie block look a little more attractive, I inlaid a strip of purfling along the front edge, rounded off the corners and capped the dowel holes with two mother-of-pearl dots – these are normally used as position markers on guitar finger boards (**photo 25**).

Once the tie block was in place, I could then screw the wrest pins into the lyre's upper rail. Each pin should be put in at an equal depth to that of the others, and to begin with, this is an easy task. The pins penetrate deeper once the strings are tightened, so they can look odd. It can take several attempts to get things looking just right while ensuring the instrument is actually in tune (**photo 26**). Just before that final stage,



26 Screwing in the wrest pins



27 The small bridge is made from mahogany



28 The case exterior...



29 ... and interior

however, I had to make a small bridge using a piece of mahogany, measuring just 15.5mm high × 8mm wide, before inlaying a strip of fret wire across the top edge. Without fret wire, the strings bite into the mahogany and dull the sound (**photo 27**).

The simplest & best finish

For this project and indeed many other stringed instruments, the simplest finish to use is Liberon Finishing Oil as it's extremely easy to apply and enhances the timbers beautifully. Just three applications make for a perfect job. We don't know whether the original Sutton Hoo lyre had any protective finish applied, and if so, it'd most likely have been a type of oil or animal fat. One thing we do know for certain is that someone felt the instrument was worth taking care of, then preserving. This is evidenced by the traces of beaver skin found and the fact it was included in King Raedwald's treasured possessions, to be taken into the afterlife.

The moment of truth

When making any stringed instrument, the 'the moment of truth' finally arrives, but what will it sound like? Well, this beautiful little lyre produces a fine clear note and each string has its own character owing to the different gauges. My daughter always says that a good stringed instrument should be like an angel – with a beautiful face and a beautiful voice – which I think is a nice insight.

The case

With the lyre completed, I could now move on to making a case in which to house it. This is essentially a box, made in the usual way, by first building the sides, before pinning and gluing the top and bottom into place. I used pine for the sides – around 10mm thick – and 3mm ply for the top and bottom. I sliced off the lid to ensure a perfect fit and lined the interior with 12mm thick foam, which is covered with crushed velvet. It's useful to fit 90° hinges at the rear, which holds the lid open and reduces the possibility of damage to the lyre as it's taken in and out of the case. Fitting a tape inside that allows the instrument to be lifted out easily. I first found this idea in an old zither case from Austria, which came in for repair. I sealed the case exterior with cupboard paint and applied the 'Anglo Saxon' style decoration by hand, using a fine brush. I found that making a stencil from acetate greatly aided the edge design, but the central rondel was completed largely by hand. I'm very fortunate that my wife is a competent artist, and has a steady hand (**photos 28** & **29**).

Tuning & playing

Finally, a note on tuning and playing. We have no real idea as to how this lyre would've been tuned. It most certainly wouldn't have adhered to the modern convention of A=440, and likely tuned to blend with a human voice, which is still the case with some guitars and instruments such as the Appalachian dulcimer. I simply took the plunge and tuned it from left to right, looking at the lyre to g, a, b, c, d, e. This way, some very simple tunes can be picked out, and not least given the right sequence of tuning the theme from *EastEnders*!

We're also not fully aware as to the intended playing position. From looking at stone carvings and the like, the player would most likely be seated rather than standing, which would otherwise make it difficult to hold in place for any length of time (**photo 30**). However, some of the lyres found show evidence of what may have been a hand strap across the back. Possible explanations include an aid for a standing player, or when some of the strings are deadened with the left-hand fingers, allow simple chords to be played (**photo 31**). Either way, the sitting position offers greater ease of playing with or without a strap.



32 The completed Anglo Saxon lyre



30 The playing position required



31 Deadening strings with the left hand

Dont delay!

Robin Gates is tempted by tools at bargain prices in the *The Woodworker* of September 1911

My first week of January improved when I stopped making New Year's resolutions. The second week was never a problem because by then all such unworkable ideas as giving up this – biscuit, cake – in favour of that – fruit, vegetable – had been abandoned. However, one January problem remaining is that of the sales. Despite the year-round price-cutting of this online age, I detect a hint of urgency on our normally sleepy High Street as, like a dose of winter flu, this acute shopping disease has broken out yet again. Elbows out, social distancing forgotten, the race is on to be first to the check-out with some unrepeatable bargain.

Sharp & quick

Thank goodness, then, for *The Woodworker* which seems to have always been about making things and buying only what's needed – when it's needed – to make them. This time I have an old September issue prompting pleasant memories of those slowing end-of-summer days when – what's this – my reverie is broken by a full-page advertisement from London tool merchant Joseph Buck for their first sale in 150 years! Oh my! Suddenly my heart is beating in overdrive! 'The opportunity of a lifetime,' says Mr Buck. 'Don't delay. Send your postcard today' with a list of the tools I need. Ah, but now I'm reminded that this issue dates from 1911. I can relax, put the kettle on and while the tea is brewing, perhaps search for the King George V halfpenny green I'd have needed to stamp that postcard 113 years ago.


ii. The Woodworker and Art Craftsman. Sep

To Carpenters, Joiners, Cabinet Makers, Engineers, Gasfitters, Plumbers, &

FIRST SALE IN 150 YEARS
TOOLS AND MACHINERY
AN OPPORTUNITY OF A LIFE TIME.

JOSEPH BUCK, 56, HOLBORN VIADUCT, E.C.

Must reduce his Manufactured Stock, previous to extensive alterations,

So is HOLDING A SALE (the first in 150 years) DURING SEPTEMBER ONLY.

No Catalogue is being issued, but everything is going under manufacturing cost.

Send a postcard with the list of things you would like to know the Sale Price of and we will quote by return.

Here are a few examples of reductions taken at random:—

SOLID STEEL FELLING AXES.

	3½ lbs.	4 lbs.	4½ lbs.	5 lbs.
Usual Price ...	5/6	6/-	6/6	7/-
During Sale only	3/10	4/3	4/8	5/1

BUCK'S BEST HAND SAWS. 26 in. (Any size Teeth.)

Usual Price ... 6/6
During Sale only 4/5

SOLID STEEL BRACES.
Steel Jaws. 7 in. or 8 in. Sweep.

Usual Price 1/10 During Sale only 1/4

INDIAN OIL STONES.
Medium or Coarse.

INDIA OIL STONES
SHARP AND QUICK

	8 in. by 2 in. by 1 in.	7 in. by 2 in. by 1 in.
Usual Price ..	4/-	3/-
During Sale only	2/9	2/1

BEST QUALITY
SMOOTHING PLANES.

	2 in.	2½ in.
Usual Price	3/9	4/6
During Sale only	2/8	3/4

SEND US A POSTCARD WITH A LIST OF THE TOOLS YOU THINK YOU CAN DO WITH AND WE WILL QUOTE YOU OUR SALE PRICES BY RETURN.

BUCK'S Best Quality Tools at unheard of Prices.

Don't Delay. Send your Postcard to-day.

PLEASE ADDRESS IN FULL—

JOSEPH BUCK, Dept. C. 56, HOLBORN VIADUCT, E.C.

Now a little game comes to mind: which of these 'examples of reductions taken at random' might I have rushed to buy in 1911? No sense here in dithering; I'll buy them all! This 5lb solid steel felling axe, for example, at five shillings and a penny. Never having felled a big tree, it's high time I took a swing at one. There's a 26in hand saw at four shillings and five pence, for sawing that tree – not too large a tree, then – into planks. I can't miss out on an 8in sweep solid steel brace, even though not of the ratcheting sort, as it's only one shilling and four pence. And an 8 × 2 × 1in India oil stone – 'sharp and quick' – at two shillings and nine pence is a no-brainer; you can never do too much sharpening. A new wooden smoothing plane, of best quality and with 2¼in iron, for three shillings and four pence – need one ask? That makes a grand total of 16 shillings and 11 pence, leaving three shillings and one penny change from a pound note to further amuse myself in the Big Smoke – or Big ULEZ as London might be nicknamed today.

Hand tools in 2024

In 2024 that total equates to about £82, which leads me to investigate what I might pay for equivalent hand tools now. In search of similar quality and British manufacture, I hit an early snag with the 5lb felling axe, unable to resist the Swedish Hultafors Arvika 5 Star model weighing in at a budget-blowing £200. But it's back to Britain for the 26in rip saw, a Thomas Flinn & Son Centenary Edition with shapely rosewood handle at £216, properly made in the Steel City itself. Sadly the 8in sweep bit brace appears extinct, and while shying from Stanley's ratcheting 10in model on account of its plastic parts, I find a handsome alternative in Workshop Heaven's Deluxe Ultimate hand brace, which has fine-grained Kotibe wood handles at £115. Meanwhile Classic Hand Tools will furnish the Norton India oil stone for £26. That just leaves the wooden smoother for which Dorset plane maker, Phil Edwards, will oblige at £235, bringing my new grand total to £792. Hmm. High time for that cuppa, I think, and cake!

nova®

Introducing!

The Neptune & Neptune MAX

Advanced technology that redefines the lathe experience.

STRIATECH

Intelligent Direct Dive



£1,269.00 RRP

Neptune

- 15" over bed swing
- 1.5 HP Motor
- 100 to 3500 RPM with a 50 RPM drying mode
- 360 degree pivoting and sliding head
- Programmable favorite speeds
- Electronic braking

Neptune MAX

- 15" (381mm) over bed swing & 28" between centres or 44" (1117mm) with bed extension
- Powerful, Direct Drive 1.5 HP Motor 110V to 240V
- Seamless speed selection from 100 to 3500 RPM with a 50 RPM drying mode
- 360 degree pivoting and sliding head
- Programmable favorite speeds
- Electronic braking
- Unequaled electronic safety feature



£1,584.00 RRP

Teknatool INTERNATIONAL

For UK & Ireland, find your nearest stockist online

www.craft-supplies.co.uk

@craftsuppliesservice

service@craft-supplies.co.uk

Craft Supplies

BE INSPIRED, BE CREATIVE



THE Alan Peters ONLINE FURNITURE AWARD 2024



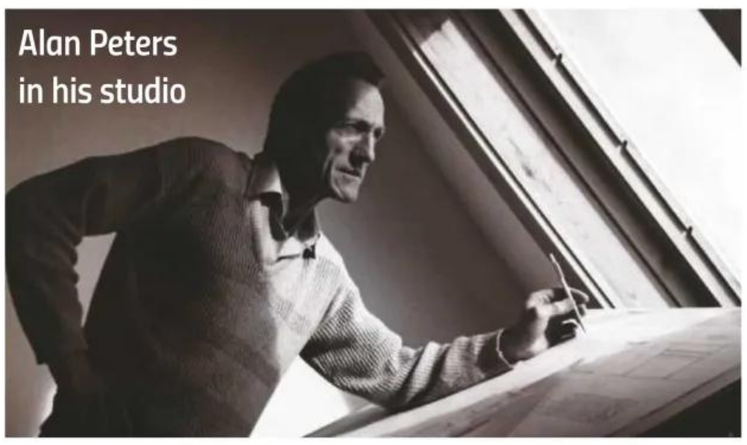
Devon walnut and rosewood desk by Alan Peters, 1989

'EXCELLENCE WITHOUT ELITISM'

Continuing to champion UK furniture design and making talent while celebrating the life and work of the late **Alan Peters OBE**, the 2024 award returns as a biennial competition and is set to adopt an online format as before

This biennial award celebrates the legacy of one of Britain's most prominent furniture designer-makers of the late 20th century while aiming to encourage all talent in the craft of furniture design and making. Any woodworker who's a resident citizen of the British Isles, aged over 18, with a passion and talent for designing and making contemporary furniture, is invited to submit up to two pieces made primarily of wood. These can also include, if applicants so wish, other complementary materials that echo Alan Peters' design philosophy. Judging is based on the appropriate use of material, quality of workmanship, functionality, as well as originality of design.

Both one-off designs and potential batch-produced designs are encouraged and the piece(s) doesn't have to be large. Applicants should be familiar with the work of Alan Peters prior to applying and are encouraged to read Jeremy Broun's 64-page online video-integrated e-book, which is offered free-of-charge here: **www.jeremybroun.co.uk/alanpetersaward**.



Alan Peters in his studio

The man behind the award

Alan Peters OBE (1933–2009) was one of Britain's most prominent furniture designer-makers of the latter part of the 20th century. Apprenticed to Edward Barnsley, he had a direct link to the English Arts and Crafts Movement as well as being hugely influential on an international level in terms of his practice, teaching and publications. Above all, Alan Peters' respect and understanding of how wood behaves and the value of hand skill, while moving tradition forward, resulted in the creation of many timeless pieces. He created affordable, functional furniture, which was built to last, making an art of his craft in some of these subtle innovations.

Award history

The original award – called 'The Alan Peters Award For Excellence' – was initiated by Jason Heap in 2010. The prize was offered to three winners, each of whom were given free exhibition space alongside professionals at this annual furniture event in Cheltenham. The award ran for eight years and the judging panel comprised of Jason Heap, Keith Newton and Jeremy Broun.

Following the success of both the 2021 and 2022 awards, this year, as with 2021, an online format will be adopted, followed by an event ceremony and virtual exhibition.

Expert judging panel

- **Jeremy Broun (Organiser)** – designer-maker and co-exhibitor with Alan Peters from 1978–2002
- **Andrew Lawton** – designer-maker who worked with Alan Peters as well as on his last commission
- **Fernanda Nuñez** – Award-winning furniture designer-maker

The Woodworker & Goodwoodworking

JB JEREMY BROUN

WORKSHOP HEAVEN Fine Tools

eVOLUTION

PRIZES OFFERED

1ST PRIZE: £1,000 voucher, courtesy of Workshop Heaven
2ND PRIZE: £500 voucher courtesy of Evolution Power Tools
3RD PRIZE: £300 Judges' cash prize

This award is open to any resident citizen of the British Isles, aged over 18, who has an enthusiasm and flair for woodworking. A piece of furniture – indoor or outdoor – is to be made and six high resolution JPEG images submitted, together with a Word document description.

Shortlisted applicants will be asked to engage in a Zoom video call or submit a one-minute video introducing themselves and describing the piece(s).

Judging of entries will take place in August followed by an event ceremony and virtual exhibition(s) in September – exact dates TBA.

It's important to get designing and making straight away, as the submission deadline is **31 July 2024**. To download an application form and view the free 64-page e-book, visit **www.jeremybroun.co.uk/alanpetersaward**. The application form download button can be found halfway down the page. Payment for entry can also be made securely via the website. For further information, contact Organiser Jeremy Broun – **jezbroun@gmail.com** – or Group Editor, Tegan Foley – **tegan.foley@dhpub.co.uk**



Romanian chest by Alan Peters

Hammer®

CALL NOW 01908 635000 FOR YOUR PERSONAL OFFER!

HUGE RANGE AVAILABLE ON STOCK FOR IMMEDIATE DELIVERY

PROFESSIONAL WOODWORKING MADE AFFORDABLE

Planing, cutting, moulding and the start into CNC technology.
Every project is guaranteed to be a success with a Hammer.
Proven a thousand times over and uniquely user-friendly.


Sliding Table Saws


Planer-Thicknessers/ Planers/Thicknessers


Spindle Moulder


Saw Spindle Moulders


5 Function Combination Machines


Bandsaws


CNC portal milling machine


Dust Extractor

FELDER GROUP UK LTD.
Unit 2 Sovereign Business Park, Joplin Court, Crownhill, Milton Keynes, MK8 0JP | **uk.felder-group.com**
FELDER GROUP SCOTLAND Unit 4 Lindsay Square, Deans Ind Est, Livingston, EH54 8RL

WW TECHNIQUE

WORKING

RESOURCES

The Handplane Book, by Garrett Hack, Taunton Press, 1999
The Workbench Book, by Scott Landis, Taunton Press, 1998

GLOSSARY

Doorstop – the timber piece used to line a doorframe and 'stop' the door swinging through; usually ½in or 12mm timber; a useful thin timber section

These randomly selected boards might be used as a base for a toolbox project, but need the cupping taken out first

In part 2 of this important series, **Michael Huntley** tackles board flattening prior to making a toolbox

FLAT OUT



1 Nos.4, 5, 7 and a block plane – names for these indicate use, but numbers are simpler

In 1973, I decided that restoring old woodwork was what I wanted to do. That was hardly surprising given the fact I lived in a timber-framed house in the Weald – one of the historic centres of oak timber-framing – and my parents owned an antique shop full of old woodwork. At that stage, I wasn't good enough to work as a furniture restorer but really preferred old buildings, so I took myself off to college and got an OND in Building Studies. That included an element of practical woodwork, but not enough to get me into a trade workshop. At this point, however, I didn't realise that I'd be building my own house in 1999! Sadly I got sidetracked by earning money in a local auction room, so my woodwork still remained at 'general builder' level.

Anyway, nobody wanted to restore buildings then – everyone thought I was bonkers!

In the early 1980s, however, I found a person willing to teach restorers. Bruce Luckhurst had been at West Dean College in the early '70s, when I'd tried to get a place but failed, due to my lack of prior cabinetmaking training. In those days, cabinetmaking courses were very rare. Today's youngsters would be surprised to know that back in the '70s, you couldn't just pick a subject and 'do' it; you were really lucky to find a teacher or apprentice-master, and consequently respected the teacher and valued the training. The Weald and Downland Open Air Museum was next door to West Dean College. This was another place that I tried to get into, but in those days, there were no paid positions for trainees. So I had to stick with the paying job in the sale room and just do my woodwork, whether on house or furniture, at weekends. Bruce's course finally offered me a proper training and I was totally enthused.

Tools

I was accepted at Bruce's on the basis of various doors and windows that I'd made. In my view, all course applicants should bring along samples of 3D things that they've made in order to show an ability to work with solid material. In my case, the joinery was in a house, but photos proved they existed and were in use, and I also had offcuts of the mouldings. Always keep a few offcuts! Anyway, I'd been collecting hand tools for 15 years by then – I still have the receipt from Angel, Son and Gray in Guildford for the No.7 I bought in 1969. Bruce gave me the first 'course specific' tool list that I'd seen and by today's standards, that list was very short. I've heard of a teaching school that asks its students to spend £6,000 on tools. I think you can have a good introduction to woodwork with fewer, and I intend to show you how we did it back in 1980.

The joinery work had really needed a machine of some sort and I got a Coronet Minor to size the timber and do the rebates. Back then, it was a bit of a rarity for an amateur to own a woodworking machine, whereas nowadays, some sort of machine is regarded as essential. In fact I've now done the reverse and the only machine that I've kept is a bandsaw, which allows me to dimension timber then hand plane it. It's the process that I get enjoyment from, not the quantity and speed of output. Perhaps it's an age thing, but I no longer mind what I work on or when it's finished; the doing is the satisfying part. Consider the action of working wood as your target, not the quantity of projects completed.



2 Shoulder planes; the bullnose is very useful



3 Basic marking tools, but best-quality rule and square; a 2ft metal rule doubles as a straightedge, and a wooden marking gauge is sufficient to start with

THE WORKPLACE

A new student will want a workbench but not know how to build one. Enter the Black & Decker Workmate. If you don't have a lot of spare baulks to run up a temporary bench, then this is the answer. Bench designs are well covered in Scott Landis' book – see 'Resources' sidebar – and I'll include a general shot of my bench in each article, as well as describing what's on there and why.

There's two additions to my bench: one permanent and one temporary. The first is a tool rack at the back, made from doorstop. It helps to keep the tool well tidy and means that chisels and squares can be put out of harm's way. The other addition is a planing stop – a ½in doorstop, cramped and tacked into position – various versions of which are described in Landis' book. Finally, there's a box of panel pins of various sizes on the bench; get yourself a selection of pins – you won't regret it. When I say 'tacked into position', it's done with pins that are left proud. They can be pulled out when finished with and hardly mark the bench surface



4 The metal stock of this engineer's square shows the effect known as 'cupping'



5 Bench layout showing stocks of the squares set up as winding sticks – note the thin strip of wood used as a planing stop



6 Bump being planed out of the board; the wooden winding sticks show that the planed area is true and dead flat; the darker strips on each side are areas that the plane hasn't yet reached; plane in a symmetrical pattern from the centre to the outside with each stroke, testing for dead flat with the sticks after each series of passes



7 Using a straightedge, test regularly from corner to corner. Putting the board face down on a sheet of plate glass helps you to see which places still need planing down

So back to my toolkit. I bought No.4, No.5 and No.7 bench planes followed by a block plane in 1969 (**photo 1**). The 4, 5, and 7 are still in use, but the block plane was difficult to adjust and uncomfortable to use. Do buy the best-quality planes you can. Clifton are English made and you can meet Mick Hudson at various woodworking shows. He helped design the planes and should you have any problems, it's easy to get yourself or the plane to Sheffield and they'll fix the problem. Support British planemakers otherwise they'll cease to exist. I can't think of any reason for not buying Cliftons, except that they don't make a block plane! For this, I choose Veritas as this company has the most options. You'll also need shoulder planes, and mine were obtained second-hand in the '80s (**photo 2**).

Techniques

Assuming you don't have any machines, how do you get square timber? Firstly, start off with small lengths – nothing greater than 2ft; and secondly, get the right tools. A plane that's long enough to span the bumps – a No.5 would do – along with a good, true square and a true straightedge (**photo 3**).

Use the square to find which side is cupped (**photos 4** & **5**), then set the board down on the bench, cup down. Doing so ensures the board doesn't rock. If it continues to rock, however, then pack the high edge with wedges. Ensure the board's end is against a planing stop (**photo 6**) and see the 'Resources' sidebar overleaf.

You should now have a board with a bump that faces upwards. You can now plane the bump away, which is much easier said than done, until you get used to it. Be aware that you may be: **a**) trying to take too thick a shaving; **b**) planing against the grain. At this point, you'll know that you're going against the grain, so stop and turn the board around. Do try and practise on some softwood with nice kind grain – you can get into fancy woods later on.

Use the straightedge to check whether the bump has gone (**photo 8**). Try corner-to-corner as well as end-to-end. Once you're satisfied, take two parallel-edged items and stand them on the board as shown (**photo 7**). These are winding sticks. You can plane yourself up some fancy ones later on, but for now, two 'true' bits of doorstop will suffice. Stand back and check to see whether the two top edges are in line. If not, the board is 'in wind'. Plane away the high spot. As usual, practise this whole process several times and don't expect to get it right first time round.

Next, having achieved a dead flat surface, you're finally able to put the board in the vice and plane the edges square (**photos 9** & **10**).

The last job is to thickness the board by gauging a line around the edge, and planing down to the gauge line.

Hold your horses

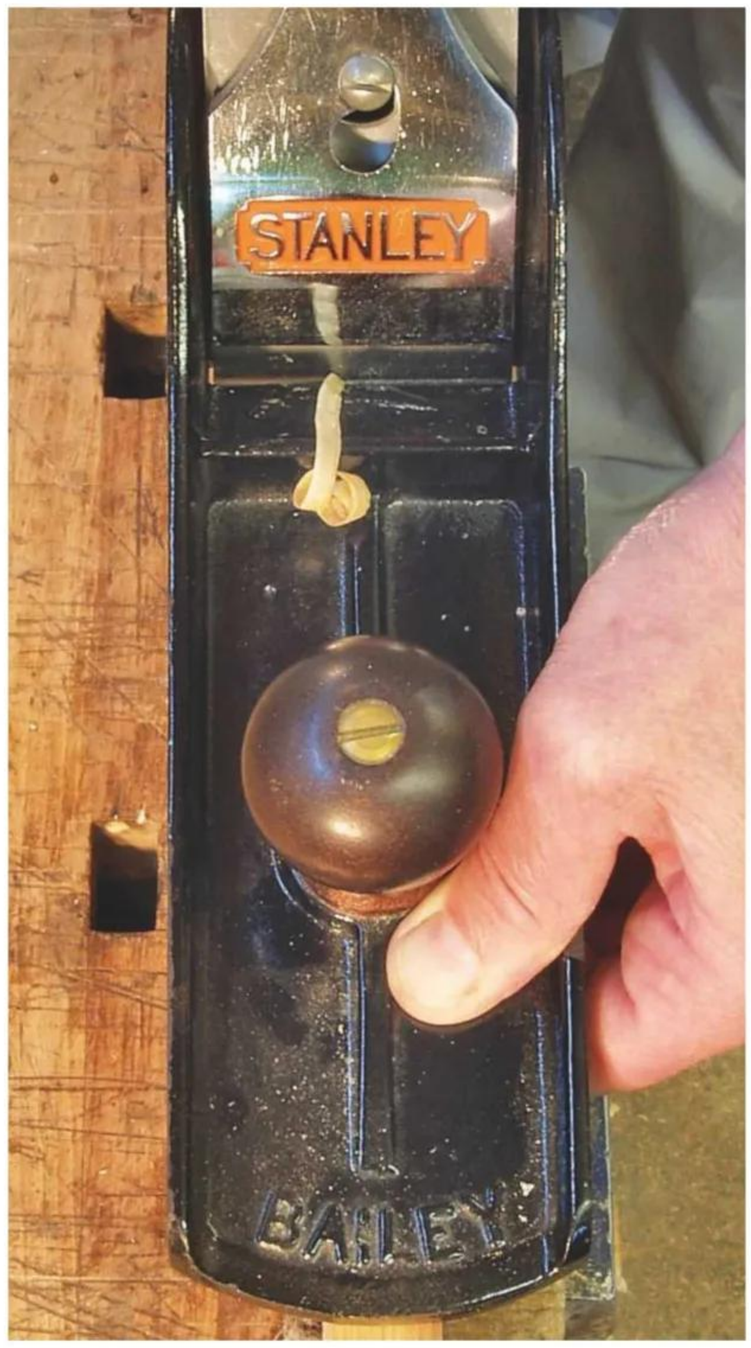
You may think that before talking about timber preparation, I should discuss timber itself; however, I've found that students actually want to get on and do some cutting and assembly of projects. As such, timber technology comes later, as does using a scrub plane, which some might say should be used to flatten a board, but all in good time!



8 Once the face is flat, mark it, then place the square's stock against your true face. Next, check the edge against the light



9 Holding the plane as shown, take a shaving from the high side only. Photo 10 shows...



10 ... half of the edge with a shaving and half unplaned; check regularly with a square until you can take a full-width shaving of even thickness along an edge that's square to the face. This requires a bit of practice as you have to concentrate on what's happening at the plane's mouth as well as the toe

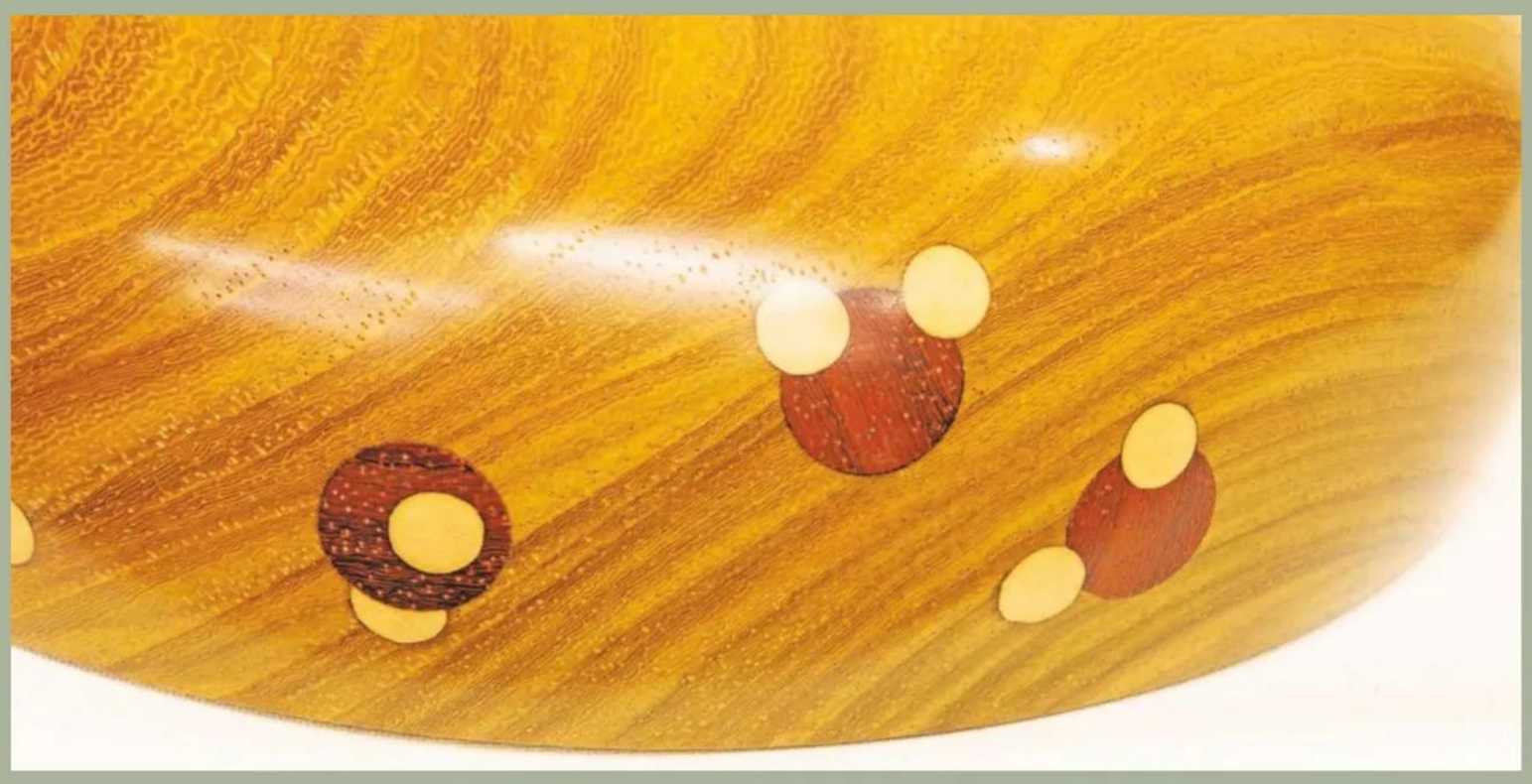
TURNING Bowl with molecular structures

CHISEL RATING

WATER WORK

Inspired by his background in teaching chemistry, **Bob Chapman** fuses science and woodturning to create a bowl that features models of molecular structures within its walls





Some readers may know that I used to teach chemistry, and I'm always looking for ways to incorporate science into my turning. For some time now, I've been thinking of building models of molecular structures into a bowl.

Fig.1 shows a representation of a water molecule. The oxygen atom is approximately twice the diameter of a hydrogen atom and there's an international agreement about the colours used in molecular models – oxygen is always red and hydrogen white. This has an important bearing on the timbers chosen for the work (**photo 1**).

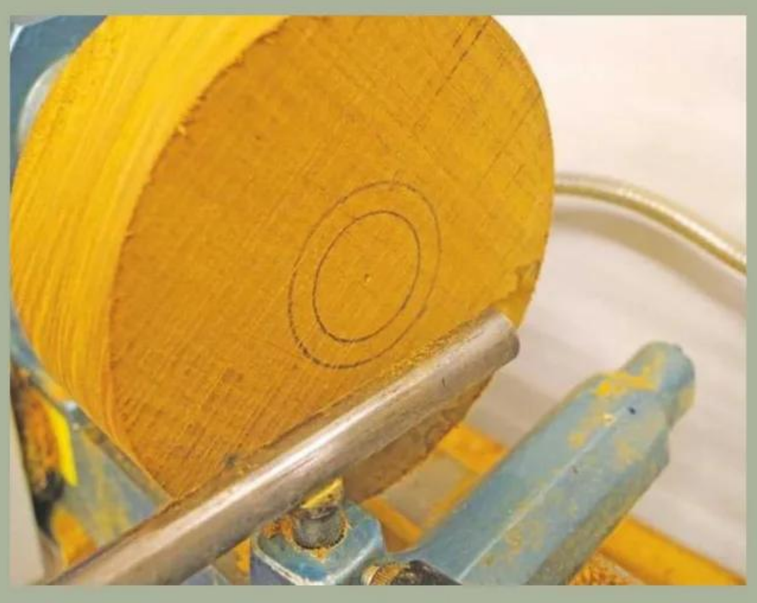
Timbers to represent colours

The reddest timber I know is padauk, which is the species chosen to represent oxygen. I have some holly, which is very white, and intended to use this for the hydrogen, but while searching the woodstore, I came across an even whiter piece of timber, which I wasn't able to identify. It's certainly not holly, but think it may be sycamore. Anyway, it seemed ideal for the task and that's what I used.

For the bowl's body, I wanted something that'd contrast with both of these, so ended up choosing a piece of Narra, which I'd been given years ago. A mid-brown colour with a distinct grain, although I'd never used Narra before, I found that it worked well. Although the dimensions are unimportant as any suitably sized piece of timber will do, mine was about 175mm diameter × 65mm thick.



1 Suitable timber chosen according to colour: red, white and brown



2 Mounted on a screw and marked out: the centre, spigot and foot...

Shaping the bowl's exterior

To start, I mounted the Narra blank on a screw held in the chuck jaws, then brought up the tailstock – mainly to mark a centre on the blank for use later on. Next, I marked two pencilled circles onto the blank (**photo 2**): the inner one shows the spigot's diameter, which will be used when reversing the bowl. The size of this is governed by the chuck, which will be used to grip it. The outer circle matches the diameter of the bowl's foot; this is about a third of the bowl's diameter, which usually looks about right. I consider it a mistake to try and make the spigot double up as the bowl's foot.

Using a combination of parting tool and skew chisel, I formed the spigot into a dovetail shape, which could be gripped securely in the chuck jaws, then proceeded to rough out the foot until it was around 3mm deep (**photo 3**). At the same time, I formed the bowl's exterior shape using a 13mm bowl gouge, but at this point, made no attempt to give the bowl a fine finish.

Second time lucky

I used an imperial ½in Forstner bit for the oxygen atoms and a ¼in one for the hydrogens – these provided the 2:1 ratio and looked about right on a test piece. At this point, I should confess that this is my second attempt at making the bowl...

During the first go, I skimmed the bowl down after inserting all the 'oxygen atoms', then again after gluing in the 'hydrogen atoms'. Having started to sand it all down, I soon found that I'd actually sanded away one of the hydrogens. 'Oh crikey', I said. After re-drilling and inserting another, I had to skim it again followed by more sanding – and promptly went through a second one! After about four or five such repairs, I gave up and started from scratch, but this time spent far more time thinking it through.

First time round, I'd deliberately drilled very shallow holes, which resulted in the inserted pieces having very little depth. With hindsight, however, I now drilled the holes approximately 6mm deep (**photo 4**), randomly around the bowl, then turned down a piece of padauk to fit, using a test hole in a piece of scrap to get the size right (**photo 5**). Next, I parted off short sections of this



3 ... which are roughly turned to shape

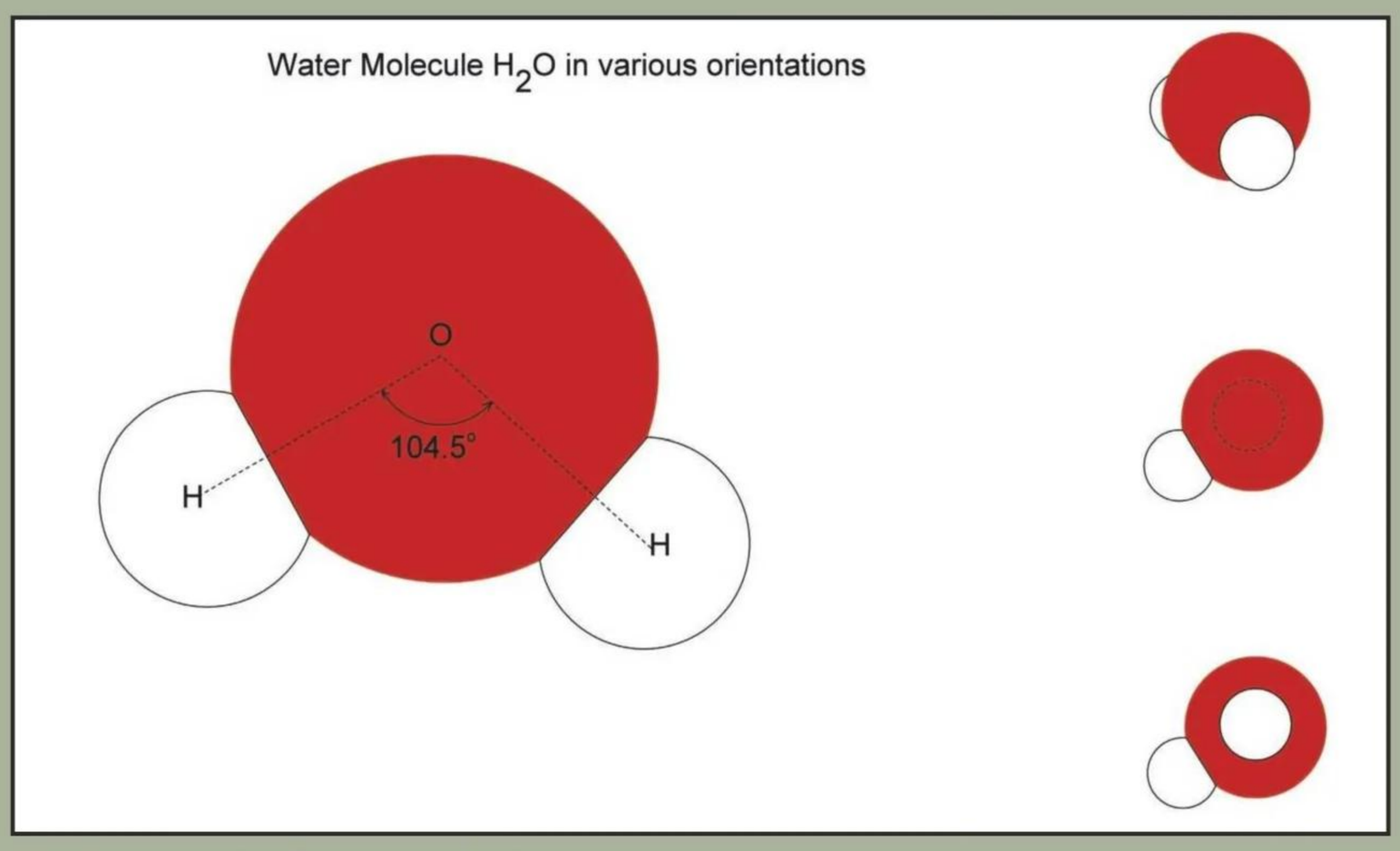


Fig.1 Representation of a water molecule



4 Large holes drilled 6mm deep



5 Turning the padauk to size



6 Padauk plugs inserted



7 The plugs are skimmed down to the bowl surface



8 White plugs prepared and inserted



9 Extra holes give a different view of the 'molecules'

– approximately 8mm long – and glued them into the holes. As I'd actually bothered to measure the holes' depths, I knew that each plug should bottom in the hole and leave a couple of millimetres standing proud (**photo 6**). I glued these in place with a drop of CA adhesive in each one.

At this point, the bowl was skimmed to remove most of the excess padauk (**photo 7**) and the smaller holes drilled – 6mm deep as before – with two to each oxygen. I turned the white wood down to the required diameter – using the same method as for the padauk – and parted off 8mm lengths before gluing into the holes (**photo 8**).

Overlapping circles

This completed the first set of water molecules; however, what would be seen in reality – if any of the detail was even visible at all – would vary according to the viewing angle. For example, some molecules would seem to have only one hydrogen atom because the second one was out of sight and hidden behind it. Thus, I decided to use simple overlapping circles to represent the atoms in each molecule, but wanted some instances of the oxygen overlapping the hydrogen and vice-versa.

To achieve this, I drilled further small holes around the blank where there were no 'oxygens' (**photo 9**). When plugged with white timber, they can be overlapped with the larger holes ready to accept the red timber (**photo 10**). Once completed, the bowl exterior can be given its final skimming and sanded to a smooth finish, safe in the knowledge that the 'molecules' must still be at least 4-5mm deep and safe from being turned away completely (**photo 11**).



10 Red plugs are inserted to overlap the white ones



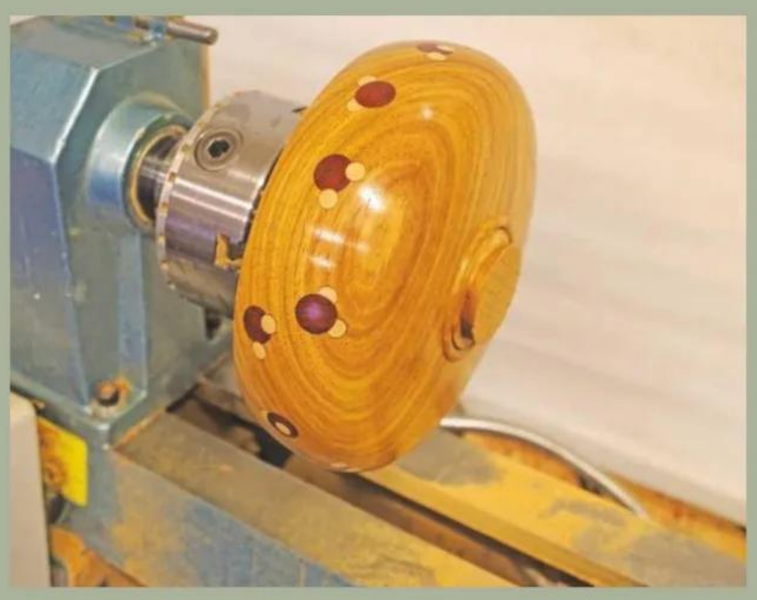
11 Finished molecules skimmed down to complete the bowl's surface

Bowl's foot

Before turning the blank round in order to hollow the bowl, I decided to smarten its foot using an Ashley Iles beading tool. This gives a neat 6mm bead (**photo 12**) on which the bowl will sit when the spigot is finally removed later on. The bowl's underside could then be sanded from 120-400 grit and polished with Carnauba wax (**photo 13**).Next, I removed the blank from the



12 The foot is finished with a beading tool



13 Sanded, sealed and polished



14 Ensure the bowl is tight up to the jaw faces



15 Leave the walls about 8mm thick



16 The reshaped bowl gouge gets round tight curves



17 A sharp scraper is used to finish the bottom



18 The bowl interior once finished and polished



19 My homemade vacuum chucking system



20 The vacuum holds the bowl very firmly...

screw chuck and reversed it so that the spigot was held in the chuck's dovetail jaws. To prevent wobble, it's essential to ensure that the blank is pushed securely up to the chuck jaws' faces (**photo 14**).

Using a 13mm bowl gouge, I began to gradually excavate the bowl's interior. I now had a decision to make – should I leave the walls thick enough to cover the 'molecules' embedded within, or go thin enough to expose them on the inside? Exposing them appealed to me but how thin would I have to go? If I damaged them now, I didn't think a repair would work, so opted to carefully measure the wall thickness, leaving it around 8mm thick (**photo 15**). Now that it's safely too late to change it, I do regret making that decision; it would've been more interesting to see them from both sides – oh well...

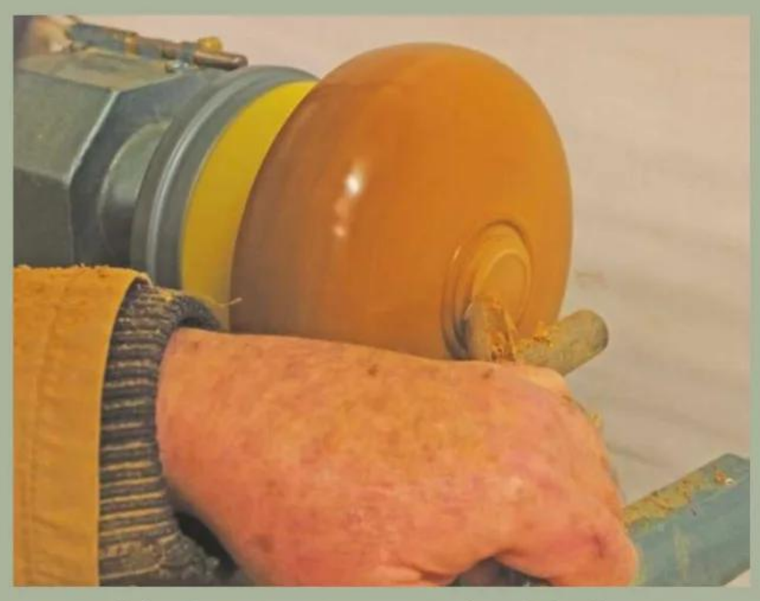
Negotiating the curve

As hollowing progresses, quite a tight radius develops at the wall's bottom and to get round this curve, a change of gouge is needed. The one shown in **photo 16** has the back of the bevel ground away in a series of mini-bevels, which makes it much easier to negotiate the curve.

Using a scraper, the bowl interior is finished with a series of very light cuts (**photo 17**). Run your fingertips lightly over the bowl bottom to feel for high spots. If you find any, mark with a pencil before attempting to remove them. It's very easy to take wood away from the wrong place and make matters worse – you may be able to see the pencil marks in **photo 17**. Sand through to 400 grit and polish the bowl's interior (**photo 18**).

Vacuum chucking

The last task is to remove the spigot that's held in the chuck. I do this using a homemade vacuum chucking system (**photo 19**). The bowl is placed over the chuck and centred by bringing the tailstock up to the centre mark made right at the beginning. With the vacuum pump switched on, the tailstock can now be removed (**photo 20**). The vacuum holds the bowl securely while the spigot is turned away, then sanded and polished (**photo 21**). If you don't have a vacuum system, however, you can mount a flat wooden plate in the chuck and use the tailstock to apply pressure. Turn down the spigot to leave a small stub where the tailstock is. Using a sharp knife or chisel, remove the stub, then finally sand and polish bowl surfaces by hand.



21 ... while the spigot is removed and the bottom finished



22 The completed molecular bowl



23 The Ashley Iles' beading tool leaves a neat 6mm bead on which the bowl sits

Aries Duct Fix & Machinery

We are the UK distributer for Cormak Engineering and Woodworking Machinery and much more...

Visit our Website at www.ariesductfix.co.uk

Cormak BH35M Drilling Machine

Technical Details	
Drilling diameter	**35 mm**
Spindle number	**3 pcs.**
Control	**manual**
Workpiece mounting	**manual**
Maximum distance from spindle to table	**85 mm**
Maximum distance from drill to table	**50 mm**
Table dimensions	**500 x 350 mm**
Rotational speed	**3000 rpm**
Motor power	**0.75 kW**
Voltage	**230V**
Machine dimensions	**500 x 500 x 520 mm**
Weight	**22 kg**







PRICE £725.00 INC VAT

The lightweight compact design of the device allows you to take the drill to work. The powerful 750W motor allows for quick and precise work. Standard equipped with a head for BLUM holes.

ALSO AVAILABLE AS A Cormak BH35P Pneumatic Hinge Drilling Boring Machine





Specifications	
Manufacturer	Cormak
Model	BH35P
Condition	New
Drilling Diameter	35mm
Spindle Number	3 set
Control	Pneumatic
Workpiece Mounting	Pneumatic
Table Dimensions	500 x 350mm
Required Compressed Air:	6 – 8 bar
Rotational Speed	3000 rpm/min.
Motor Power	0.75 kW
Voltage	230V
Weight	28kg

PRICE £995.00 INC VAT

The lightweight compact design of the device allows you to take the drill to work with you. The drilling machine is characterized with speed and work precision. The pneumatic drilling feed ensures convenient work and the possibility of operating the workpiece with two hands. The compact design is also suitable for mobile applications. This model is additionally equipped with a pneumatic drilling feed and pressure system.

Standard equipped with a head for BLUM holes.

Aries Duct Fix Ltd
Unit 5-6, The Foundry Business Park, Seager road, Faversham, Kent, ME13 7FD
Office: 01227 751114 **Email:** sales@ariesductfix.com **www**.ariesductfix.co.uk

WIN!

A CLARKE PEMBROKE II ECO-DESIGN MULTI FUEL STOVE – WORTH £958.90!

In conjunction with Machine Mart®

we're giving one lucky reader the chance to win the newest addition to Clarke's range of stoves – the Pembroke II Eco-Design Multi Fuel model – **worth £958.90**!



Machine Mart has recently added the powerful and stylish Clarke Pembroke II model to its existing range of Clarke stoves.

Contemporary design

The Pembroke II Multi Fuel stove features a contemporary design, which provides a traditional sense of style to the home with real flames offering a warm ambience to any room. Multi fuel stoves can be used for burning wood/logs, eco logs, anthracite and briquettes, with less than 20% moisture.

When burning wood, the Pembroke II has a brilliant heat output of 12.5kW, helping to keep rooms nice and warm in the cold winter months. This particular model boasts a solid steel body, cast-iron door and is finished with black, heat-resistant paint for a classy and stylish look. Additionally, an air control feature allows the burn rate/heat output to be altered and a simple to use pull handle system moves the riddling grate, which pushes soot and dirt into the ash pan for easier cleaning.

Air wash system

A wide glass panel on the stove door allows you to experience the full flame effect, and a clever air wash system helps to keep the interior glass clean.

Safety notes

If required, please ensure to use a flexible flue liner with a 127mm diameter.

Manufactured in compliance with BS/EN13240 and UKCA/CE latest standards. If you intend to use this appliance on a barge or boat, it must be installed in accordance with BS 8511:2010 – consult your qualified installer.

Installation of a carbon monoxide detector is recommended in accordance with BS EN 50292:2002

The Pembroke II Stove has been exempted under section 21 of the Clean Air Act 1993 for use within UK smoke control areas.

In addition to the model shown here, Machine Mart offers an extensive range of Clarke wood burning stoves, to suit a variety of needs and budgets – visit **www.machinemart.co.uk**.

Clarke
Quality Cast Iron
STOVES
WOOD BURNING & MULTIFUEL

HOW TO ENTER

To be in with a chance of winning this **Clarke Pembroke II Eco-Design Multi Fuel Stove**, worth **£958.90**, visit **www.thewoodworkermag.com/category/win** and answer the multiple choice question below:

QUESTION: What diameter of flexible flue liner is required for installation?

A: 125mm
B: 127mm
C: 130mm

The winner will be randomly drawn from all correct entries. The closing date for the competition is **19 January 2024**. Only one entry per person; multiple entries will be discarded. Employees of David Hall Publishing Ltd and Machine Mart are not eligible to enter this competition

The bow front adds a sweeping elegance to the shape

CONTEMPORARY BLANKET CHEST

At first glance, this Dovetailors chest may look simple and minimalist but appearances can be deceptive. Behind the elegant exterior and sweeping curved front lies a complex design with mind boggling angles within the walnut frame components



This contemporary bespoke bow-fronted blanket box was created using a combination of sophisticated computer design techniques and traditional furniture making methods. The design evolved from the concept of a treasure chest with a modern twist. The bow front adds a sweeping elegance to the shape, while the legs raise the piece off the floor for a lightness of form. An internal pullout tray and small front tray add functionality and structure. It's a perfect example of how CAD software can enable creativity.



The blanket chest features integrated handmade wooden hinges

A complex build

The compound angles within the geometry made the build very complex and for accuracy, some of the components were cut out using a CNC router. Function is at the very heart of the design. It was extremely important that this beautiful chest was a useful and practical storage unit as well as a feature in its own right.

Cedar of Lebanon bottom panel

The piece is constructed from FSC-certified solid American black walnut, laminated plywood and MDF lipped in solid maple, veneered with ripple maple. A vacuum bag system was used for the laminations and veneering and the exterior was finished with hand-applied hard wax oil. A cedar of Lebanon bottom panel gives a fresh scent when the chest is opened and the Dovetailors maker's mark is placed inside one of the handmade wooden hinge joints.

FURTHER INFORMATION

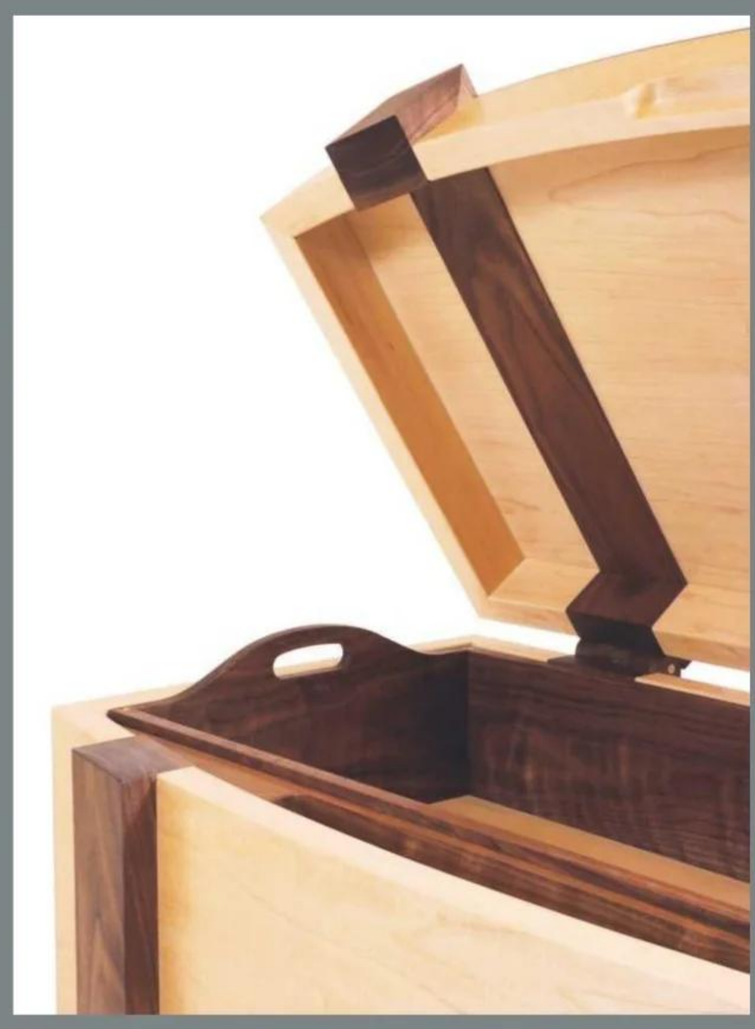
To find out more about Dovetailors – makers of quality handmade bespoke home items, ecclesiastical furniture and high performance commercial components – visit the website: **https://dovetailors.co.uk**



A practical pull-out tray in figured walnut



The sweeping curved front and complex angles within the walnut frame components made this a very challenging project



The design evolved from the concept of a treasure chest with a modern twist

BESIDE THE SEASIDE

Paul Greer takes a look at various wooden artefacts commonly found beside the seaside, including bathing machines, piers, beach huts, deck chairs, rollercoasters and most recently, bespoke wooden surfboards





1 Victorian brands used bathing machines as mobile hoardings to advertise their wares
Photograph courtesy of Getty

From time immemorial, the sea has been to man both a threat and a means of livelihood. However, it's only within the past three centuries that, in Britain, it's also been seen as a source of health benefits, and – more recently still – along with its shoreline, a venue for a range of entertainments, and leisurely living in general. Many of the artefacts associated with these were made wholly or partly of wood, and some continue to be to this day.

Bathing machine

One of the earliest of these was the bathing machine (**photos 1** & **2**). Invented by Benjamin Beale in the early 1750s, and first used at Margate, in Kent, this was a walled and roofed wooden cart, with a door at each end. The bather entered by the rear one, and the cart was pulled out by a horse until the water reached floor level.

Steps at the front allowed the bather to carefully descend into the water, helped by a 'dipper'. This long-redundant occupation was usually performed by a woman, who had to be strong in order to assist people who were

typically elderly, with limited mobility, and frequently heavy or awkward.

Bathing machines were less fashionable from early in the 20th century, as seaside visitors increasingly came for pleasure rather than health, and the advent of the bathing costume meant less need for modesty. Queen Victoria had a bathing machine at Osborne House, on the Isle of Wight, sited on the south coast (**photo 3**).

Ryde Pier

Also on the Isle of Wight, Ryde boasts the world's oldest seaside leisure pier, which opened in 1814 (**photo 4**). Growth of the railways through the 1830s and '40s – for the first time – accorded large numbers of people access to the seaside, and by 1850, a dozen British resorts featured piers, which allowed visitors to be close to the water, even at low tide. By 1900, there were no fewer than 80 piers on offer, with some towns even having two, and Blackpool even had three.

Deck chairs

Patented by John Thomas Moore, made in Macclesfield, and advertised as 'adjustable and portable folding chairs', what became known as the 'deck chair' first appeared in Britain in 1886 (**photo 5**). Edith Nesbit, author of *The Railway Children* later applied this term, and they were also known as 'Brighton beach chairs'.

The use of a canvas strip for the support is credited to a British inventor named Atkins, but the original green one soon gave way to the multicoloured stripes so familiar today. By the first years of the 20th century, every pier and promenade had deck chairs for hire on a daily – or even hourly – basis.



2 3D version of an on-set prop depicting a vintage bathing machine, made for the TV adaptation of Jane Austen's *Sanditon*



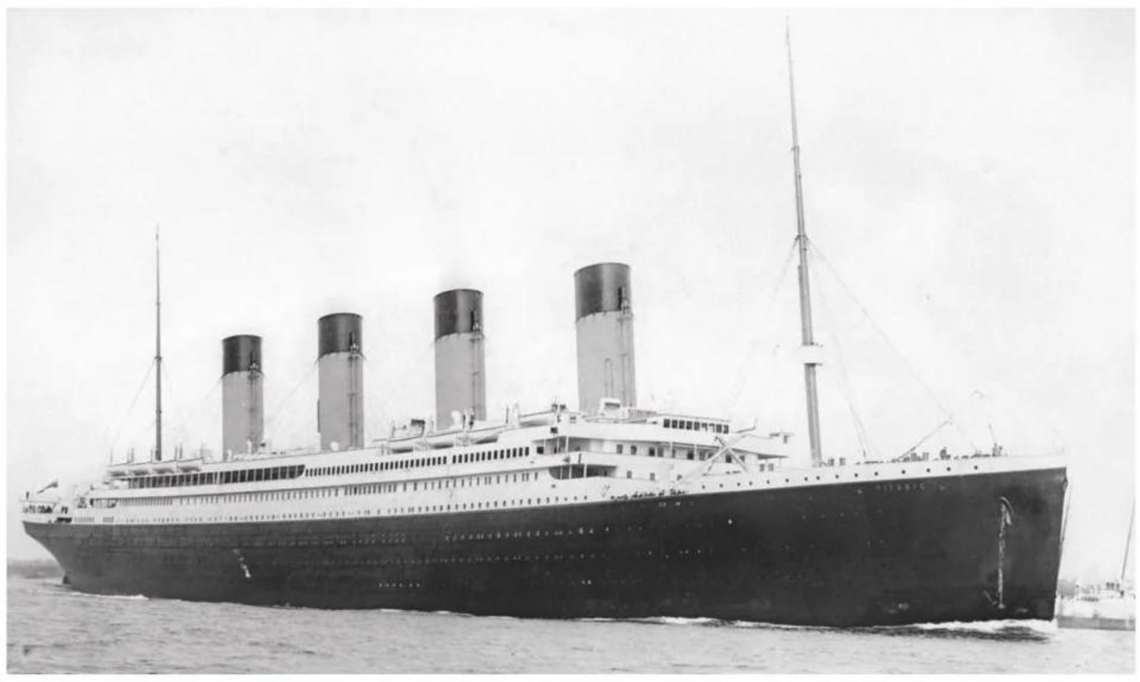
3 Portrait of Queen Victoria, 1882



4 Ryde Pier – an early 19th century example – is the world's oldest seaside pleasure pier



5 Classic deck chairs with striped colours



6 RMS *Titanic* departing Southampton on 10 April 1912

Deck chairs were most aptly named when a facility on cruise ships and ocean liners. There were said to have been over 600 of them on the *Titanic* (**photo 6**), which came to grief on its maiden voyage in 1912, and, as the great ship sank, many of them were thrown into the sea, where they acted as temporary life rafts. One of these recently sold for over £80,000, reflecting the awe in which many still hold this event.

Groynes

Groynes form a significant part of the protective measures taken around the British coastline. They're designed to restrict the movement and loss of sand and shingle, and wooden ones first appeared at Brighton in the 1720s (**photo 7**). Groynes shield thousands of properties standing within 100m of average high tides. The beaches they help form are valuable both in reducing wave energy, and as tourist attractions essential to the local economy.

However, in some places, like Criccieth, Wales, they've led to problems with their redistribution of sand, leaving some places starved of it, while others have an abundance.

Beach huts

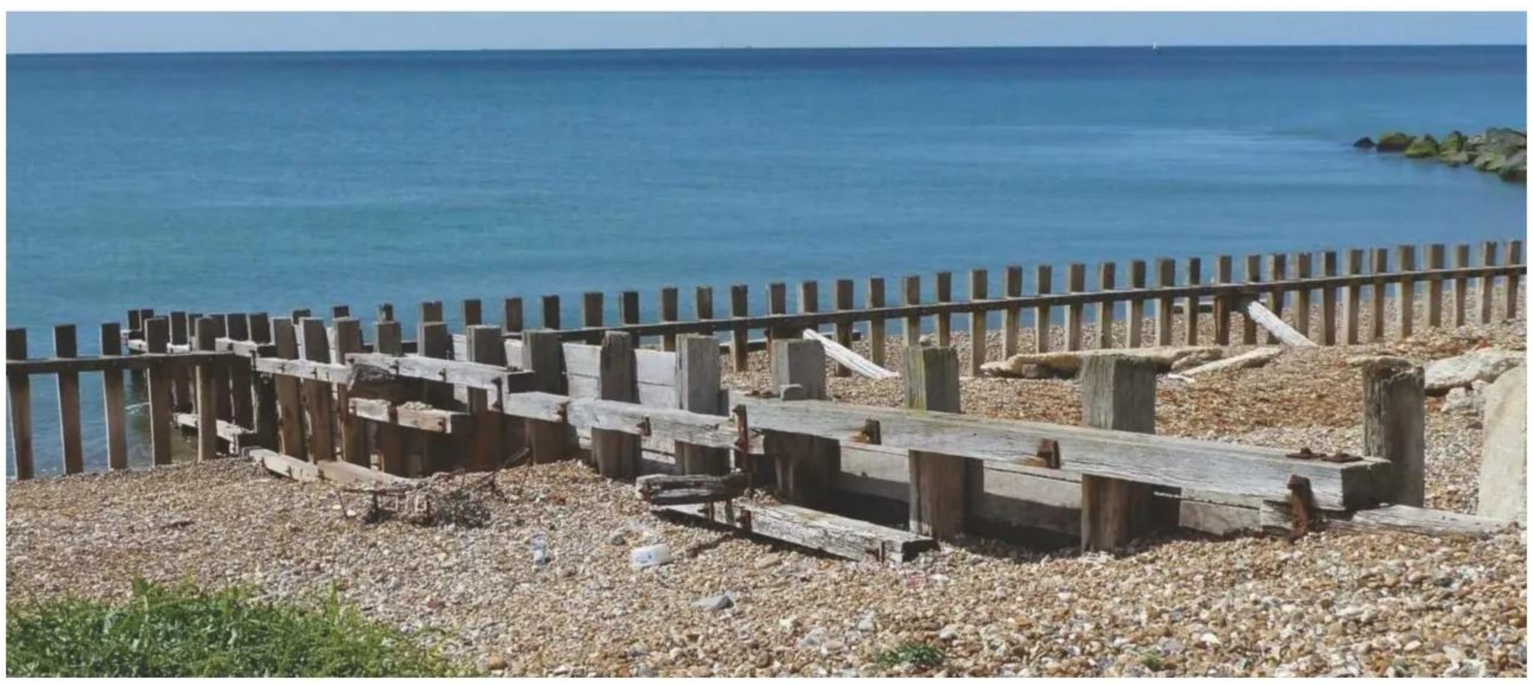
Beach huts have become extremely popular. Some of the earliest in use appeared near Bournemouth pier in 1909, and the front there today has about 2,000. Over two-thirds of these are privately owned, and today in the UK, there's thought to be over 20,000 of these in total (**photo 8**).

In the 1920s, mixed bathing came to be permitted, but changing in public still presented a problem (**photo 9**). People could be fined for doing this, even when under a raincoat – referred to as 'macintosh bathing'. This prompted local councils of seaside towns to install beach huts in numbers. Besides Bournemouth, Southwold – in Suffolk – and Hayling Island – near Portsmouth – are celebrated for their colourful and imaginative beach huts.

Staying overnight in a beach hut is everywhere forbidden, yet most are spotlessly maintained, and some even expensively furnished. A few beach huts have sold for more than real houses, with one changing hands for £300,000!

Wooden rollercoasters

For many people, no visit to the seaside would be complete without a ride on a merry-go-round, or a rollercoaster. Inspired by the one at Coney Island, in the USA, the wooden one at Blackpool Pleasure Beach had its centenary in 2023 (**photo 10**). Its train is maintained by devoted



7 The remains of wooden groynes on Brighton and Hove's seafront, which date back to the 1720s



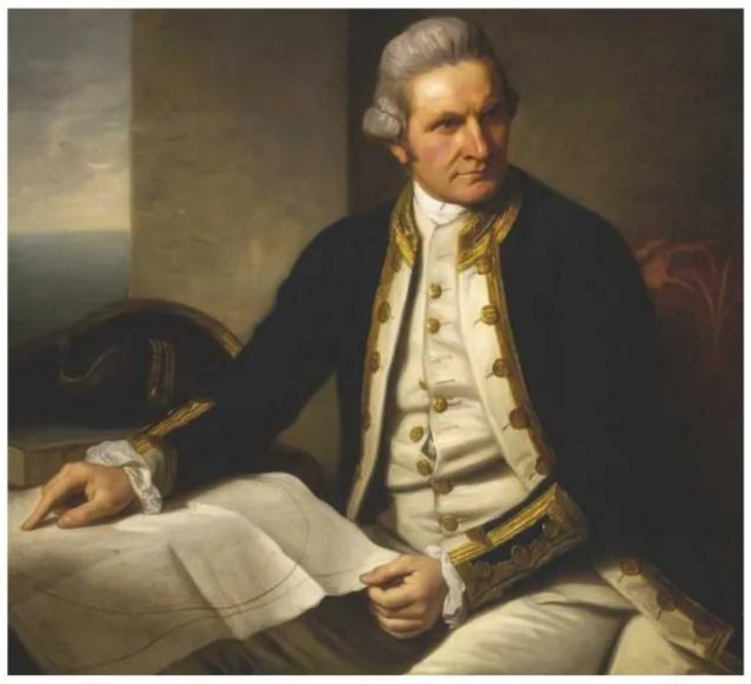
9 Four young women in matching beach wear run out of the surf, Los Angeles, circa 1910 Photograph Underwood Archives – Getty Images



8 Colourful beach Huts at Southwold, Suffolk



10 The Grand National is a wooden rollercoaster located at Blackpool Pleasure Beach



11 Captain James Cook, c. 1775



12 Classic wooden surfboards





staff, but the original wooden track has now been replaced by a metal one. The few remaining 'woodies' have any renovative work done during the close season.

Surfboards

Surfing is one sport which for many has become a passion, even on British beaches, with their modest waves, but originated in the Pacific islands thousands of years ago. The British explorer, Captain James Cook (**photo 11**), was the first European to see it demonstrated by local inhabitants he encountered on his voyage to the South Seas in the 1770s.

In 1959, Hawaii – formerly the Sandwich Islands – became the 50th of the United States, and surfing's popularity exploded when Americans stationed there introduced it to the mainland west coast, using wooden boards, which were often home-made, and of their own design (**photo 12**).

The resulting boom in surfing sparked a search for lighter boards. A good deal of surplus weight had been shed with the introduction of balsa wood in the 1930s, but, coming from South America, this was expensive, and therefore often combined with a cheaper and readily-accessible one, like redwood. Changes in design included many becoming smaller. Today, there are a number of excellent online guides to making your own board, which usually entails attaching strips of wood over a wood frame, creating a light but strong facility (**photos 13** & **14**).

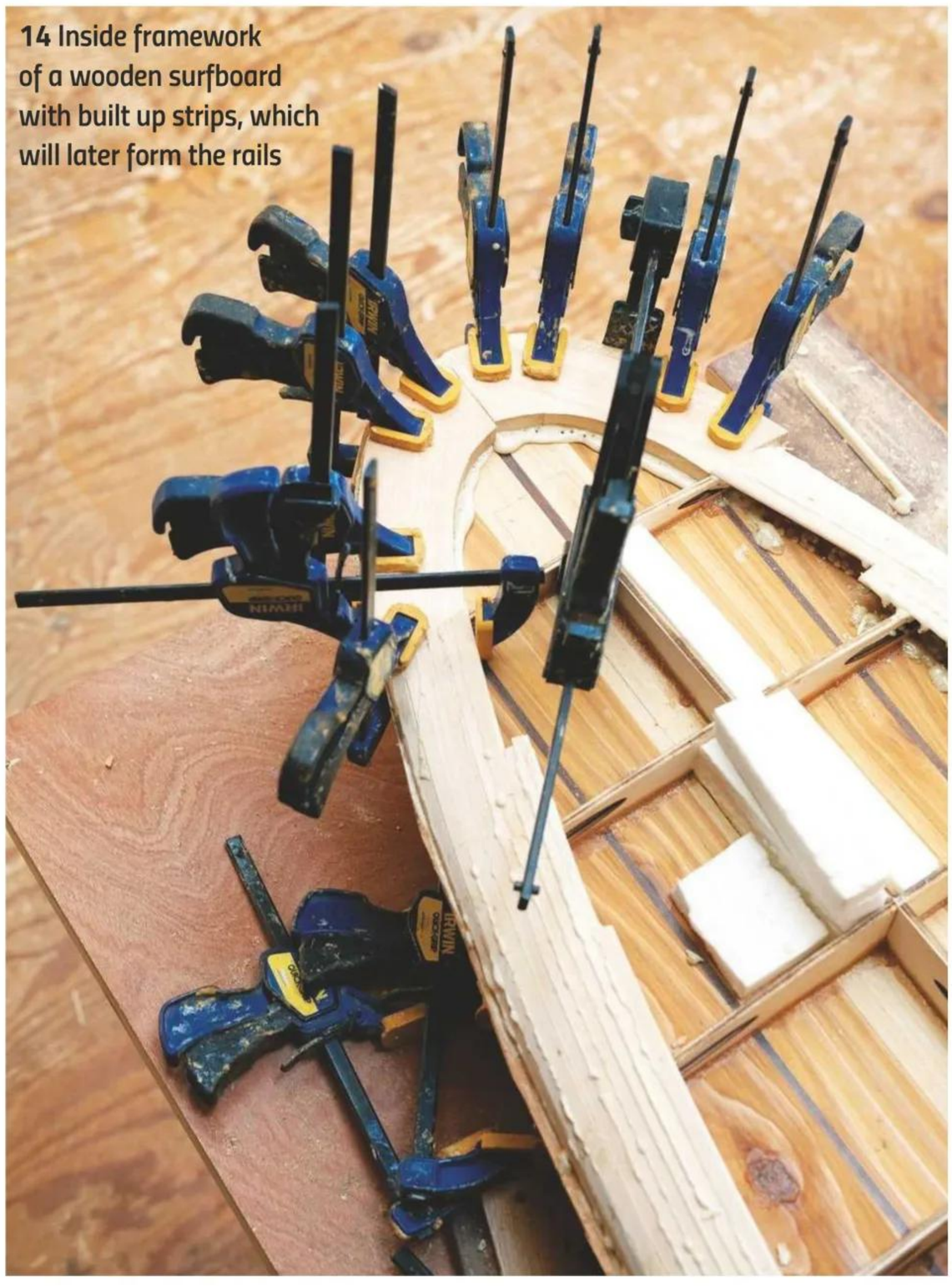
Today, plastic or composite surfboards tend to be favoured, but beautiful wooden boards are still deservedly popular. The American summer is perhaps most memorably evoked in the '60s music of the Beach Boys, most notably their hit, *Surfin' USA* (**photo 15**)



15 *Surfin' USA* single by the Beach Boys



13 James Otter – of Otter Surfboards, situated in Porthtowan, Cornwall – has been making wooden surfboards since 2014



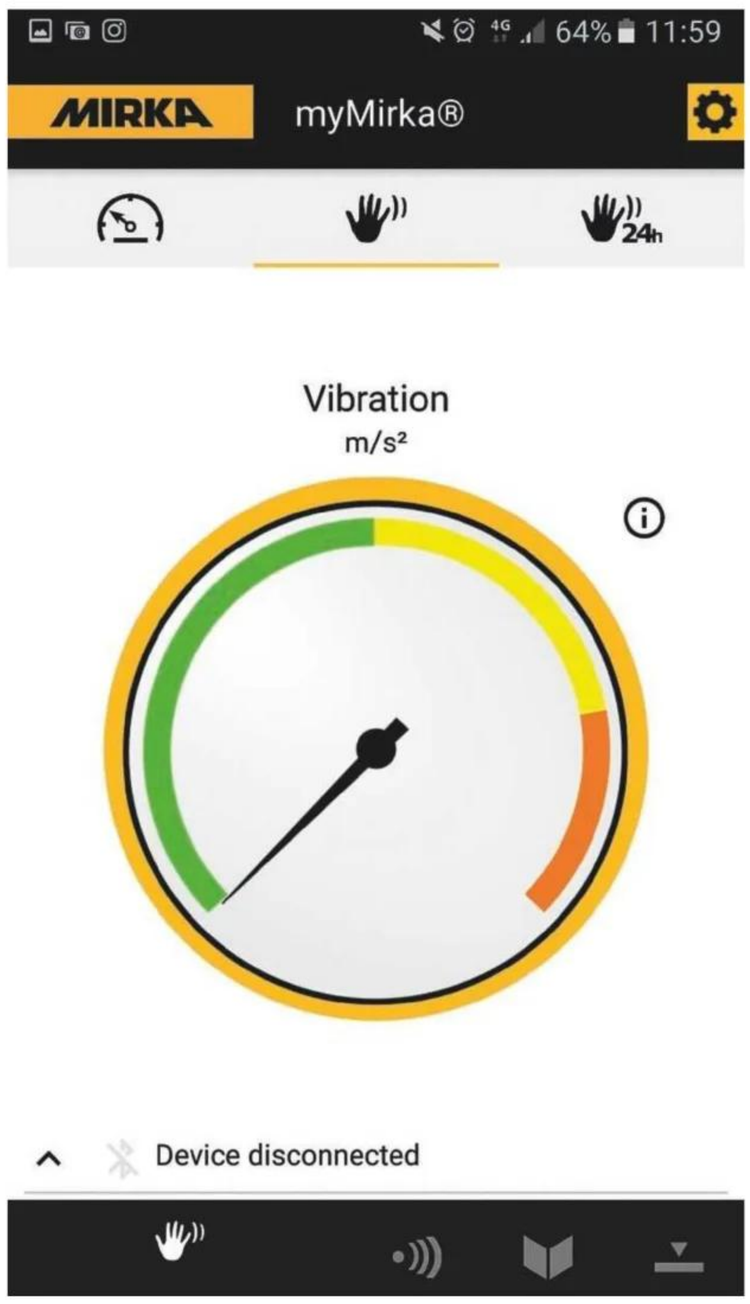
14 Inside framework of a wooden surfboard with built up strips, which will later form the rails



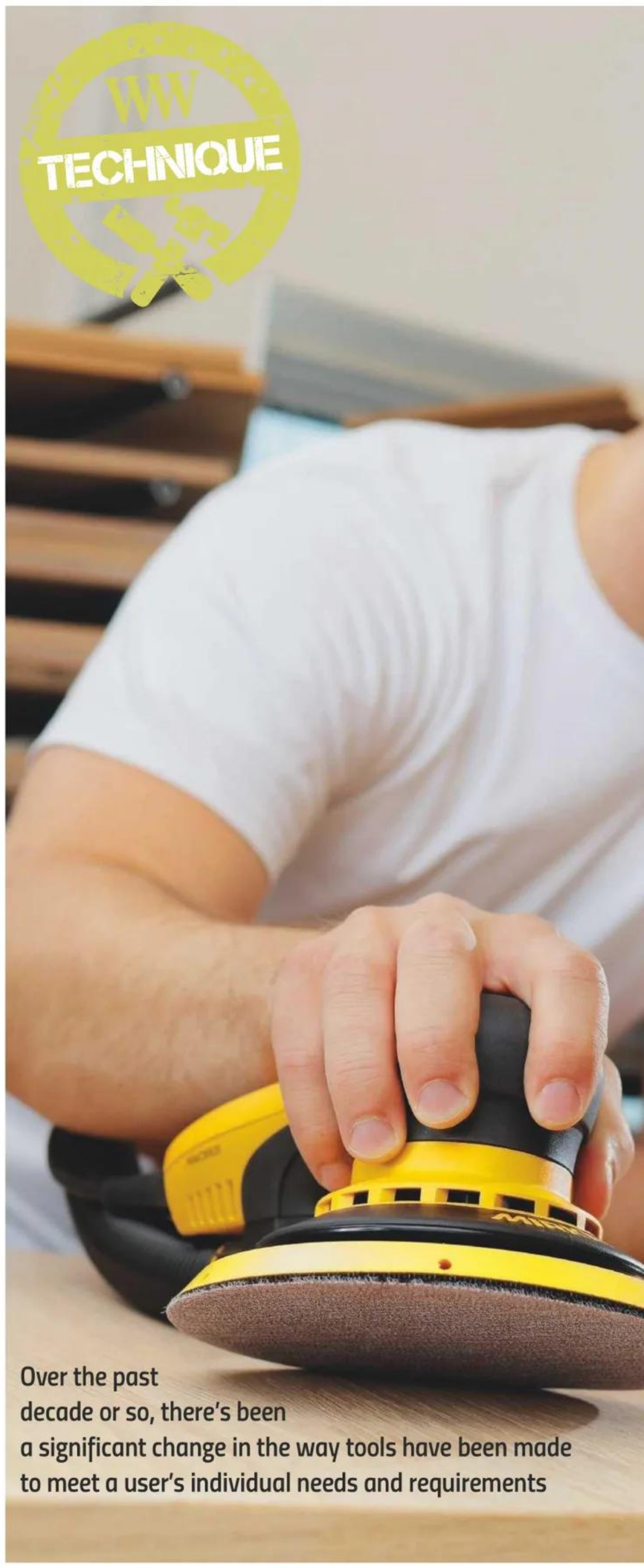
SAFETY IS IN YOUR HANDS

Pete Sartain, National Sales Manager – Industrial Mirka® UK, discusses the importance of using dust extraction and suggests some top tips for protecting yourself while reducing the risk of HAVS





Screenshots from the myMirka® app, showing speed and vibration levels



Over the past decade or so, there's been a significant change in the way tools have been made to meet a user's individual needs and requirements

Over the past decade or so, there's been a significant change in the way tools have been made to meet a user's individual needs and requirements. This has resulted in tool manufacturers making significant R&D investments in a bid to design and develop durable products, which can deliver an efficient overall process and a high-quality finish on a variety of surfaces, all while protecting users against the dangers of Hand Arm Vibration Syndrome (HAVS) and dust particles.

HAVS – which affects a hand's blood vessels, nerves, muscles and joints, along with the wrist and arm – is becoming a bigger issue for users as it's a condition that can't be seen, or they're unaware of the effects this is having until it's too late. The reason being the fact that each user may have different tolerances to the amount of vibration they can handle, or may not realise there's a problem until a different tool is tried, or as a result of taking a break from the one being used.

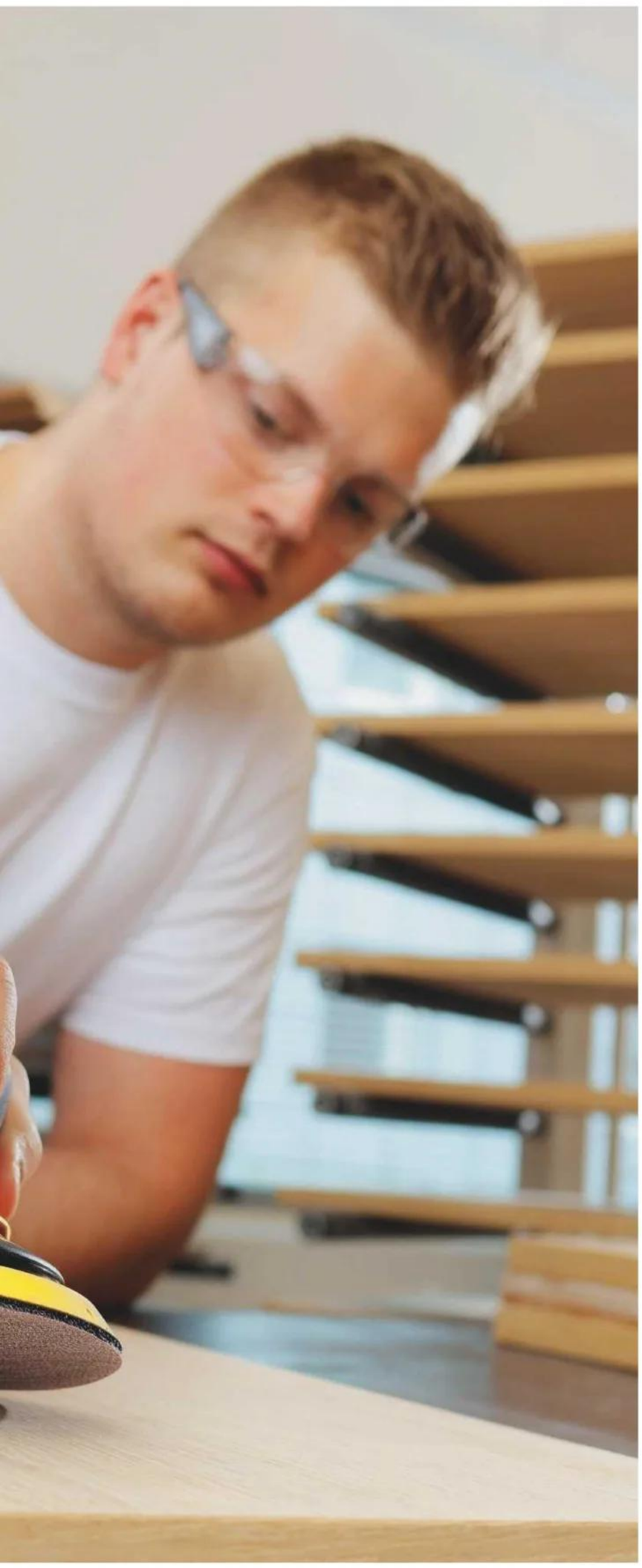


The DEROS Electric Random Orbital Sander is powerful, smooth, quiet and very compact in use

myMirka® app

For Mirka®, the fight against HAVS starts with putting the emphasis back on the user, which the company has managed to achieve following introduction of the myMirka® app. Applicable to Bluetooth-enabled tools within the company's product range, the app shows end users tool vibration levels on a colour-graded scale, and advised how to lower the vibration if required. Additionally, the speed at which the tool is being used can be visualised in a real-time graph. Furthermore, if greater detail is required, there's an in-app purchase that tracks the daily vibration levels in relation to European standards for a comparable scale of the pressures being put through their joints on a daily basis; this allows the user to see how the tools are being used and potentially assist in the implementation of measures to protect themselves and others – see sidebar at end of article for further information on downloading the app.

This app is one part of the re-education process that the user should go through alongside being instilled with best practices concerning tool usage. We advise the importance of working closely with either the foreman or health and safety coordinator to ensure that the tools being used meet the necessary requirements, thus reducing the risk of injury.





Mirka® Dust Extractor 1230 M AFC GB 230V with hose ensures dust-free sanding in a clean working environment

Dust-free work environment

Extraction systems may seem like they take up a lot of space, but dust particles can be a major health issue for employees and could possibly lead to respiratory problems. This is why an increasing number of businesses or single users are investing in systems that allow them to work in a dust-free environment.

Laboratory tests have shown that without adequate extraction, dust in the air per kilogram of sanded material is over 200g, and dust on surrounding surfaces is almost 800g/kg. These may not seem like large quantities, but when left to accumulate over a long period of time, they could potentially turn into both a fire and health hazard for a business. However, investment in a suitable mobile extraction system shouldn't only be viewed as a short-term cash injection, but rather a long-term commitment. This way, it can provide an effective solution for a cleaner workspace, as well as reducing prepping and tidying up at the end of the day, not to mention potential dust contamination of other tools and surfaces. The smaller systems are more often used in workspaces because they're equipped with a local air supply and extraction, and therefore easy to move and store.

A dust-free environment ensures control of the sanding process and allows for multiple work phases to be undertaken in the same room, which delivers efficiency for both the business and in terms of tool usage. It also reduces the risk of 'dust pills' and clogging as the dust can no longer collect in lumps on sanding discs to the same extent, and there's no longer a danger of sanded dust building up and creating grooves on the sanding surface, filling up the disc and also contributing to a reduction in sanding capacity.

The abrasive maintains its aggressive properties over the entire surface much longer than traditional paper materials, which have likely long wilted and faded, thus making the sanding process more even and efficient.



The Mirka® PROS 625CV Pneumatic Random Orbital Sander, featuring a 5.0mm orbit, has been specially developed to produce maximum dust extraction

TOP TIPS FOR ACHIEVING A DUST-FREE ENVIRONMENT & PROTECTING YOURSELF FROM HAVS

1. An increase in vibration can cause damage to the tool, so be aware that any variation in the weight of pad – other than when using 180 grit paper discs – can lead to increased machine vibration

2. Always use a genuine Mirka® backing pad on Mirka® branded tools, as these have been specifically designed for certain machines – for example, a 150mm DEROS/PROS backing pad is engineered to weigh exactly 130g. However, using a generic non-Mirka® pad may alter tool vibration, resulting in damage being caused to the bearing and other areas. Note that Mirka® tools returned with non-Mirka® pads fitted aren't covered by the company warranty

3. If intending to use an interface pad – 5mm/10mm – you should remove the backing pad and insert the grub screw supplied with the tool into the remaining threaded hole, which is located beneath the pad. This counter-balances the interface pad's weight as well as helping to reduce tool vibration during use

4. In the case of coarse or heavy weight discs – 40/60 grit, etc. – the grub screw should be used in conjunction with the sander

5. Using a Pad Saver protects the backing pad from wear. However, in the case of sanding wood filler, this often reduces dust extraction efficiency. If 80-120 grit discs are used with a Pad Saver, Mirka® recommends inserting the grub screw

6. To ensure optimum performance, the product should be regularly serviced

7. Check that the fleece bag within the mobile extraction unit isn't full and doesn't have any rips or holes. If these are present, the bag needs to be replaced

8. Periodically remove and clean the motor filter. This can be done by placing it in a bag and gently knocking the dust out. Or better still, use another vacuum or extractor to clean the filter, and once done, replace in the machine

9. Ensure the seal between the tank and extractor's upper section is clean and damage-free

FURTHER INFORMATION

To find out more about Mirka® products, see **www.mirka.com/en-gb**, and to download the free myMirka® app, visit either Google Play – **https://play.google.com** – or The App Store – (Apple UK) – **https://itunes.apple.com**

Toolnut.co.uk

Nuts About Tools...



Visit www.toolnut.co.uk for the finest carving & hand tools..



Toolnut Carved by Colin Edwards



Our customers rate us 5 star

"It's great that Toolnut offer quality and bespoke hand tools, that are not available everywhere else" ★★★★★

"Excellent service - Prompt service. Product was well packaged in fully recyclable materials." ★★★★★

See all our 5 star reviews on Trust pilot





Ashley Iles (Edge Tools) Ltd. · Henry Taylor Tools · Clarke · narex · veritas · A&E SQUIRE · ECLIPSE · Flexcut · IRWIN Record · STANLEY · Robert Sorby · MOORE & WRIGHT

trend® tool technology

PERFECT TOOLS FOR CABINET DOORS

NEW

35mm CONCEALED CABINET HINGE JIG

A precision drilling jig for installing concealed cabinet hinges accurately and quickly

- 3,4,5,6 mm — **3, 4, 5 & 6mm Hinge Inset Positions**
- **In-built Depth Stop**
- **Pilot Hole Plate**
- **Pin Guide System**



Ref: **CAB/JIG/B**

www.trend-uk.com /concealed-cabinet-hinge-jig

CABINET HARDWARE DRILLING JIG

A versatile jig that assists on a wide variety of door and drawer fronts

- mm — **Self-Centring Scales**
- **Reversible Design**
- **Protective Rubber Over-Mould**
- 4mm — **4mm Tool-Steel Drilling Guides**



Ref: **CAB/JIG/A**

www.trend-uk.com /cabinet-hardware-drilling-jig



TIME SAVING WOODWORKING SOLUTIONS

www.trend-uk.com

A BEE BOX FOR JEWELLERY



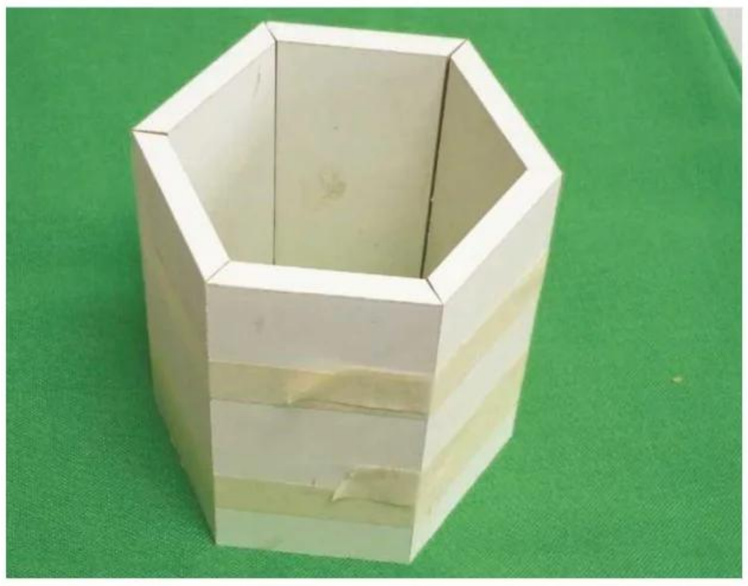
CHISEL RATING

Commissioned by a bee-keeping friend to make a three-section jewellery box, **Peter Benson** bases this on a hexagonal theme and takes us through the processes here

My friend Mo asked if I'd make a box for her jewellery. As a long-time bee-keeper, she had in mind a three-section design, hexagonal of course, and some months later, the commission was completed. This article looks at how the jewellery box was made.

1 Three boxes

PROJECT **Hexagonal jewellery box**



2 Prototype testing angled cuts



3 Reinforced side plate

Challenging joints

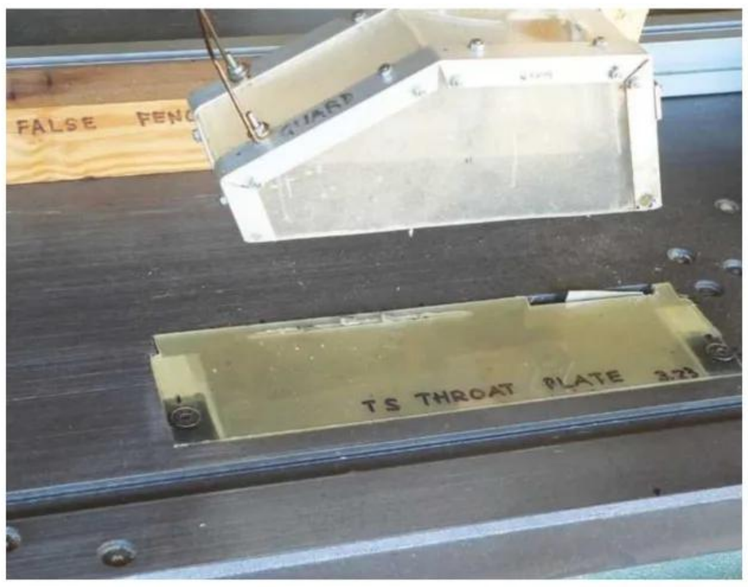
A six-sided box requires different joints than a square or rectangular one. The sides must be cut at 60° to fit together, and the angle must be precise. I started by setting my table saw blade at the stipulated angle and made a prototype to test the setting (**photo 2**).

Reinforcements

I was planning to use 6mm plywood for the box, which would be strong but too thin for strong butt joints, so these would require additional strengthening. For this I glued strips of 9mm round moulding along each edge of the six panels. When run over the tilted saw blade, it cut the strengthened plywood at the correct angle, more than doubling the gluing area (**photo 3**).

Avoiding tear-out

A second concern was that the table saw, despite having many fine teeth, might create unacceptable tear-out. To prevent this required having to make a modification to the saw, in terms of a throat plate with zero clearance. A replacement plexiglass plate – just the correct thickness for my saw – was cut and screwed in place, with the blade retracted below. Next, I gently raised the spinning blade to the required height of 7mm, cutting the throat plate without leaving any additional gaps, so that it'd support the plywood during cutting and obviate tear-out. I don't like using the table saw without a guard and riving knife; however, the first wasn't serious here, as the blade penetration was so small, and I installed a reduced-size riving knife (**photo 4**). The resulting cuts, tested on a scrap piece of plywood, were fine.



4 The table saw's zero throat plate

Panel preparation

Next, the 6mm plywood sides were cut 254mm long × 95mm wide. As mentioned, each side had a strip of 9mm moulding glued 1mm in from the edge, and the reinforced plates were then stacked under a couple of paving stones to help the gluing integrity. The next day, they all went through the table saw to produce 60° strengthened edges (**photo 3**).

Assembly

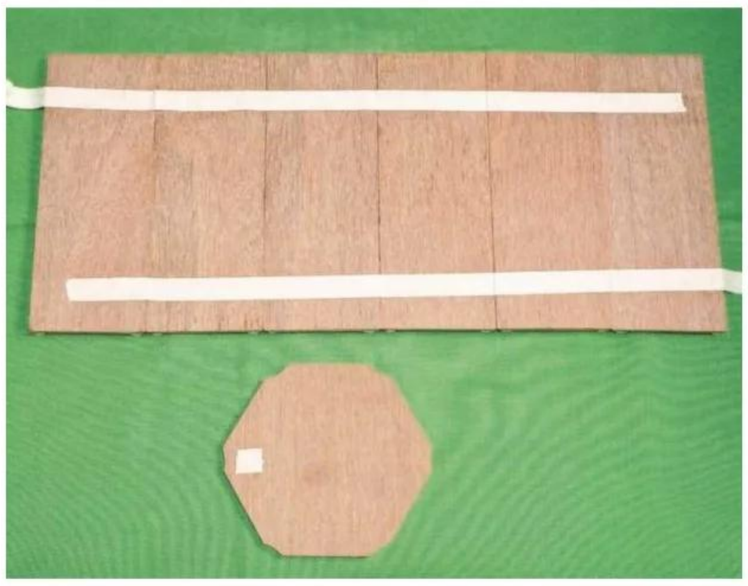
I wasn't confident that the sides would make up a symmetrical box without some 'guidance', so cut two temporary bottoms from the same plywood, trimmed out the corners, and included these – without glue – in the following assembly.

To create the basic box, I laid the panels side-by-side and taped them tightly together with masking tape (**photos 5** & **6**) on both faces. Lifting the two end panels, I held those together to assess the joints' accuracy. They seemed tight, so I laid them once more on the bench, then brushed PVA glue along the inside of each joint, including the outer edges; the end panels were then raised and taped together. To supply the necessary, slightly challenging pressure, I wrapped a bicycle inner tube tightly around the box and secured the ends with F-clamps (**photo 7**).

Separation into three boxes

Mo had requested that the box be divided into three sections of two sizes, stacked under each other. Before doing that, however, I wanted to cut a vertical slot from top to bottom, centred on one of the faces, about 1.5 mm deep × 2mm wide. I set the table saw with 1.5mm blade projection and no riving knife. This slot was intended to hold an insert of yellow plastic, identifying the components' orientation once separated. **Photo 25** shows that I forgot to do this, and the slots had to be cut later. Sorry!

The standard approach for cutting the box into sections is passing the completed project over the table saw, with a tiny amount of the blade protruding, then re-set to vertical. In this case, 7mm of blade just sliced the box sides, while leaving the – slightly thicker – corner supports in place. Once again, the zero-clearance throat plate was installed, blade vertical, and the fence



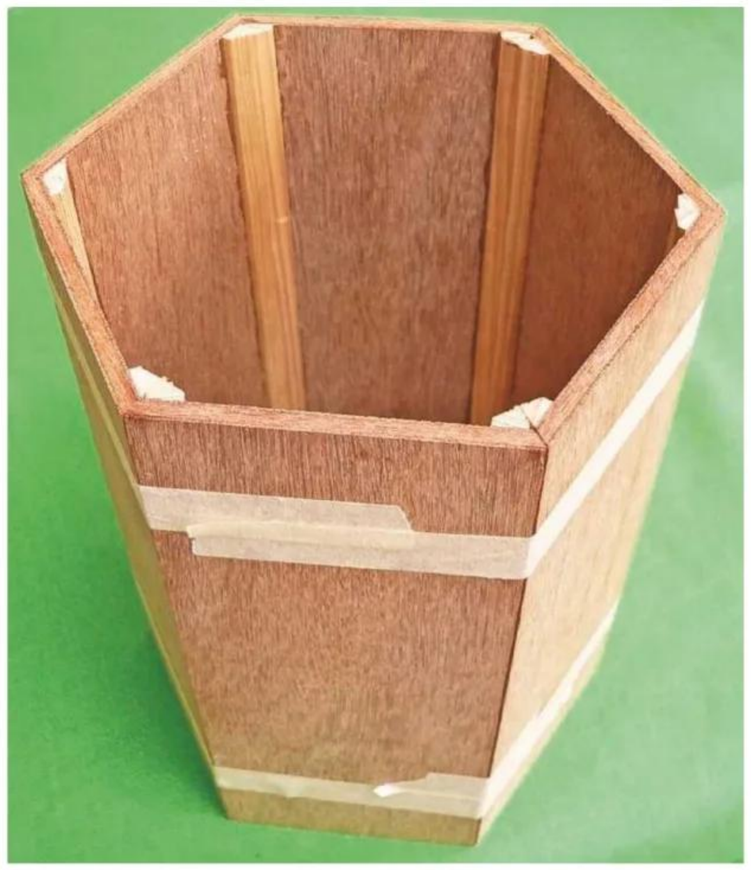
5 Taping the sides together



6 Gluing up the sides



7 Spiral binding



8 Sides glued up



9 Separating boxes on the table saw

positioned so as to cut the box into the specified sections. I kept the guard in place, albeit above the box, more as a reminder to me than actual protection. It was very important to keep the box steady against the fence and not allow it to tilt sideways. Also, for me to hold the ends of the larger box to (**a**) propel it over the blade; and (**b**) prevent their moving together and trapping the blade. That is a lengthy description for a process that only took five seconds (**photo 9**)! Finally, I completed the separation by hand, using a zero-set pull-saw (**photo 10**) to form three boxes (**photo 11**).

Floor installation

The three boxes now required floors to be cut and inserted. I used the same 6mm plywood as for the sides. Since the purpose of the hexagonal bases was to hold the box symmetrically, I used my schoolboy geometry to ensure it was accurate. I used my 75-year-old compasses to draw a circle with a 8.6cm radius. Using the same compass-setting, I divided the circumference into six equal sections, and drew in the hexagon sides, with added curves to accommodate the vertical strengtheners. I cut just outside these lines using a Japanese saw for the straight lines, and my motorised fretsaw for the curves that fit around the corner braces. A little filing tickled the bases into their new homes, where they were then glued (**photos 12** & **13**). To provide soft interiors, I added four pieces of self-adhesive yellow felt, attached to thin cardboard liners, and trimmed with a scalpel – or Stanley knife – to fit inside the box.

Tidying up with veneer

My detail design required that I cover the top and bottom of each box with veneer, to tidy them up. The bottom veneer (**photo 14**) was marked and cut – by sitting the box on the veneer on the bench and marking around it with a pencil – then cutting with a fine-tooth hand saw, just outside the pencil line. Once glued in place, I sat the boxes on a sheet of plastic on the bench, placing a heavy brick on a board resting on the box top, to ensure an even pressure. The boxes' top edges would also be veneered, with lipping. After sanding the tops (**photo 15**) to make them even, I glued several strips of veneer in place, trimming this once the glue had set (**photo 16**).

Fitting back together

To locate the boxes when stacking, I wanted to give the top two boxes little legs – 5mm dowels – and drill blind holes in the appropriate corners of the lower boxes, for them to drop into. These 'legs' would also raise the individual boxes when separated, so they'd not mark the dressing table they stood on. I drilled 5.5mm holes, 6mm deep, in the corners of the top two boxes, and glued the legs into place. I trimmed the dowels to length, using a simple length-determining jig (**photo 17**), sanded them smooth with fine abrasive and tapered the ends slightly to ease their engagement with the box below. Placing the top box in place on the middle one, I drew around each leg on the carcass below, and drilled



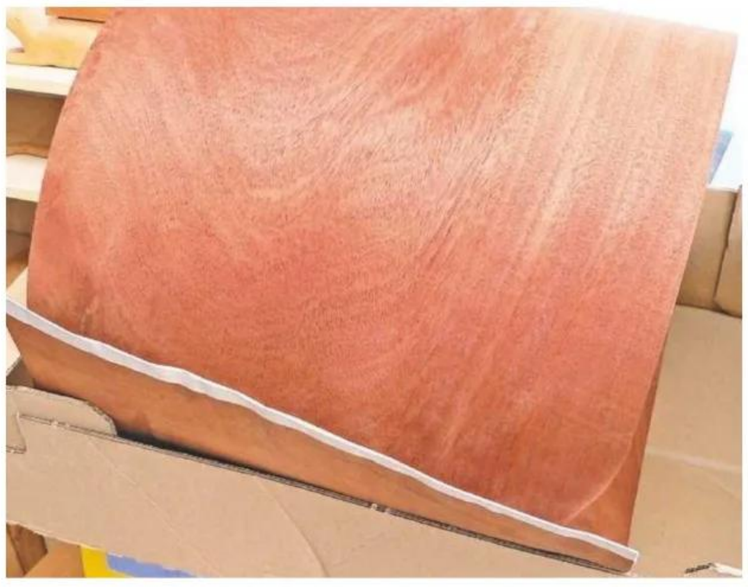
10 Final separation



11 Forming the three boxes



12 Inserting the bottom



13 Iroko veneer for the tops and bottoms



14 Sanding the box's top edges



15 Veneering the box's top

six × 6mm holes in the lower box, to match the legs, allowing a small amount of width (**photo 18**). This required an extended table for the drill press – a scrap piece of MDF, bolted to the original drill stand. The middle box is shown upside down in **photo 19**, with its little legs in the air.

The lid

Only the top box has a separate lid, as the lower two are enclosed by those above them. The lid is cut from a 7mm thick slice of Honduras mahogany. Its size was designed to produce a 9mm overhang on all sides, as favoured in the Arts & Crafts movement. Glued to its lower side is a smaller lid, which fits easily into the top box, just to locate it, and not intended to be a tight fit. I covered this, and the three internal bottoms, with yellow self-adhesive felt (**photos 20** & **21**).

The base

For the base of the lowest box, I wanted to create a similar effect to that of the lid – an extension that almost matches the upper protrusion. For this I cut segments of the Honduras mahogany, and glued them under the bottom. This turned out to pose a challenge, as it simultaneously



16 Jig for cutting the legs to length



17 Drilling for the feet

required me to see above the top and below its bottom, to ensure they were accurately placed. To do this, I used a mirror. Sitting the box on the mirror allowed me to see both aspects at the same time (**photo 22**). Its feet were made using hemispheres of pine glued to the segments' undersides (**photo 23**).

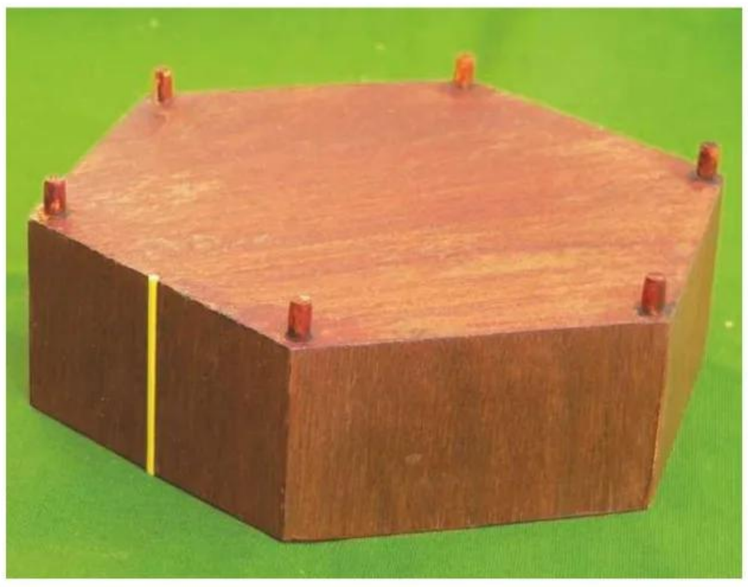
Finishing

Most of my projects are sanded through the grades and finished with teak oil, then waxed for a suitable matt finish, which also worked well here. This protects the wood and also gives it a suitable sheen (**photo 1**). The overall colour scheme is a darkish brown with yellow details, as befits a bee-box.

Ornamentation & guidance

I wanted a small yellow ornament for the simple/austere jewellery box, which also required an indicator to keep the boxes in the correct orientation. Remember the slot I created earlier? This is what it's used for. I filled the slot (**photo 1**) with a 2mm wide strip of yellow plastic, cut from a box of garden fertiliser. In order to cut the correct, uniform size, I made up a little jig (**photo 24**). The first cut, using a veneer saw or scalpel, establishes a straight edge. Next, I found a slice of cardboard that just matched the thickness of my table saw blade – 2.6mm – and using double-sided tape, attached this to the jig's side, raised 2mm from its floor. When the plastic sheet was slotted under the cardboard, the veneer saw cut a strip just 2.6mm wide. A few dabs of CA adhesive keep the plastic located in the slots.

N.B. The original carved knob for the lid – in the shape of a bee – and secret chamber never made it past the testing stages... ✕



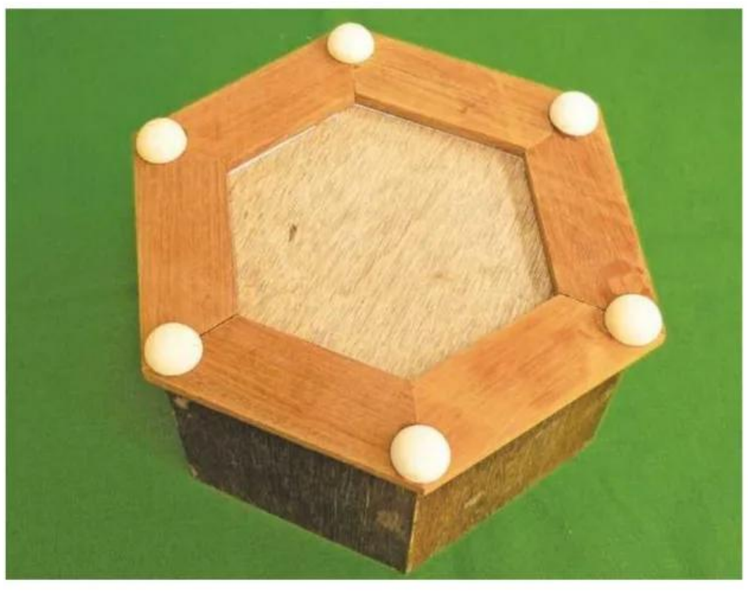
18 Mid section showing veneered bottom and legs



19 Soft lining



20 Mirror for alignment



21 Bun feet



22 Jig for cutting the yellow plastic strips

NEW StopLossBags

Reduce waste and save money

Patented StopLossBags® pouches allow you to preserve the fresh off-the-shelf quality of fine finishes.

The specially formulated 3-ply construction helps prevent loss of solvents while a gas barrier inhibits oxygen penetration into the finish.

StopLossBags® are designed for oil, water, and alcohol-based liquids. You can use them with paints, stains, varnishes, mineral spirits, darkroom chemicals, water (non-consumable), shampoo, etc.

Only £24.95

Price includes: 4 StopLossBags®, 8 Caps and 1 Collapsible Funnel



WOOD WORKERS WORKSHOP

woodworkersworkshop.co.uk

Protect and enhance the natural beauty of wood with **Treatex Hardwax Oil**





treatex®
Naturally superior wood finishes

Treatex Hardwax Oil protects and enhances the appearance of all types of internal wood surfaces including floors, stairs, doors, furniture and worktops. Treatex Hardwax Oil is manufactured on a base of natural sustainable raw materials: jojoba oil, linseed oil, sunflower oil, beeswax, candelilla wax and carnauba wax.

- Brings out the timber grain
- Adds warmth to wood
- Easy to apply
- Quick drying
- No sanding required between coats
- Low odour
- Resistant to spills of water, wine, beer, coffee, tea and fizzy drinks
- Withstands high temperatures
- Very durable
- Easy to clean and maintain
- Spot repairable
- Safe for use on children's toys

tel: 01844 260416
www.treatex.co.uk

LETTERS

★LETTER OF THE MONTH

CECIL A. HEWETT – A MAN OF MANY HOBBIES

Dear Editor,
I'd be very grateful if you'd kindly let me know whether there's an author's index for *The Woodworker* magazine, specifically for the years of 1950–1980.

I'm trying to find articles written by Cecil A. Hewett – who was in fact my late uncle – during these years, which might have been published in the magazine or its annual publication. Cecil A. Hewett had a lifetime interest in carpentry and wrote various books and articles on the subject, which were published in journals on medieval archaeology. He also made models of medieval buildings, some of which are now in the collections of the Science Museum Group, in addition to making restoration furniture.

He worked for Essex County Council as an expert on medieval buildings and their carpentry and the Essex Record Office has a collection of his unpublished drawings and articles. The Coggeshall Museum, Colchester, has on article about him on their website: **www.coggeshallmuseum.org**.

For your information, I also enclose a photocopy of an article written by Ken Adams on my late uncle and his work. Titled 'An Essex Expert', the article shows a photograph of Cecil with his model of the *Snowdrop* – a Thames sailing barge – which I've been trying to locate for some time; the remains of which are to be found in Goldhanger Creek, Essex. Photos of the *Snowdrop* can be found online, which document her working life transporting agricultural cargoes to and from East Anglia. The sailing barge was owned, for a time, by an Essex farmer.

Yours faithfully, **Charles Morgan**


AN ESSEX EXPERT

Master of many crafts

by Ken Adams

A TEACHER [of many crafts and] models of them all is forty-three-year-old Mr. Cecil Alec Hewett, of West Field Drive Coggeshall. He is a registered ex-servicemen's and a pottery repairer, he carries period furniture and rather scale models for science museums; in his hand two harpsichords, cultivated 12,000 roses and written scores of articles on old timber buildings in Essex and Suffolk. Now he has just had his first book published. It is *The Development of Carpentry*, an Essex study from 1200 to 1700. An edition has been sold to the United States of America.

Married, with two sons, Mr. Hewett is a fine arts teacher at Romford girls' school at Chelmsford.

After thirty years of intense study of the wealth of timber buildings, secular and ecclesiastical, in East Anglia Mr. Hewett has found that different jointing techniques can be clearly attributed to distinct periods of history. His interest in joinery led him to write articles on the craft and eventually this book, which has more than 150 drawings and plates illustrating the construction of carpenters' joints, used in timber buildings. They cover the development and decline of scarfe joints, joist joints, cying joints and collar joints, examples of decoration, treatment and the development of ridge-beam and crown posts. The jointing techniques are classified and illustrated in greater detail and chronological sequence.

The dating of timber buildings is notoriously difficult, but because of his first-hand knowledge he and his family spents a seven-week working holiday—all expenses paid—in America to study the seventeenth-century houses built by the Pilgrim Fathers and report on his findings. There are ninety houses in all being preserved by the Americans.

The family also made a similar trip to Greatness, and in only fifteen days Mr. Hewett completely smet about those about jointing and carpentry on historic timber buildings.

As a result of his studies Mr. Hewett received an invitation from the bursar of Merton College, Oxford, to supervise the restoration of the fourteenth-century warden's hall.

Not only did he submit drawings and advice; he also made all the patterns for the carved bosses, corner-posts, spandrels, king-posts, rafters and joists. Under his supervision an Essex Cotton timber merchant supplied the oak and made the necessary woodwork, which has been delivered and is now in the process of being fitted into the renovated building.

About thirty-five feet by twenty-two feet and forty feet high, the new floor of the hall will be used as a lecture room and there will be a television room on the ground floor.

In Mr. Hewett's garage stands a five-foot-long barge, which he made in six weeks. It is a scale model of the *Snowdrop*, which has derelict at Goldhanger, near Maldon. Last summer he sailed the barge half a mile out to sea at Dovercourt, but unfortunately it capsized each barge capsized that the family had to find a greater spot. It is being fitted with audio control next month.

Mr. Hewett has constructed six scale models, including a farm wagon, a steam coach and an old boat, for the Kensington science museum.

Pottery-making is part of his teaching and some of the examples displayed in his home bear the mark of an expert. His home is also adorned with period furniture he has made, and two engineers' hammers. He had one seven years to build, but the second, which he has sold, was completed in under eighteen months.

Another scheme Mr. Hewett has on the ground was the cultivation of 15,000 roses. He and his friend rented a field and in three years the project developed into a thriving business, but owing to the pressure of his joinery commitments he had to give it up.

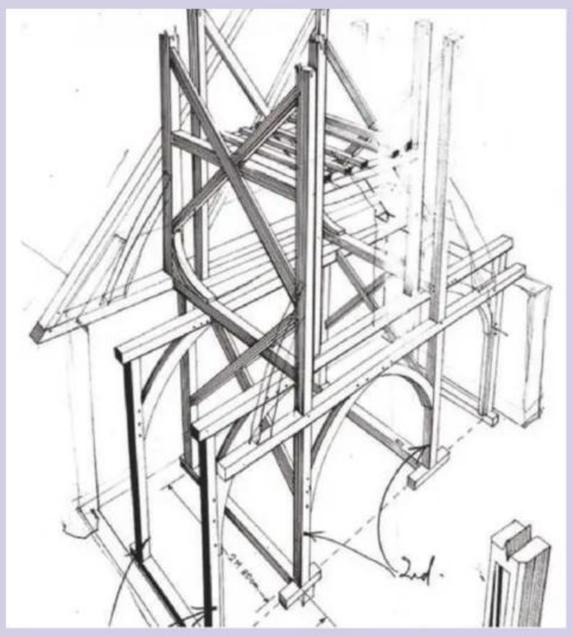
He has been teaching for seventeen years. Writes he left school he was trained as a silversmith and his name is still registered as such at Goldsmiths' Hall, London. +

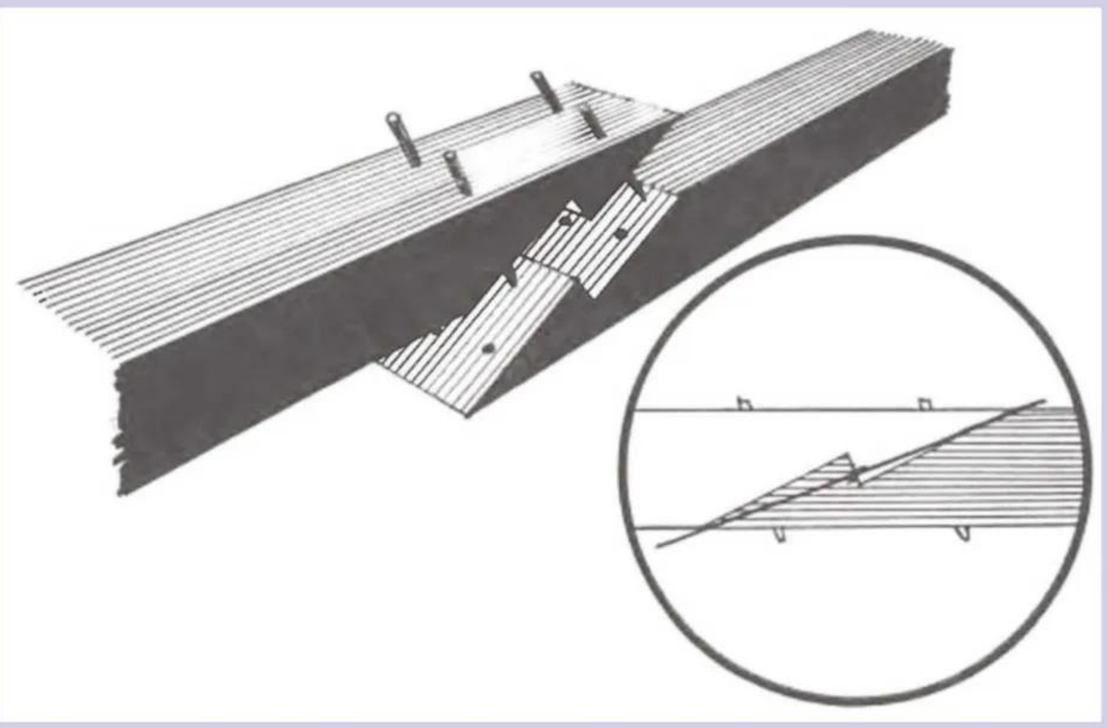
53

A man of many hobbies —Mr. Cecil Hewett, of Coggeshall— at work on his five-foot-high model of a barge. Photograph by Ken Adams.

Cecil A. Hewett at work on his 5ft high model of the *Snowdrop* barge

Hi Charles, thank you for your letter and for bringing the wonderful work of your late uncle, Cecil A. Hewett, to our attention. Again, I'm hopeful that some of our readers will have access to issues from these years and be able to find said articles and establish which ones he appeared in. Cecil's work was clearly incredibly specialist, not to mention detailed, and I do hope we're able to help in tracking down these articles for you. Thank you for also sharing the article depicting the model sailing barge, which looks to be a wonderful feat. His illustrations and diagrams of buildings were things of beauty and technical wonder, and we've reproduced a few of them here. If we're able to glean any information that may of help, I will of course be in touch.
Best wishes, **Tegan**


One of Hewett's trademark isometric drawings, depicting the Belfry of West Bergholt church


An illustration from Cecil Hewett's landmark study, 'The Development Of Carpentry, 1200–1700: An Essex Study', Newton Abbot, England: David & Charles, 1969 – showing a through-splayed and tabled scrap with four face-pegs – anciently known as the *Trait-de-Jupiter* in view of its resemblance to lightning. In the early 13th century, this joint was used for the bridging joist in the stone 'wing' of Little Chesterford Manor House, Essex

WOODWORKING WORKBENCH

Dear Tegan,
Way back in about 1995, I was asked to produce an article, which documented the making of my woodworking workbench. It was duly published, and I believe was in your magazine. I'm hoping that you might be able to help in tracking down the article and sending me a copy.


Frank's bench, which appeared as a project in the magazine

At the time, I was in my mid-40s and doing a BTEC Dip course in furniture design and making at Cheltenham College. This bench was one of the projects I made. The brief was to make tool storage, so I decided to build a workbench around mine.

I'm actually about to sell the bench and as it took quite a bit of effort and involved a fair cost, I'd like to set it up in its best light. The only reason I'm selling is due to the fact I'm getting older and we're also downsizing and moving to a smaller property.
Best wishes, **Frank Rainer**

Hi Frank, thanks for your email. Unfortunately, I'm unable to readily locate issues from that period, but I know for certain that many of our readers do have a full set of old magazines, with some dating as far back as the very first issue. Hopefully someone will recognise your article, or indeed your name, and get in touch. If we're able to successfully identify it, we can photocopy the necessary pages and send these to you, which will hopefully aid the bench sale. Alternatively, back issues do appear on eBay and similar sites, so assuming we can establish the issue year and month, you may actually be able to purchase the entire issue for yourself. Fingers crossed!
Best wishes, **Tegan**

WRITE & WIN! trend tool technology

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 new 'Letter of the Month' prize – a Trend T8EK 240V 2,200W ½in dual-mode plunge router, worth £349.99! Engineered for both hand-held and router table use, it comes with a host of accessories, all supplied in a moulded carry case to ensure safe storage. Simply email **tegan.foley@dhpub.co.uk** for a chance to get your hands on this fantastic prize.



Good luck!



R.I.C. JIG FOR PIR INSULATION

This insulation jig is easy and fast to use, with no fine dust generated

Dear Tegan,
With regards to Phil Davy's 'Around the house' article in the December 2023 issue, which features part 1 of his workshop rebuild, I wonder if either he or your readers are familiar with the R.I.C. insulation cutter? For those planning to use PIR insulation, this is a great help.

To describe the process, in the first instance it's a straightforward question of inserting a board into the jig. The R.I.C. Jig is 100mm wide so if, for instance, you're looking for a 300mm cut, you'd measure 200mm, then measure with a tape and mark the board at either end, moving the board into position. The cutting action is made through an integral wire, which is simply pulled upwards to make the initial insertion, then through the material. There's no power source needed, and it's virtually maintenance-free. All PIR boards aren't of the same quality. Those with a flat, straight foil – rather than a wrinkled surface – are easier to cut, but the device will slice through board up to 100mm thick, producing a fast, straight cut with no fine dust, and what you're left with is a very clean and accurate finish every time. Easy, fast. No dust. To watch a video of the R.I.C. Insulation Jig in action, see **https://tinyurl.com/2kvwd8pk**.
Regards, **Steve Roberts**

Hi Steve, I've passed this information on to Phil Davy, but looking at the video of the jig in action, it seems that not only does this clever invention save time and labour costs, but is also easy to use and most importantly, no fine dust is generated. For those readers wanting to know more and purchase one for themselves, email Steve here: ***scroberts1952@gmail.com****.*
Best wishes, **Tegan**

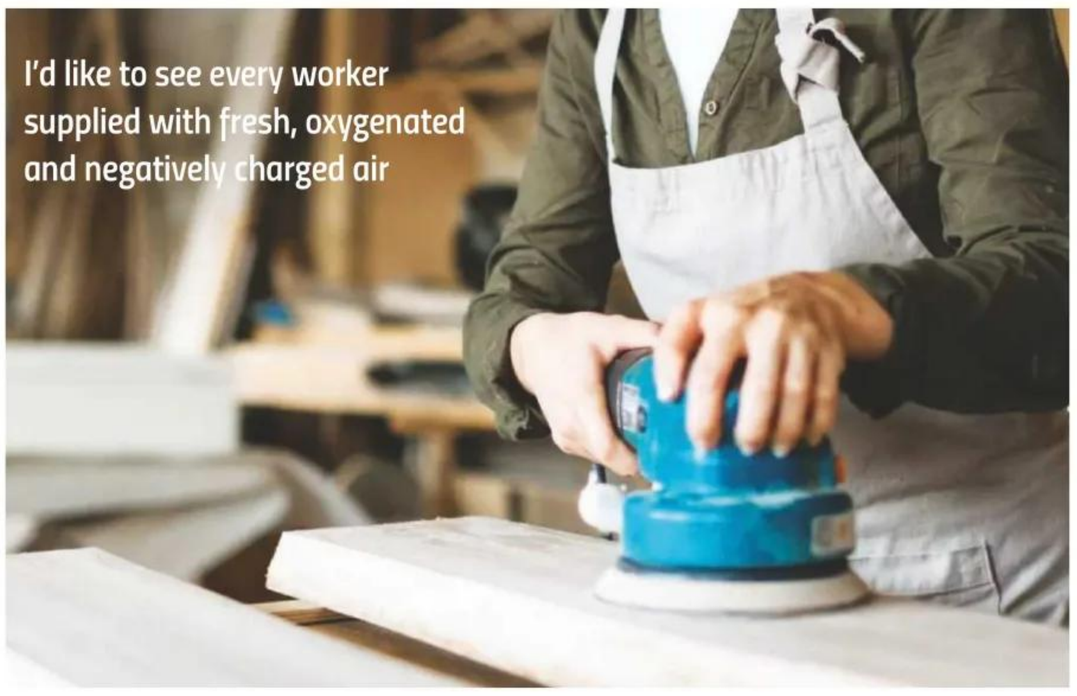


READERS' HINTS & TIPS

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**



HANDY HINT: DUSTLESS WOODWORKING WORKSHOP



For the past six years or so, I've been thinking of building my own dustless woodworking workshop, which I estimate will cost in the region of $100,000. Now aged 70, I've been hesitant, this side of a house move, to do much about it, but hopefully, when I reach my destination, it'll start to take shape.

The workshop will be approximately 60sq.m and have a long wall to the low winter northern sun that we experience in Australia's southern hemisphere. The wall will have large glass openings to emit the light, which will, in turn, warm the concrete slab and provide natural light.

In the middle of the workshop, a sound-proofed 3sq.m room will house pressure and volume dust extractors to serve the workbenches and machinery around it. It'll also house large volume air filters, vented at waist level to the workshop, to draw down any dusty air that escapes the dust shrouds on power tools. The negative air pressure in the workshop will be compensated by sound baffled air vents to the outside of the building, positioned under eaves at the tops of the walls. I hope to have a constant source of clean, oxygenated air from the outside that courses downwards, theoretically. On cold days, the air will be partly recycled. This idea may be timely given the fact that in Australia, at this moment in time, tens of thousands of new homes are at the top of the list for public and private housing, and there's a shortage of tradesmen. Dusty workplaces may have turned prospective youth away from carpentry and joinery trades, and rightly so. For many years, we've known that wood and composite wood products are just as dangerous as silica dust. Hopefully my idea will revolutionise the way people work in all situations, not only in dusty trade environments, but offices as well. I'd like to see every worker supplied with fresh, oxygenated and negatively charged air.



Pocket filters in the two-stage AC400 provide filtration down to 1 micron

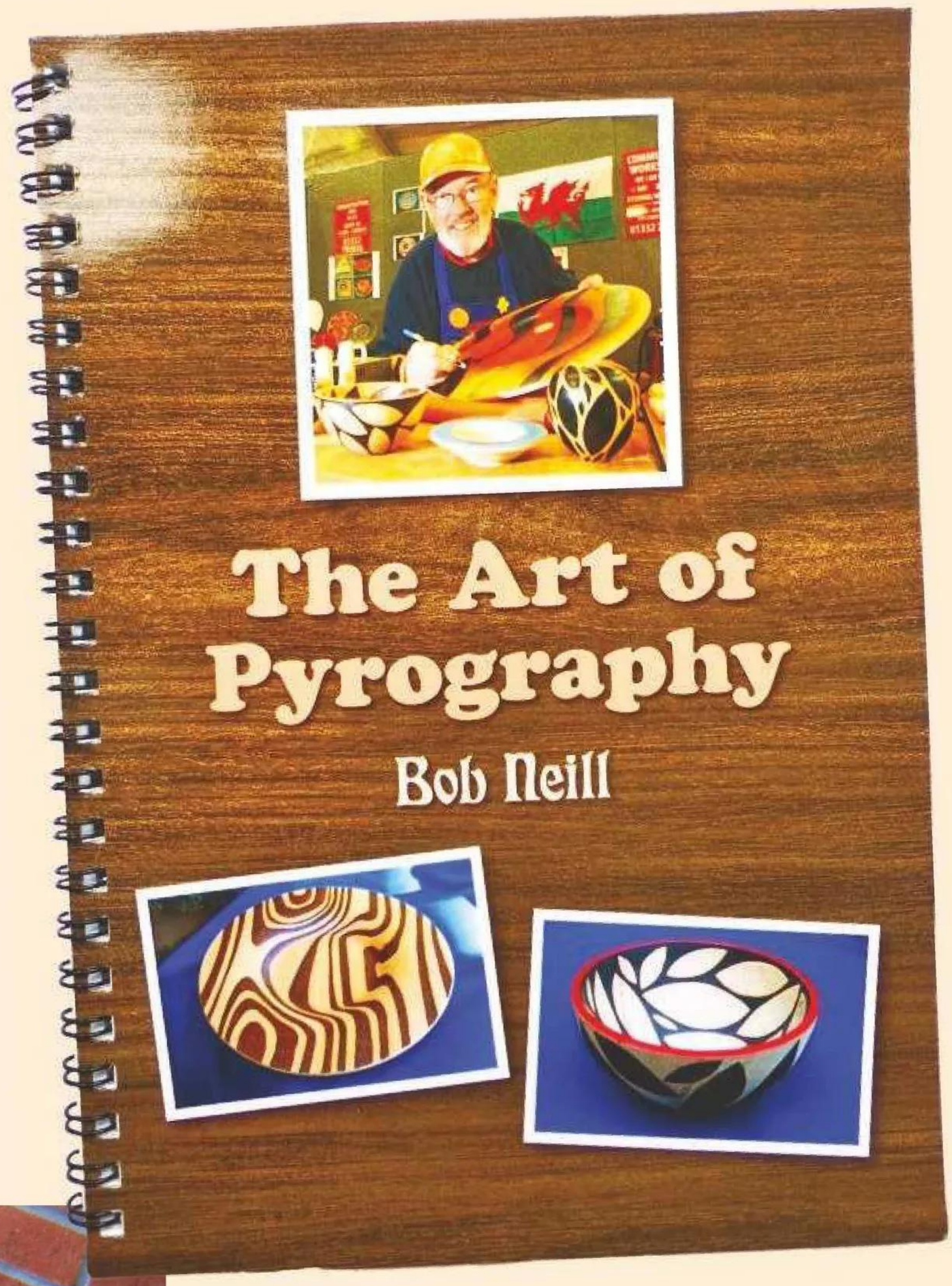
Peter Natoli

FUSING PYROGRAPHY AND COLOUR

Bob Neill's recently self published book, *The Art of Pyrography*, is one of few words and mostly photos, as **Bob Chapman** explains having taken a closer look and finding himself inspired, but wanting to know more

Bob Neill's *The Art of Pyrography* is a very slim, spiral bound volume of 40 pages, each with two photos showing examples of his pyrographed work. Inside the front cover, the author gives a potted biography outlining his varied and considerable experience in aspects of design and decorative work. Inside the back cover is an advertisement for a one-day workshop run by Bob.

What I found most surprising is that there's not another word of text in the entire book. Within the pages, you'll find excellent examples of pyrography and colouring, which are applied to a range of objects from bowls to hollow forms. However, some readers might find themselves yearning for context, background or some explanation of the techniques employed. I was disappointed to find no indication of how the pyrography is carried out and in some examples, it's difficult to identify the pyrography amid the colouring.





Some of the pieces shown challenge the viewer to discern pyrography detail beneath the colour

Individuality & artistic expression

The book is an interesting concept but the danger – for the author – is that a prospective purchaser might simply flick through the photos without giving them the consideration and study they deserve. They engage the eye immediately, but not necessarily the brain. In five minutes it's been picked up, looked at, put down again and forgotten. It needs text, if only a brief description of the timber used and size of individual pieces. Are the colours stains? Acrylic paint? Inks? It'd be good to know.

One of the book's standout features is its ability to present the diverse styles and themes prevalent in pyrography and colouring. From traditional patterns inspired by nature to contemporary abstract designs, the different photographs reflect the author's individuality and artistic expression. In a personal note accompanying my review copy, Bob Neill says that the book's aim is simply 'to inspire woodturners to decorate some of their pieces' and make them 'a little more interesting'.



A subtly coloured and pyrographed bowl



A pyrographed and coloured hollow form

Catching the imagination

Although I feel that this aim should be stated in the book itself, Bob has succeeded in doing so, at least in my own case. Several of his examples do indeed catch my imagination – for example, the hollow form at the bottom of page 10 – sorry, you'll have to count them as there's no page numbers – and the more subtly coloured bowl at the bottom of page 39. I'm definitely intrigued enough to give them a try; however some others – such as the bowl on page 8 – challenges the viewer to discern the pyrography detailing beneath the colour. Is this a criticism or a compliment? I'm not quite sure.

This is a book with several failings, but its inherent message remains potent – the fusion of pyrography and colour is a pathway towards originality and innovation. It certainly whets one's appetite, but I'd like to see Bob write another book, which might address some of the questions that this one leaves unanswered.

FURTHER INFORMATION

The Art of Pyrography, by Bob Neill

Typical price: £6 (£8 with postage)

Publisher: Self-published – email: **bob.neill1@btinternet.com**

Web: www.bobneillpyrography.co.uk

sturmer WORLD OF MACHINES

5 YEAR WARRANTY

OPTIMUM®

MASCHINEN - GERMANY

VAT FREE
Until 31st Dec 2023

Sold in 52 countries worldwide. Now available in the UK from NMA Agencies. 5 YEAR WARRANTY. Terms & Conditions apply. VAT free for displayed models only. Order online or through retailer of your choice. Stock available from mid September.

OPTIGRIND GU 15 DOUBLE GRINDING MACHINE
ART NO:3101505



~~£189.99 INC VAT~~
£158.32 INC VAT

- Heavy, durable industrial design with maintenance-free motor
- Housing made of extruded aluminum
- Long service life and smooth running due to balanced rotor with quality ball bearings

OPTIDRILL DQ 14 BENCH DRILL
ART NO:3191040

- Separate emergency stop switch
- Guaranteed concentricity accuracy of less than 0.03 mm measured in the drilling sleeve
- Drilling spindle with precision ball bearings
- High-quality quick-action drill chuck



~~£275.99 INC VAT~~
£229.99 INC VAT

NMA AGENCIES LTD

01484 400 488 sales@nmauk.com www.nmatools.co.uk

Unit 1, Brookfoot Business Park. Brighouse, West Yorks, HD6 2SD

TOP TIPS FOR BUYING WOODWORKING MACHINERY

Alex Dalton, Managing Director of **Daltons Wadkin,** takes a closer look at some of the top things to consider when making a woodworking machinery purchase

WW TECHNIQUE

FURTHER INFORMATION

To find out more about Daltons Wadkin and the range of new and used woodworking machinery on offer, visit **www.daltonswadkin.com**



High volume cross-cutting at Forest Garden Products

Whether hobbyist or industrial, woodworking machinery offers time and labour saving advantages over manual techniques, and guarantees a level of accuracy. Buying woodworking machinery for your own personal use, or for use in a commercial workshop, can be a significant investment. There's a huge variety available, consisting of both portable hand-held power tools and stationary units. This wide range is easily and readily available on the market, so, it's not unusual for customers to find it difficult to source the right machine for their woodworking needs. This article looks at some key things to consider when trying to source the perfect machinery item.

Safety

Before getting stuck into the attributes of new versus used equipment, we must mention safety. According to the Health and Safety Executive, the woodworking industry has one of the highest accident rates in manufacturing, not to mention those from hobbyist use. Before buying or operating any equipment, you should ensure it's been checked by a competent person with all the necessary guards, extraction and safety features in place, and that it's functioning correctly. Users also need to ensure they're suitably trained in the safe setting and use of the equipment.

The Provision and Use of Work Equipment Regulations 1998 (PUWER) details the responsibilities of people and companies who own, operate, or have control over work equipment. We're increasingly asked to carry out PUWER assessments and all too often come across illegal machinery. We also provide in-house and site-based certificated operator training for all woodworking machinery to ensure every area is covered.





Bespoke bed manufacturing at Pluss Organisation

New or used

Purchasing brand-new woodworking machinery can be expensive, so many businesses or individuals therefore look at buying used machinery in order to save as much money as possible while obtaining quality equipment. Indeed, some of the older-style machines are built far more substantially than anything available new.

When it comes to new machines, there's no need to compromise; you'll get the exact specification you need coupled with a manufacturer's warranty.

If choosing to buy used machinery, there's a few things that you need to be aware of, such as condition, age and machinery brand in relation to price. Difficulty in obtaining this information is often a stumbling block for buyers, mainly due to where the machine is being purchased from. Anyone supplying second-hand woodworking machinery for use at work must ensure that it's safe and without risks to health. Ask the seller for any information on what servicing has been carried out.

It's also important to verify the machine's condition, especially taking age into consideration, as well as manufacturer, and comparing it against the price. Sellers often use ambiguous terms such as 'checked and tested' and 'refurbished'. I must stress that buyers should find out as much information as possible when looking to purchase second-hand machines. Also, it might seem like an obvious point, but do check the guarantee! New machines normally carry at least a 12-month warranty, but what does that cover? Parts only, or is labour included? Even used machines should have some form of warranty, so ensure you know what you're getting.

Get the right specification

When looking to buy a machine, consider what the intended use will be, and how your requirements may change in the short- to medium-term. Also ensure to factor in a certain amount of future-proofing. Quality is key. While on paper the specifications for equipment may seem identical, in practice the longevity and overall performance will depend on the machine's build quality. What specification are you looking for? No different from buying a new TV or car, there are many optional extras, so be mindful of not paying for things you don't need.

And don't forget tooling. The machine will only ever be as good as the tool and can be a significant part of the overall investment, especially in the case of moulding machines and CNC routers. Check to see what tooling, if any, is included, and if you have existing tooling, will it fit the new machine?

Many consumers select a product purely because they prefer the brand, or specific features, even if it's not the best machine for their needs. Buying a well-known brand gives you reassurance, but an important consideration is that some of the older UK woodworking machines are no longer manufactured, so check the availability of spare parts.

Personal budget

If you buy the right woodworking machine, it'll prove to be a valuable investment, but your budget is another significant factor to consider. Woodworking machines aren't cheap; in fact, many superior quality examples are very expensive, but if you buy right, you need only buy once.

Workshop space

"We never have enough space" is a comment I hear daily from customers large and small. Check the woodworking machine's size and especially the overall working footprint. Some of those available will allow you to fold parts away when not in use. Combination machines can offer up to five or six different functions in the same unit and while usage is limited to one operator at a time, significant space can be saved.

If all of these factors are taken into consideration before parting with your cash, you should find that the chosen machine will do its required job very well, last for many years to come, and most importantly, be safe to use.



Automatic angle cutting on a Salvador S600



British-built Stenner band re-saw

GET YOUR FAVOURITE MAGAZINE FOR LESS

The Woodworker & Good Woodworking is a hands-on magazine aimed at the home woodworker. Its heritage, dating back over 110 years, makes it the authoritative voice on the subject. Edited and written by enthusiasts, there's a real feel for the subject. ***The Woodworker & Good Woodworking*** magazine presents projects and technical advice on all aspects of woodworking, plus features, news, reviews and tests of the new and most popular kit and tools available.



PRINT + DIGITAL SUBSCRIPTION

- ***Great savings*** on the shop price
- 1 year's worth of issues ***delivered to your door***
- ***Free*** postage & packaging
- ***Download*** each new issue to your device
- A ***75% discount*** on your digital subscription
- Access your subscription on ***multiple devices***



SAVE 75%*
ON DIGITAL ISSUES

TERMS & CONDITIONS: Offer ends 31st December 2024.
*This digital discount is only available when you subscribe to the 'Print + Digital' package. You can still get a great discount on the digital package; visit the URL stated below for more information.
See **https://dhpub.co.uk/terms/** for full terms & conditions.

PRINT SUBSCRIPTION

- ***Great savings*** on the shop price
- 1 year's worth of issues ***delivered to your door***
- ***Free*** postage & packaging
- ***Never*** miss an issue

Delivered to your door when you SUBSCRIBE TODAY!



TERMS & CONDITIONS: Offer ends 31st December 2024.
*This digital discount is only available when you subscribe to the 'Print + Digital' package. You can still get a great discount on the digital package; visit the URL stated below for more information.
See **https://dhpub.co.uk/terms/** for full terms & conditions.

CALL OUR ORDER LINE

01858 438436
Lines open Mon-Fri 9am-6pm GMT

Quote ref: DTWW2024

SUBSCRIBE SECURELY ONLINE

https://subs.thewoodworkermag.com

CODE DTWW2024

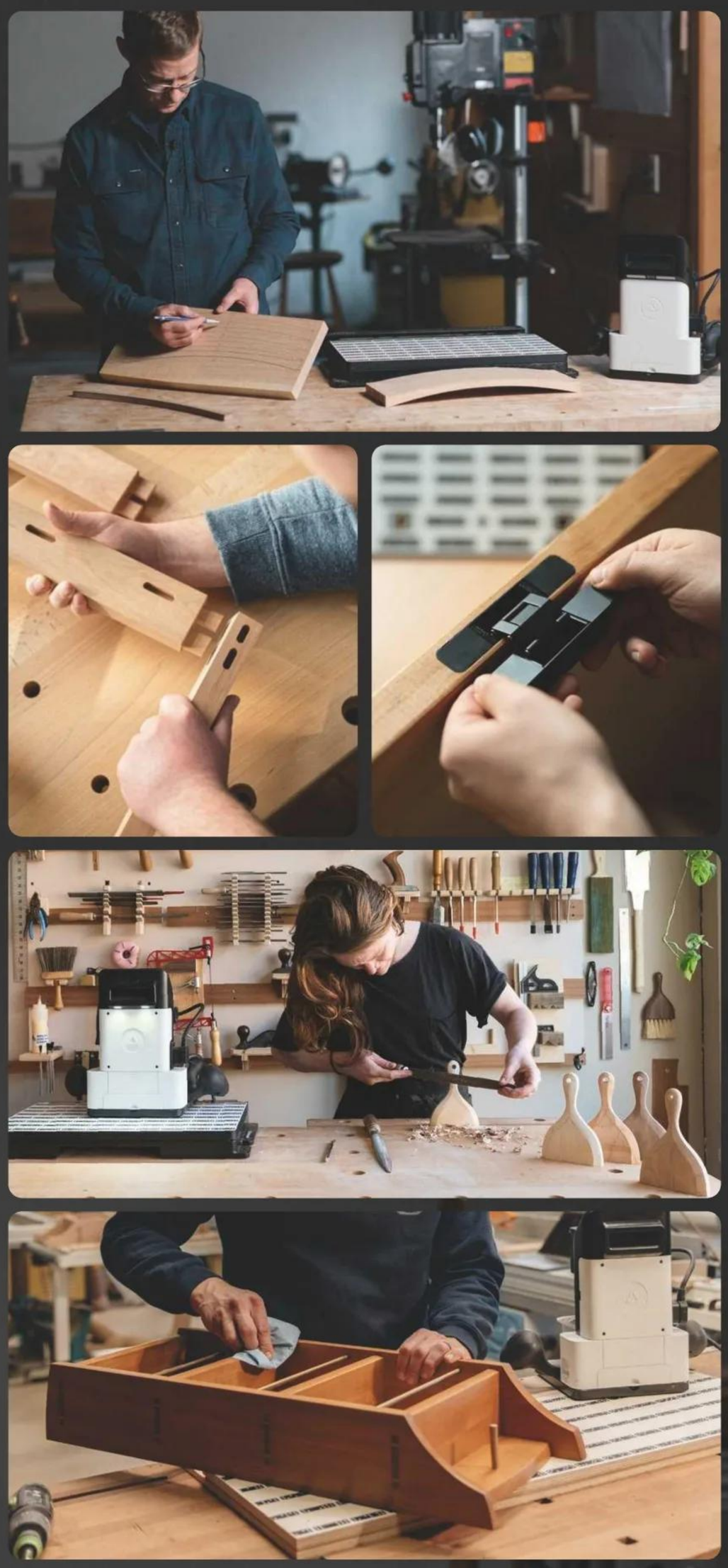
SHAPER

AN INVESTMENT YOU CAN FEEL GOOD ABOUT

Shaper Origin is a handheld CNC router that brings digital precision to your craft. Use Origin alongside traditional workflows for joinery, inlays, template making, and more.

Our Holiday Deal is Here!
Get your FREE starter package until November 20th

shapertools.com/holidaydeal



Have a question?
Book a free demo with a Shaper expert:
shapertools.com/book-a-demo

Photographs by **Brian Mac Domhnaill & Muireann Ni Cheallacháin**

CONNECTIONS TO A LOST AGE

WW PROFILE

Awarded a grant by the World Wood Day Foundation back in 2016, **Mark Griffiths** took on the huge task of rebuilding a replica Iron Age vessel discovered in a peat bog, using only a basic selection of reproduction tools and working methods from that era

As I unlocked my workshop door on a crisp spring morning, the email alert pinged on my phone. It was a single line from archaeologist, Dr Ben Gearey: "I think we've won the grant!"

In addition to working as an archaeologist, Ben has been a familiar face on Channel 4's *Time Team*, and the grant was a yearly prize awarded by the World Wood Day Foundation. The Foundation is an organisation set up to promote and celebrate the use of wood in our culture. Each year they invite proposals from individuals with a story to tell about our cultural fascination and reliance on this versatile material.

Iron Age woodworking

Our proposal centred on a wooden vessel discovered buried in a Southern Irish peat bog some years before. Although damaged by the peat cutting machine that unearthed it, the vessel – which dated from around 36 BC – was in remarkable condition. This beautiful Iron Age artefact had been carved from a single alder tree, a species that carried mythical significance in pre-historical Ireland. When first created, the vessel – which measured 1,300 long × 510 wide × 440cm deep – split at one end near the pith, most probably due to the timber drying too rapidly. The original maker had attempted a repair of this defect by insetting near invisible tiny wedges, and in doing so, demonstrating an incredible level of skill.

By re-making this object using the tools and methods of the time, we aimed to throw light on the process, working practices and challenges faced by an Iron Age woodworker, and along the way, gain a greater understanding of the use and significance of the original Pallasboy vessel.



The original vessel, being dredged from the peat bog



Sketch of the original vessel



The team, from left to right: Dr Ben Gearey, Caitriona Moore, Mark Griffiths and Brian Mac Domhnaill

Detective work

Our group comprised of four members, and just like The A-Team, we each had our specialist skills. As the team's designated woodworker, the challenge I faced was crafting a faithful reproduction of the original; Caitriona Moore – a wooden artefact specialist – would be our guide on historical woodwork and woodworking tools; Brian Mac Domhnaill – an archaeologist with a background in the arts – would both advise and document our progress at each stage; and finally, our team leader was Dr Ben Gearey – an expert on pre-history archaeology. His role would involve smoking cigars, and ensuring the plan came together.

Using a bit of detective work, Caitriona had tracked the original Pallasboy down to Dublin museum's storage facility at Swords. A trip was planned, and within a few weeks we found ourselves together in a vast echoing building that resembled something seen in *The X-Files*. Among grey metal shelves packed with all manner of objects representing every period of Irish history, we found our vessel. And so, watched over by a bubble wrapped Zebra, the team got to work. Brian took detailed photos and recorded our observations; Caitriona studied the maker's original tool marks, and from these she'd be able to put together the tool kit used; and I sketched out shapes, details and took measurements of every part of the vessel. This was a rare opportunity to get the team and the original object all together in one place; we each had to make it count and gather all the information we could. We were fortunate to have Conor



Splitting the log



The reproduction Iron Age tools made by historical blacksmith Terry Tyhurst



A reproduction Iron age axe



The axe being used as a chisel



Shaping commences



Marking out the shape



Shaping the inside with an axe



Working in an awkward position

McDermott on hand – one of the original team of archaeologists involved in the vessel's excavation back in 2000. He told me about the pre-history culture that'd created this object, and the many theories concerning its original use: bath/cot for an infant; boat for transporting heavy objects on the river; or a feasting vessel. I remember asking him that if it was used for feasting, then why did it have a rounded base – his simple reasoning being the fact there were no flat surfaces in the Iron Age, and so, this shape would sit better on the rutted, uneven ground.

Iron Age tools

One of our greatest challenges proved to be tracking down a suitable sized alder tree – an unenviable task that fell to poor Brian. Although abundantly found in the Irish countryside, these days, alder is little used in joinery or furniture making. The majority of timber Brian was offered came from storm-felled diseased trees, or was just too small. Amazingly, however, he managed to track down a local land owner who had a 600cm wide tree – the exact size we needed – and having heard about our worthy project, was happy for us to fell it.

Back in the UK, I received a call from historical blacksmith Terry Tyhurst who'd just finished our replica Iron Age woodworking tools. From studies of the original, Caitriona had put together an idea of what our pre-history maker's tool kit would've looked like, and it was these designs that Terry had faithfully recreated at his forge.

Due to the metal's poor quality, early Iron Age blacksmith-made tools – and weapon heads – had a sleeve that wrapped around a wooden handle or shaft. As the technology advanced, tools such as the axe and adze were forged with a hole, or eye, for the handle to fit into – a design still used on today's tools. As part of the project, we'd be comparing both styles to see how they matched up.



Shaping with a chisel



Checking details with the team



Smoothing with a chisel

Carving the vessel

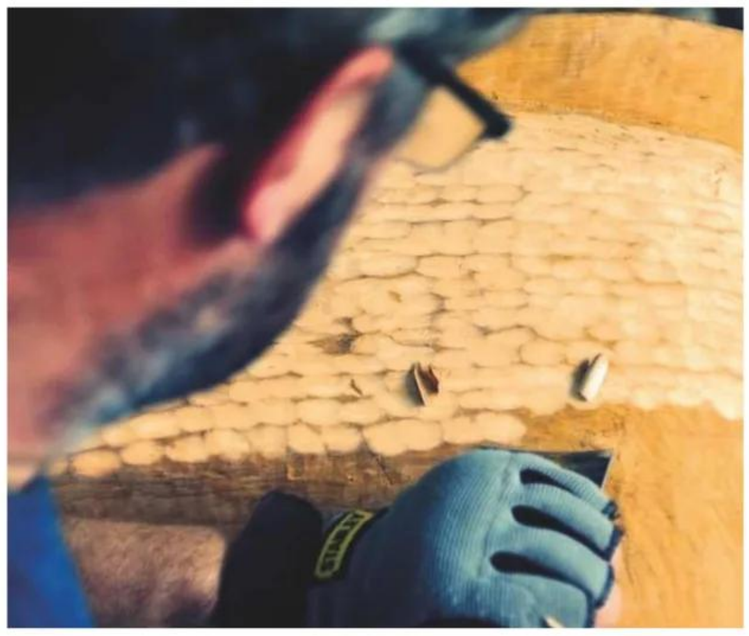
Weeks later, I was in Cork City's Meitheal Mara boatyard standing in front of two large alder tree sections. Meitheal Mara – which translates as 'workers of the sea' – is a community project that runs classes in boatbuilding and seamanship They'd very generously allowed us to take over part of their yard on the banks of the river Lee.

Of the two logs to choose from, one was taken from a higher part of the tree: it was straight and defect free, although it came in a little under the diameter we were hoping for. The second log was closer in size to that of the original, and also cut close to the root end. The roots of a tree carried a deep spiritual significance in pre-history Irish culture, as they're seen to connect with the earth, and by association, the underworld. With its hard rooty grain, this log would pose a greater carving challenge; however, authenticity dictated that this was the one.

As I only had nine working days in Cork, I wasted no time in preparing our chosen log for splitting – an ancient method using just wooden wedges. Working from the top of the tree



Note how the timber has changed colour



Adding the chip carved detail

downwards, a horizontal line is scored in the end-grain with axe blows. Small shallow angled wood wedges are then hammered into this line using a rough wooden club – otherwise known as a beetle. As the split opens, following the grain, larger steeper wedges are forced in. Brian rigged up a microphone to capture the satisfying cracks and bangs, which were omitted as the timber fibres yielded.

After the newly-exposed face had been levelled with the axe, I got to work plotting out the shape. I was using a very unauthentic marker pen rather than the sticks of charcoal that would've originally been employed. Coincidently, alder is considered to be one of the best woods for charcoal making.

Over the next five days, I carved the log using our four replica Iron Age tools – consisting of an axe, curved adze, gouge and a flat double-bevel chisel – along with their contemporary equivalents, which included an axe made by master woodturner, Robin Wood.

With the first few blows, it was easy to see why the alder tree was so closely associated with death in this early culture. As the axe fell, the timber started to 'bleed' thick red resin. The wood also underwent a dramatic and rapid colour change. In just an hour or so, it transformed from a soft creamy white to a strong brick red.

The Iron Age tools took some getting used to. The axe head's width, for instance, made accurate blows hard to achieve. And no matter how well it was secured, after every few blows, the adze head would drop off. As frustrating as this was, Ben made the point that to a pre-history woodworker, these tools were cutting-edge technology. To them this was the way you used the tool: if the head had to be re-attached every forth strike or so, then so be it. I'm sure the power tools in my workshop will appear slightly inefficient to a woodworker 2,000 years from now!

At each stage of crafting, I timed the progress of the replica tools compared to the contemporary set – on average the work took twice as long using the Iron Age originals, and of course, the modern steel kept a far keener edge.

On display

After nine blister-inducing days, the vessel was finished. As with the original, and as expected, large splits had started to open, radiating out from the pith. Far from being disappointed, we were fascinated to share the same seasoning problems faced by the original maker. It led to discussions as to whether the vessel had found itself submerged in the peat bog not through some mysterious ritual, but as a way of swelling the timber and thus preventing structural damage.



Shaping the ends



Completed end detail

On the day we installed our copy of the Pallasboy vessel in Cork's Public Museum, we reflected on how this project had brought to life working with wood during the Iron Age. For every question we'd answered, many more were posed.

For me on a personal level, the greatest discovery had been the strong connection I felt to this craftsperson from a lost age. We shared similar, simple tools and both understood that working with timber is always as challenging as it is rewarding. Above all, however, in the maker's work, I could see a love and respect of this craft that spans two millennia.



The chip carving once completed



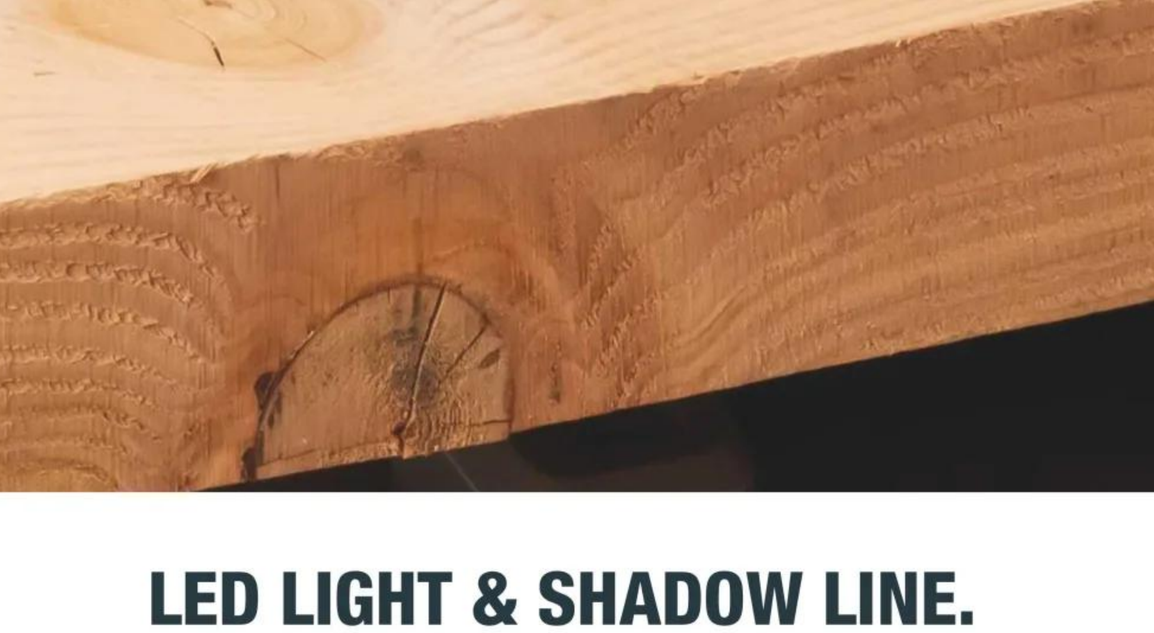
The finished vessel, ready to display in Cork Museum

FURTHER INFORMATION

To find out more about the project and see further updates, visit the team's blog: **https://thepallasboyvessel.wordpress.com**

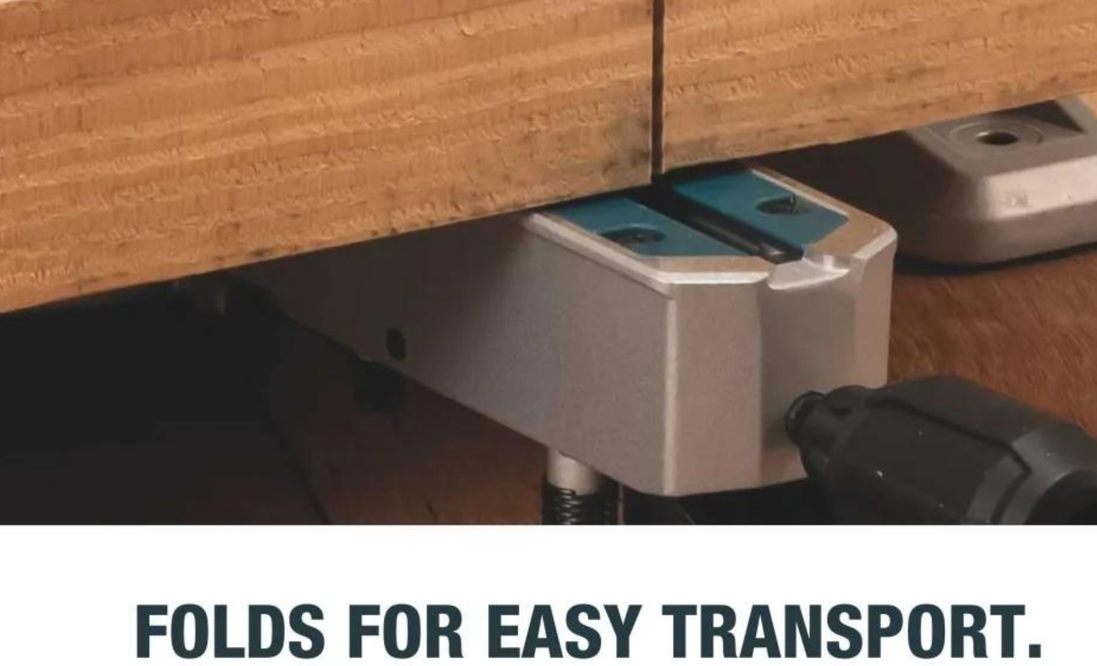
makita®

LED LIGHT & SHADOW LINE.
65 x 305MM MAX CUT.



110V / 240V 216MM SLIDE COMPOUND MITRE SAW: LS0816F

FOLDS FOR EASY TRANSPORT.
LIGHT WEIGHT, ONLY 8KG.



FOLDING MITRE SAW STAND: WST07

makitauk.com

CHISEL RATING

APTO SHOE RACK



In an ongoing search for new takes on old ideas, this unusual piece of furniture by **Hannah Knowles** may inspire us all to explore things further

WW PROJECT





We interact with products all the time, from smacking the button on the morning alarm clock to flicking the light switch off before going to bed. Everyday products are some of the most helpful and important things used, but we tend to notice them only when they fail.

A product group which stuck in my mind as failing time and time again was flat-pack furniture. From the awkward fittings and fixtures to the instruction leaflet, or even just the product's quality, I wanted to try and change the stigmas surrounding this range of furniture.

The result of my project is a modular flat-pack furniture range, which consists of a shoe rack, a coffee table and two side tables. The shoe rack just has a top added to make the coffee table, and the top and dowel is cut to create the two side tables.

A pipe dream

The initial use of copper plumbing pipe and fittings seemed to happen by accident. I was looking for a simple and quick way to create a curve within the modelling stage of my design. To my amazement, the fittings did the job perfectly and led me to think of how I could develop furniture by using only off-the-shelf parts. I wanted to use these as it'd not only make the flat-pack range cheap, but also easy to build and repair.

Choosing sizes

I began by doing a bit of digging into the standard diameters of wood dowel, and also the different sizes and types of pipe fitting that were readily available. I used 15 and 22mm capillary pipe fittings – the slimline type that are soldered on – as these can be easily purchased from local DIY stores without any hassle.

I opted for ash dowel due its affordability, sustainability and lightweight properties. This project makes use of 22, 15 and 9.5mm diameter varieties.

Minimising waste

The first step was cutting the dowel to length and ensuring that there wasn't much waste. I decided on four 600mm lengths of 22mm dowel for the shoe rack, with 300mm spare. I then used these 300mm lengths to produce the side table prototype.

15mm dowel needed to be cut for the cross bars; I could get three per length with 100mm waste. For the shoe rack and side table, I needed 15 lengths overall, which were cut out of five 1m lengths, leaving me with 500mm waste.

The 9.5mm dowel was the last to be cut; I needed 300mm dowel lengths and used 2m for this project. Out of the entire dowel, I had 1m of waste, which didn't seem bad considering I was making three pieces of furniture.

Collecting components

This piece is made from four 1m lengths of 22mm dowel, drilled and ready for the cross bars – 10 300mm pieces of 15mm dowel. As for the pipe fittings, you need four 22mm tees and elbows, and of course some 22mm diameter copper pipe.

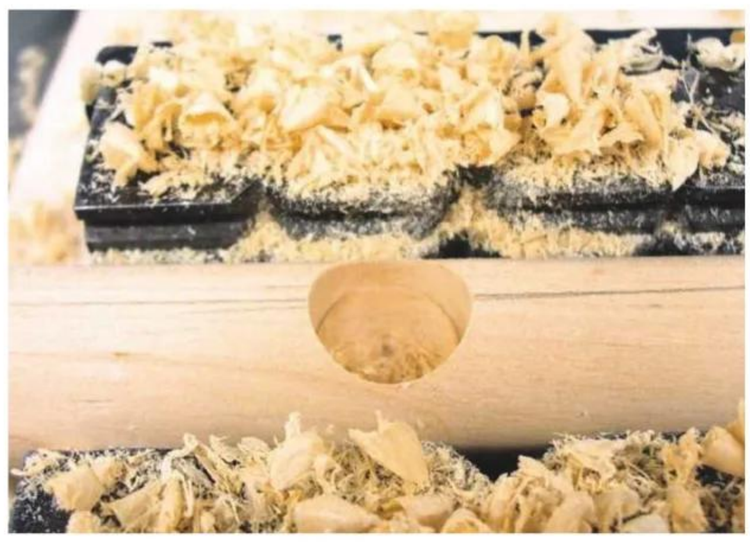
Since I like to do all of my cutting at once, I used a table saw to cut MDF table-tops, which were then veneered on both sides. I didn't use solid ash as I'd have to plane it to 12mm thick, which seemed like a waste. The veneer was stuck on with cold-press veneer glue and left for 24 hours in the press. This was a good job done and allowed me to move on to the next stage.

Precision drilling

Drilling the holes was the next thing to be done on the 22mm dowel. It was important that the holes were exactly 63mm apart, starting from the centre. I began by holding each length in a vice, finding the centre on each end and drawing a line through it. This would allow me to draw a straight line along the dowel. Each hole had to be on the same line to ensure it'd match up to its other half. After all four lengths were marked, I used a 15mm flat drill bit to create



1 The ash dowels had a rough finish and required a lot of hand sanding



2 15mm diameter holes for the cross bars were bored with a flat wood bit



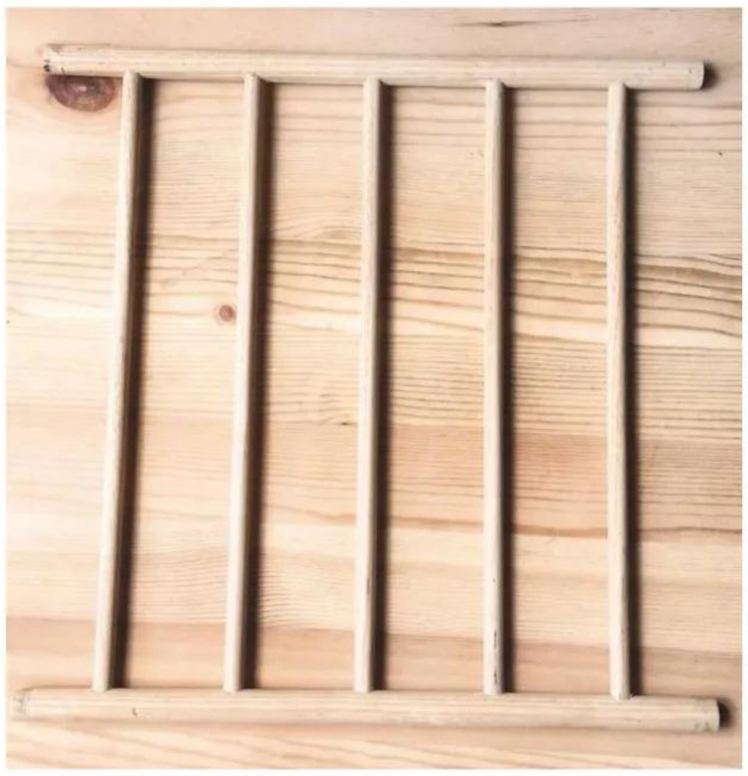
3 I went for a high polish and a coat of lacquer on all the copper fittings



4 A gentle tap with a hammer ensured that the fittings were fully seated



5 On the two long side rails, cross bars were glued into their drilled holes



6 I assembled each rack section in turn, checking that the rails were perfectly parallel

the holes. To ensure that each was the same depth, I set the drill stop at 7.5mm. This allowed me to drill all the holes at once and ensure they were the same.

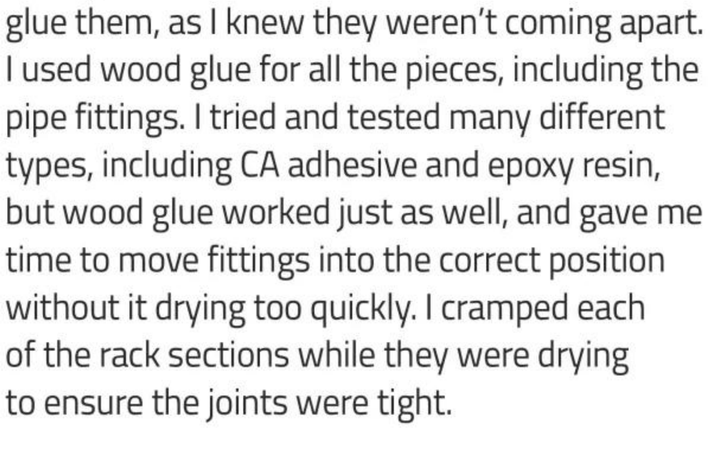
Sanding & sticking

As the dowel came rough from the store and not exactly 15mm in diameter, it had to be sanded. This involved sanding each piece individually in order to secure the pipe fitting to the end and the cross bars to the holes. I ended up doing this by hand, but in hindsight, using a lathe would've saved a lot of time and created an even smoother finishon the piece.

I wanted the dowel to be a snug fit, so glue was optional. However, it made sense for me to glue them, as I knew they weren't coming apart. I used wood glue for all the pieces, including the pipe fittings. I tried and tested many different types, including CA adhesive and epoxy resin, but wood glue worked just as well, and gave me time to move fittings into the correct position without it drying too quickly. I cramped each of the rack sections while they were drying to ensure the joints were tight.

Professional help

While the rack sections were drying, I focused on the copper sections and fittings. I did have some help from a coppersmith, who happened to be my grandfather. He taught me about copper's properties and what'd happen during the bending stage. You can see where the copper has been bent and put through its paces as it compresses and expands, and for me, this makes the piece. It adds character and individuality to the range, which can sometimes be lost



9 ... and to ensure that the two curved sections were perfectly symmetrical

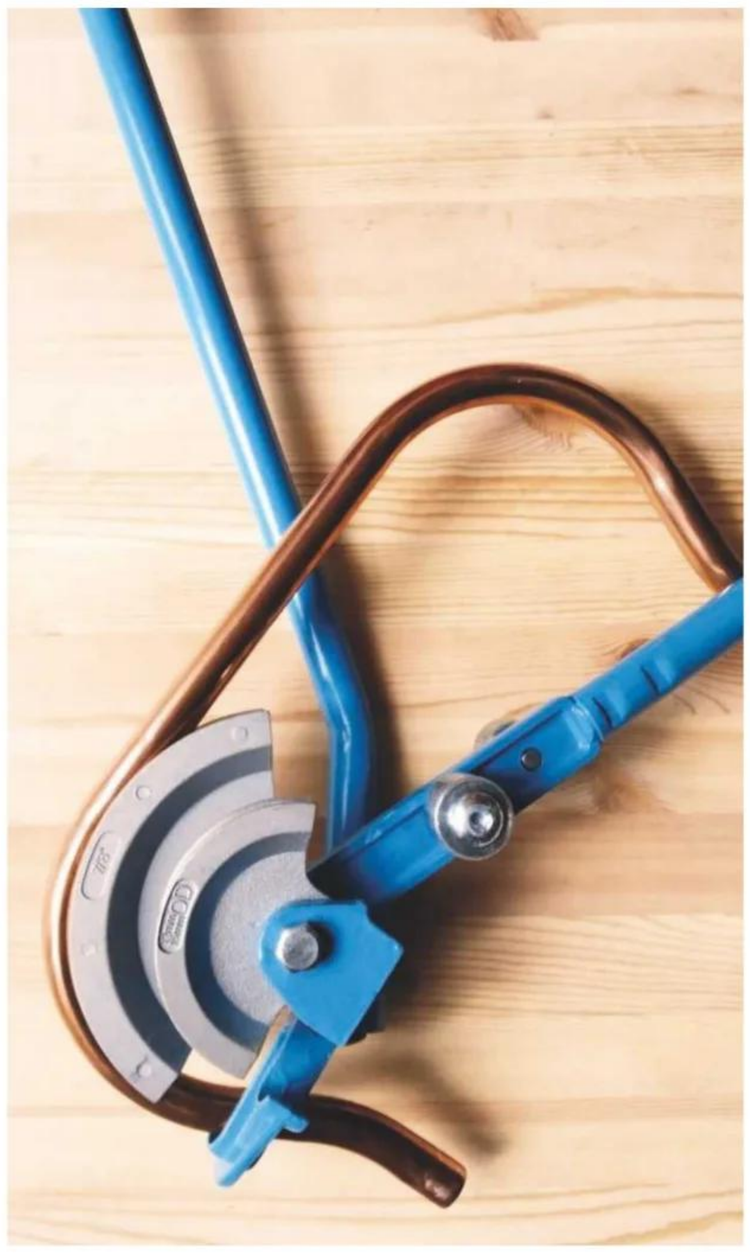


7 I them cramped each rack and set it aside, allowing the glue to harden

within flat-pack pieces. I opted for a high polish on all the copper fittings and base, which were then given a coat of clear lacquer; this helps prevent the copper from tarnishing over time.

Finishing touches

After adding ash strip wood and copper strips around the various table-tops, the pieces were



8 A pipe bending machine was essential for forming gentle curves on the feet...

nearing completion. The final task was assembling them and waxing the wood, using a white wax. I wanted to keep the ash as creamy as possible, as it gave a good contrast to the copper's high shine.

The simplicity of the pieces shows that flat-pack doesn't have to be complicated or expensive; all that's required is good-quality materials, simplicity and affordability.



10 The completed Apto shoe rack design

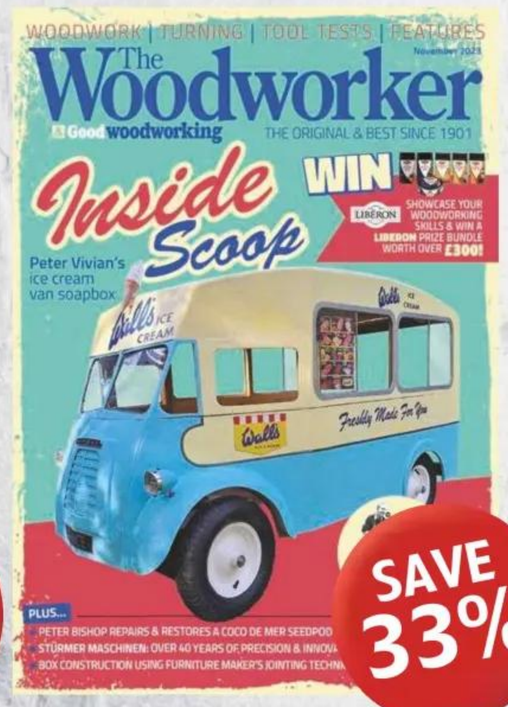
Christmas Gift Subscriptions

HURRY LIMITED TIME ONLY!

6 issues for only £19.99!



SAVE 37%



SAVE 33%



SAVE 44%



SAVE 33%



SAVE 44%



SAVE 42%



SAVE 44%

SUBSCRIBE SECURELY ONLINE WWW.DHPUB.CO.UK/DXMAS23P3
OR CALL 01858 438436 AND QUOTE DXMS23P3

LINES OPEN MONDAY TO FRIDAY – 9AM - 6PM

Calls are charged at the same rate as standard UK landlines and are included as part of any inclusive or free minutes allowances. There are no additional charges with this number. Overseas calls will cost more.

TERMS & CONDITIONS: Offer ends 31st December 2023. *UK print subscriptions offer only. Subscriptions will begin with the first available issue in 2024. David Hall Publishing collects your data so that we can fulfil your subscription. We may also, from time to time. send you details of David Hall Publishing offers, events and competitions but you always have a choice and can opt out by clicking the unsubscribe link at the bottom of the email. Please be aware, by opting into our communications. we may contact you with offers by email/post/phone. We do not share or sell your data with/to third parties. Details you share with us will be managed as outlined in our Privacy Policy here https://dhpub.co.uk/privacy-policy. Issue frequency is subject to change. Current yearly term varies per issue. Please visit https://dhpub.co.uk/terms for full terms and conditions.

THE ROCKING HORSE SHOP

FANGFOSS, YORK, ENGLAND

NEW

BRAND NEW PLAN for SMALL LAMINATED ROCKING HORSE





PLANS

Plan 206 for our small laminated horse is available now, and includes the plan for both the safety stand and bow rocker. The horse requires just 1 sheet of 12mm plywood!

Suitable for riders 3 to 5 years or just as a decorative artefact.



TIMBER KITS

In a similar way to our Decorative horses, the timber kits include everything you need for both the horse and mounting mechanism. The horse is made from high quality birch plywood, cut using the latest CNC technology, enables you to assemble and get straight on with the carving!



ACCESSORY SETS

There is an accessory set for every budget, which contains everything you need to complete your horse, including saddle, bridle hair and metalwork. These are all handmade by our team in Yorkshire!

COME AND JOIN US

at the North of England Woodworking Show, Harrogate from 10th to 12th November! We will have a range of special offers on all our products!

2
Brand New Books

18
Plans to Choose

2
Carving Courses

Visit Us
Fangfoss, York, YO41 5JH

To order over the phone
01759 368737

info@rockinghorse.co.uk
www.rockinghorse.co.uk



AROUND THE HOUSE WITH PHIL DAVY



When it comes to spotting a workshop bargain, do you snap it up or risk missing out while weighing up the pros and cons of spending money on equipment you don't actually need? Most of us probably love tools and will justify the expense of a brand-new plane, power tool or whatever this happens to be, as long as we really want them – even though stumping up the cash can often be a struggle.

Then there's long term value. With prices of serious top-end hand tools steadily increasing, perhaps we convince ourselves of potential investment opportunities? At the other end of the scale, it was the humble B&D Workmate for me. Reduced to £30 at a major DIY shed, I couldn't resist, especially as vintage models on eBay can fetch upwards of £100. While I didn't actually need another one, I justified the outlay by telling myself that it'd be stupid to ignore the offer... now I just have to find the space to store it!



USEFUL KIT/PRODUCT

SWORDFISH IKON SHARPENER

Working together with my friend Ben Plewes on a book some time ago, we did several photo shoots in his pristine workshop. Now, not only is Ben's workspace neat and well organised with everything to hand, but I couldn't help notice that the workshop pencils were always incredibly sharp and pointy! Intrigued, I tracked down the humble pencil sharpener, which sat on a shelf. It instantly took me back to school days, though this time it wasn't too intimidating approaching the teacher's desk...

The Swordfish Ikon is a great gadget and will have you sharpening everything in sight. I even used it to chamfer some pine dowels on a recent shelving project, though I'd hesitate to use it on hardwood as there's no way of honing the cutters once dull. The plastic unit can be secured to a table-top or shelf with a threaded clamp, then you depress a button to extend the front plate outwards. Insert the pencil, turn the handle and away you go. Once sharp, the Swordfish automatically stops feeding the pencil in. A clear plastic tray at the base gathers the shavings and is simply pulled out to empty. I found my Ikon model on Amazon. It's a fantastic little gadget for the workshop, and I guarantee you'll be hunting for old pencils just for the pleasure of turning the handle. Magic!



SPECIFICATION
Typical price: £15.40
Web: www.amazon.co.uk
RATING: 5 OUT OF 5



USEFUL KIT/PRODUCT

QUANGSHENG MARKING GAUGE

If you're used to a conventional hardwood marking gauge, this style of metal tool takes a bit of getting used to. The line produced by the steel blade is very fine. Build quality is superb and not surprisingly, it feels pretty solid. Compared with a basic beech gauge, this one is twice the weight at about 0.25kg.

Its circular stock/fence and knurled thumbwheel are brass, with a steel stem that includes both metric and imperial graduations. The thumbwheel is just big enough to prevent the tool from rolling on the bench top. Its bubinga grip is nicely contoured and has a threaded brass fine adjuster at one end. Graduations finish at 120mm and 5in, but maximum capacity is actually 135mm.

The hardened-steel cutting wheel slides flush into the recessed stock for protection and safety. Once tightened up everything is rock solid, with no play in the stock. The tool works particularly well across the grain, making it ideal for setting out dovetails.

If wanting to make this into a mortise gauge, you'll need to buy an additional kit, which consists of 10 brass washers and a spare blade. This requires you to unscrew the existing blade followed by inserting a longer screw with second blade and 1mm washers to make up the spacing required. This is obviously a slower process than adjusting the pins on a traditional mortise gauge and not so easy if setting the gauge to a chisel that's imperial!

Maximum mortise setting is 14mm. The Quangsheng isn't an item to simply toss in the bottom of the toolbox, however; it's a beautifully made, precision tool that's a delight to use.

SPECIFICATION
Typical price: £41.50
Web: www.workshopheaven.com
RATING: 4.5 OUT OF 5

WINTER PROJECT:
DOOR REVERSAL

OPEN DOOR POLICY



If you want to maximise room space by reversing the door, **Phil Davy** tells you how to do it with mortise & rim locks

What appeals to us in terms of comfort and style in the 21st century wouldn't have been so popular once upon a time. Times change and a common request from owners of older houses is to reverse the opening of internal panelled doors.

Originally, this was probably due to draughty hallways and stairs or possibly modesty, too. I suspect Victorians especially didn't want visitors peering through a doorway from the hall when a door was opened. Whatever the reason, these days it often makes sense to change the way a door hangs to make the most of space in a room.

Often, there are two ways to do this. Firstly, you can remove the hinges and fit them to the opposite stile, so the door still fits the opening exactly without having to use a plane. You'll then need to remove latch and lock if fitted and also fix them on the opposite side.

Alternatively, flip the door around so that the handle and lock mechanism don't need to be moved. This can be the easier option as you don't have to cut new hinge recesses on the door itself. The downside is that the door probably won't fit the opening so well, especially if things are a bit out of square.

Whatever method you choose, you'll need to cut new hinge recesses into the door lining, which isn't easy when there are layers of paint to get through. No matter how sharp your chisels, existing paintwork will chip as you cut new recesses in the jamb. Old recesses can then be filled with softwood offcuts.

You may need to remove and rehang the door two or three times to check the fit. If the door in question is badly warped, you may want to correct this with a batten across the offending corner, which is temporarily screwed to the lining. Narrow blocks can be inserted against the door stop to counteract the cramping action.

On internal doors, it's sometimes easier to prise off the stop and refit it once the door is reversed.

Loose joints

It's likely that you'll need to carry out repairs to a door at the same time as reversing it. Splits, worm holes and other defects all add to the character, though if the homeowner wants the door to look immaculate, it could be cheaper to fit a new replacement. If doors are to be painted, using filler here and there is less of a problem. Where doors are stripped, it then becomes more important to fill obvious holes or splits with matching wood where possible.

Pine doors that have been chemically dipped and stripped may well have loose joints, so you'll need to get out the sash cramps. Prise joints apart slightly and clean out old glue. Cut new wedges and hammer these into tenons when re-gluing.

One of the doors I worked on had a badly split corner, which required me to rout an angled recess before gluing in a replacement piece of wood. Where repairs made with new timber are visible, try to match grain as closely as possible.

New Catalogue Out Now!
Request your FREE catalogue online
Ironmongery Direct
Trusted to deliver
IronmongeryDirect.co.uk

Takes:
A weekend

Tools you'll need:
Small router, jack, block & shoulder planes, marking tools, chisels, drill, screwdrivers, tenon saw



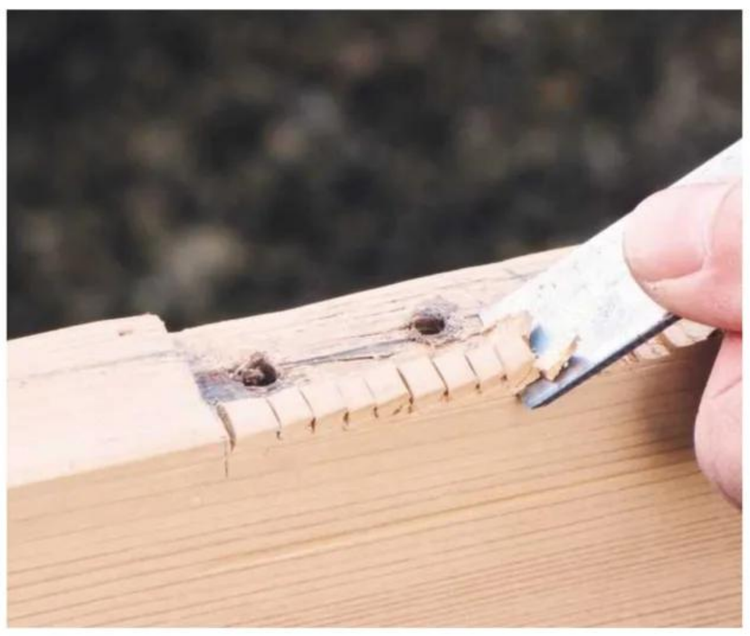
1 Start by removing the door from the jamb; old screws may have narrow slots, so several screwdrivers are useful here



2 Screw slots are often clogged with paint, so use a knife tip to clean them up; this will ensure that the screwdriver blade seats securely



3 When reversing hinges, set the marking gauge to match the hinge flap's thickness. You can then mark the depth on the door's edge



4 Using a chisel, make a series of vertical cuts into the wood's adjoining recess; carefully remove the waste here



5 Pare down to the gauge line and using a small square, check the recess is flat. Next, trim the ends and ensure the hinge fits properly



6 Not all screw holes will line up with the new hinge position. Carve small plugs, then glue and tap these into the old holes



7 Mark centres of new holes with a bradawl. Drill and screw the flap to the door edge, then repeat for the second hinge



8 It's wise to label hinges with masking tape to ensure they don't get mixed up – screw holes don't always match



9 Cut and glue wood strips to cover edges of the old hinge recess. Remove pins when dry and trim flush



10 Mark new hinge recesses on jamb. Chop out with a chisel or carefully rout away most of the waste



11 Clean up recesses with a chisel and check hinges fit snugly. Chipped paintwork will be sanded later



12 If the door edge binds when closing, you'll need to plane it. Remove the door for planing if you find that the lower edge binds



13 Next, remove the mortise lock from the door. To reverse its operation, unscrew the metal case and swap the latch over



14 Unscrew the striking plate and chop a mortise on the opposite jamb. Cut a softwood block to fill the cavity, then glue



15 Fill old hinge recesses in the same way, pinning the softwood until the glue is dry. You can then trim flush with a shoulder plane

LOCK SWAP

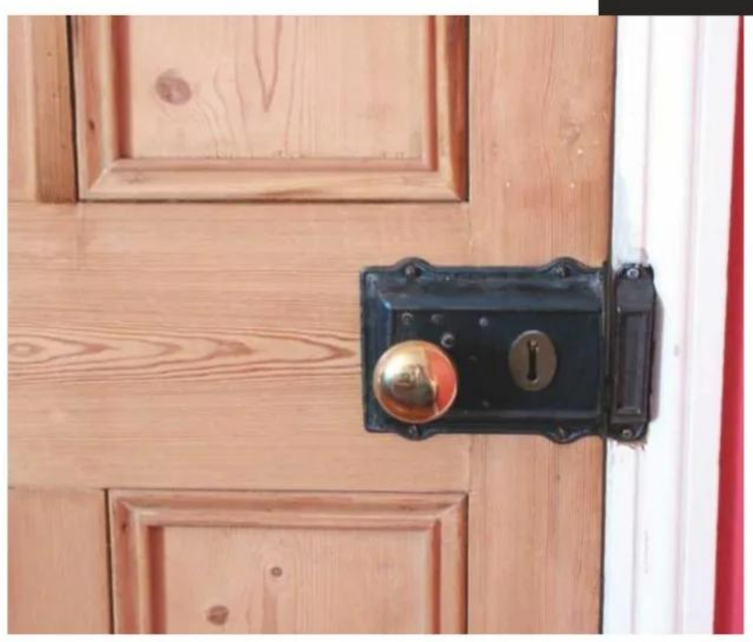


New Catalogue Out Now!



Request your FREE catalogue online

Ironmongery Direct
Trusted to deliver
IronmongeryDirect.co.uk



1 A rim lock is easier to swap than a mortise lock, though its box keep still leaves a cavity



2 Brass door knobs are usually secured with fiddly grub screws. Once these are removed, unscrew the rim lock



3 Remove the door and check for fit between the jambs. Shoot if tight, but be economical when it comes to planing



4 Place rim lock on the reverse side of the door and draw around the plate, ensuring the spindle holes line up



5 Carefully cut a new recess with a chisel. Check that the lock fits, then glue a softwood blank to fill the old cavity



6 Using a chisel, remove existing paint from the old hinge and lock recesses; aim to get the wood as flat as possible



7 For a neat job, cut softwood blanks so they're slightly oversize; glue in place and trim flush with a shoulder plane



8 Although rim locks are face mounted, box keeps can be cut into the architrave. Fill cavity as before



9 If you find the door corner is badly split, it's best to splice in new wood. Mark the stile's face for routing or sawing



10 Cramp guide batten to the door and cut away any damaged wood with a router. Try to avoid cutting the tenon at this point



11 Glue the new piece to the door, aiming to match existing grain if possible. Allow glue to dry and saw the end flush



12 Using a block plane, trim the face and edge so that they're flush. Finish with a sanding block and stain the new wood if desired

PROJECT Miniature caravan

FIT FOR ROYALTY

Woodworkers love making things at less than their normal size – think dolls' house furniture, for example – but scaling down a caravan is one of the most unusual projects we've come across

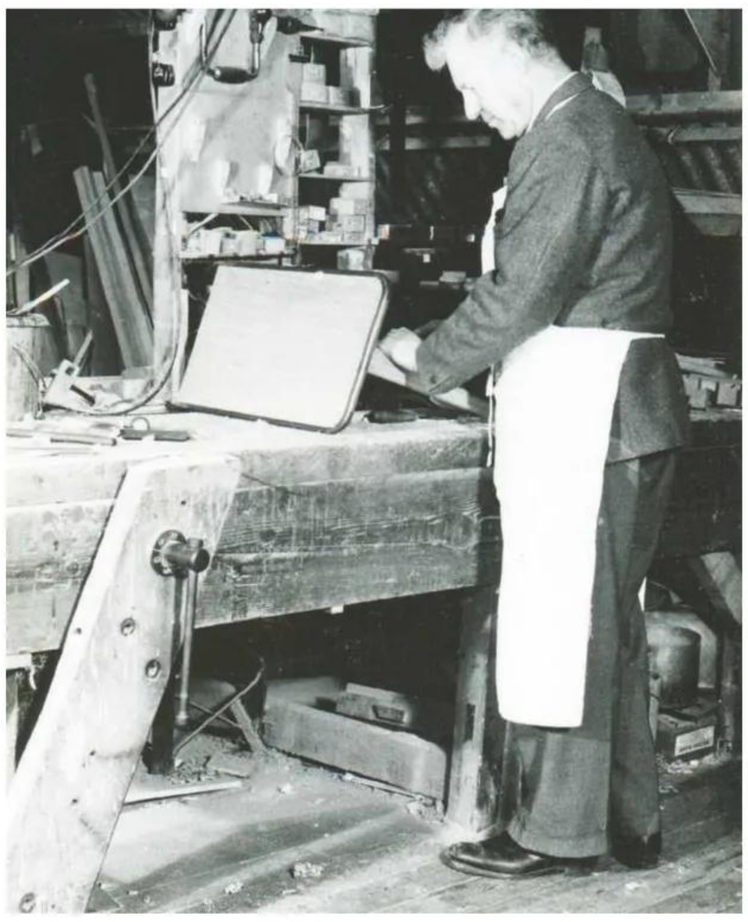


1 The chassis is checked over before the caravan's timber frame is fitted. This young man might still have been at the firm for the first overhaul in 1982



2 The caravan, now fully framed up and insulated, has a wheel arch support fitted. Note the pierced holes at the rear to lessen the weight

Caravans have been known to provoke all manner of emotions in the heart of many a woodworker and, depending on whether you're an impatient motorist or a romantic dreamer, they can be anything on the scale from very bad to extremely good.



3 The saloon table folded down just like the full-sized version would've done. We love the craftsman's apron that protects his suit

I'd like to think that most of us would be amenable to spending a few nights away in a cosy container for two, but can you imagine making something like this for your children or grandchildren?

Rolling along

Built using traditional construction techniques by Rollalong Caravans of Ringwood, Dorset, this charming scaled-down version of a standard caravan of the time was presented by The Caravan Club – established in 1907 – to the young Prince Charles and Princess Anne in May 1955.

The miniature vehicle came in at just over 2m long, and was fully roadworthy and functional, apart from the hotplate in the galley. It came complete with a set of Beatrix Potter books, a copy of Captain Marryat's *Children of the New Forest* and a Poole Pottery tea set.



4 It was all hands to the pump here, in a well-staged publicity shot that evokes a time of burgeoning prosperity and full employment; jobs for all and a golden future awaits



5 The original 1950s interior was a very fine job. Note the Poole pottery set – which was replaced with an inferior chintzy set in 1982 – along with the set of books and intriguing artwork

On display

On delivery day, the van was hooked up to a Hillman Husky estate – the very latest offering from the Rootes Group, with a top speed of 65mph – for a tootle around the Palace grounds. For the record, the photo below right, shows an Austin Somerset as the tow car, just in case anyone was getting ready to write in and tell us off!

After a spot of tidying and restoration by original makers Rollalong, who currently specialise in permanent modular buildings delivered to site, the Royal Caravan was first displayed to the public in 1982 at the Earls Court Camping & Caravanning Show.



6 Looking like a surly giant at first glance, this is probably a Rollalong man mentally preparing a snagging list; however, it gives a good illustration of the van's scale

A recent refurb

Proving popular wherever it was showed, the miniature rolling residence was completely refurbished in 2007 by – yes, you guessed it – Rollalong, and continued its crowd-pleasing role as a special attraction at a variety of events and exhibitions.

Following an appearance at the Royal Childhood exhibition in London, the caravan can now be seen in its current home at the National Motor Museum, where it's on permanent loan. This could be well worth a visit; just imagine the fun of actually owning such a scaled-down conveyance!

Many thanks to the Caravan Club and Angela Willis at the NMM.



7 Here the diminutive domicile is shown tethered to the back of a sturdy Austin Somerset, ready for a trip on the open road...

FURTHER INFORMATION

National Motor Museum, Beaulieu,
New Forest, Hampshire SO42 7ZN
Web: **www.beaulieu.co.uk**



CHISEL RATING

GOBLET OF FIRE

Les Thorne makes use of a pleasing burr bowl offcut to turn a natural-edge goblet

My dictionary describes a goblet as a drinking vessel with a stem and base, especially one of metal or glass, so the one shown here complies only so far as those elements.

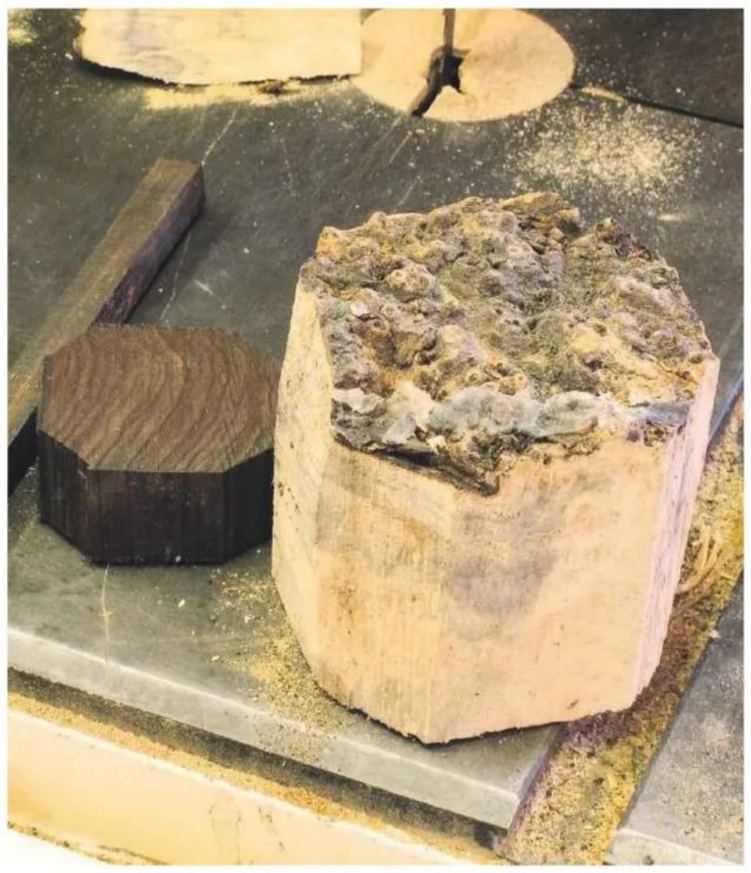
I'm aware that you might well ask its purpose, but my stock answer is to remind you that a thing of beauty exists to give pleasure and that sometimes it's good to make an item just for the sake of it.

When you cut up a burr to make into bowls, there'll be small bits left over. These can be used for many different projects so are always worth keeping. The best thing about natural-edge on a burr is the spikiness, so take care to keep examples of this if possible.

The burr used here is Amboyna from south-east Asia, and I managed to make a couple of really good bowls from the timber's main body. It can be a bit soft, so you must take care during turning to ensure that bits don't break off.

As the goblet is purely decorative as opposed to functional, it doesn't need to be finished with any sort of waterproof or food-safe finish. I therefore elected to only use a satin lacquer on the entire piece.

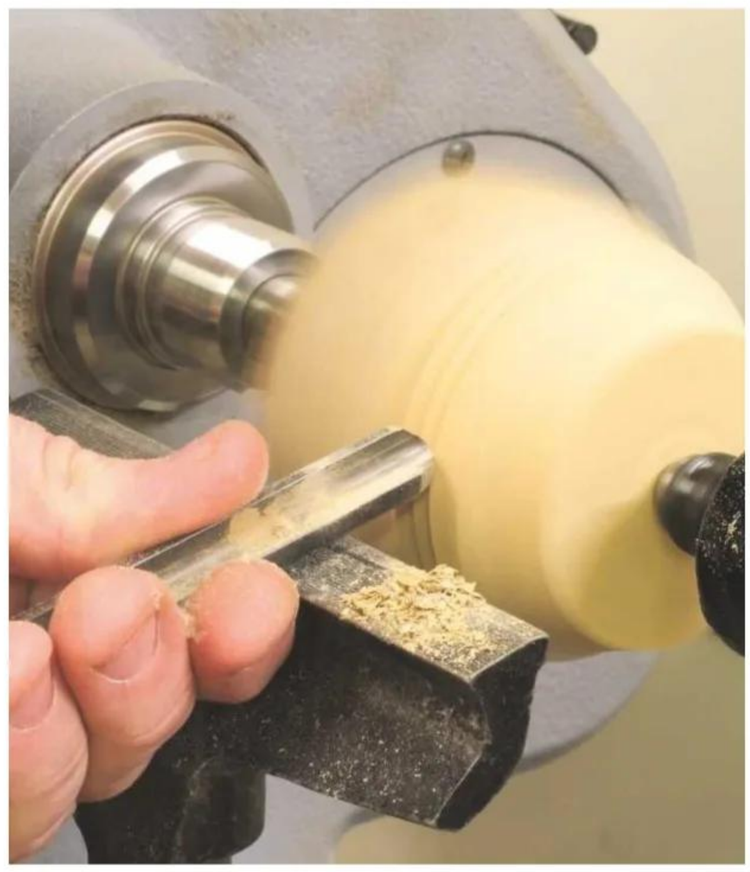
The project is made in three parts, which is the best method for ensuring as little timber is wasted as possible. You can imagine how much timber would be lost as a result of the stem having to be turned down from full diameter.



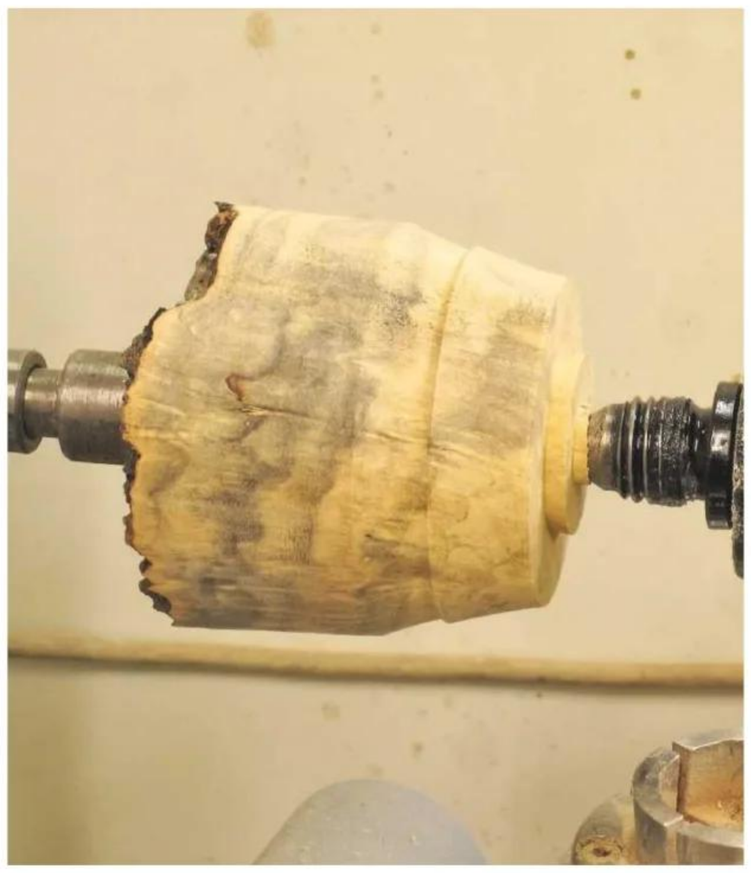
1 The project constituents are cut and laid out; the stem and base will be made from some ebony, which creates a pleasing contrast with the Amboyna burr top



2 Next, the Amboyna is mounted up between centres; it does look out of true, but it's vitally important to have the natural top level. Adjust the orientation as you start working



3 The 13mm bowl gouge is the best tool for this stage; the spindle roughing gouge could be too aggressive with such an uneven piece of wood



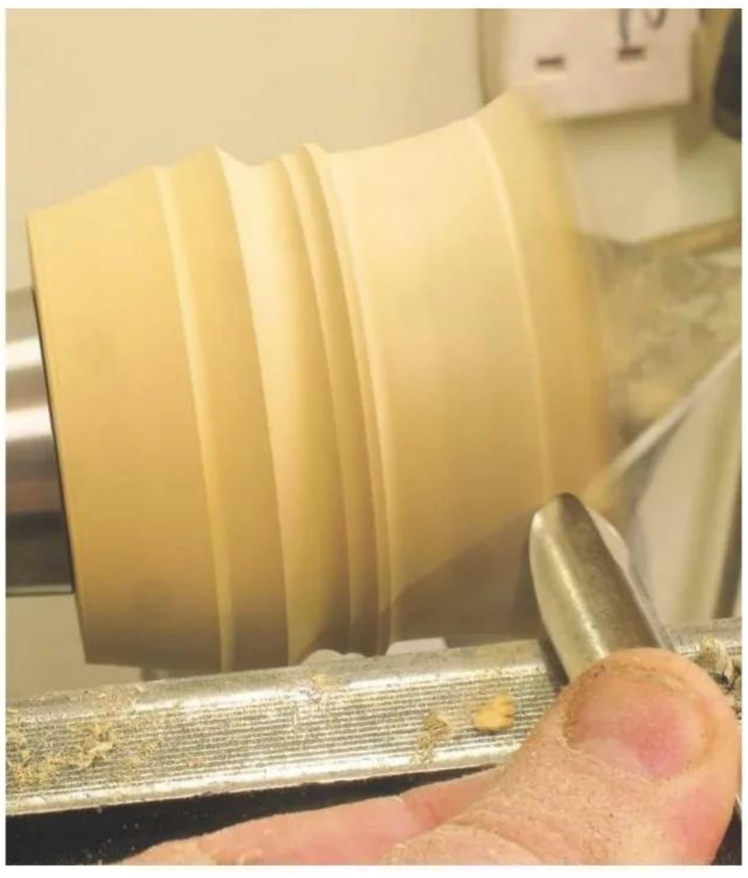
4 To cut a spigot on the bottom, I use the small Charnwood chuck. The smaller the spigot, the more of the shape can be put on, and the advantage here is that the chuck cause an obstruction



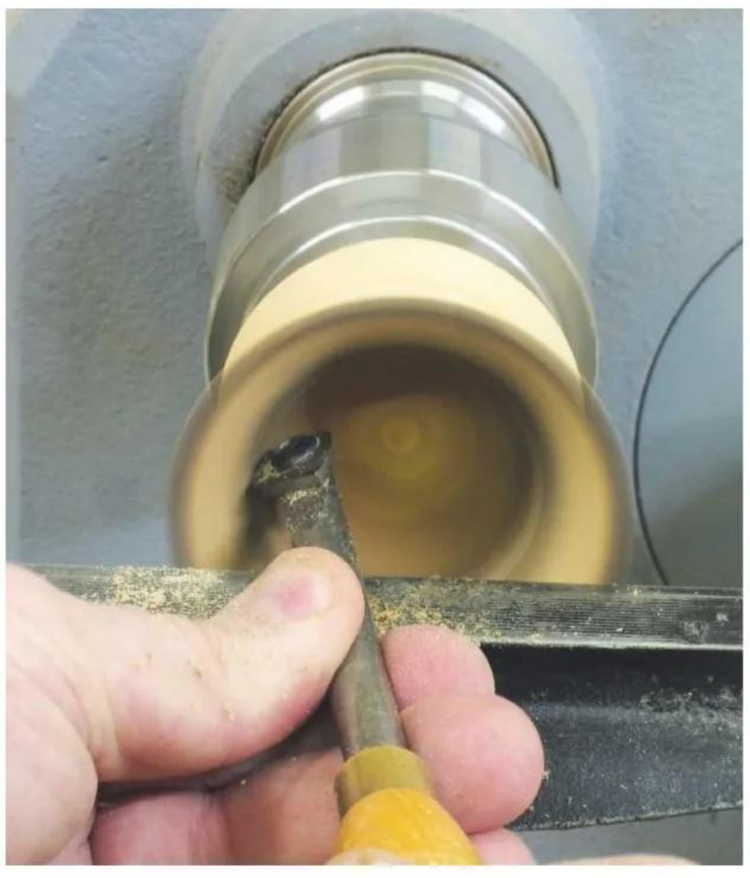
5 To hollow the goblet bowl, I use my 13mm signature gouge. This is presented in the centre with the flute pointing towards 11 o'clock, before being dragged left and inwards



6 As you come up the side of the interior, rotate the flute more towards 9 o'clock; this decreases the size of the cut while helping to limit the chances of a catch



7 To achieve the best shape, I work on both the inside and outside. The spindle gouge is used to turn a curve from the natural-edge downwards. Be wary of vibration as the work thins



8 As the wood is a little soft, I struggled to get a really good finish. To remedy this, I spray the inside with lacquer and take a light pass with a freshly sharpened scraper



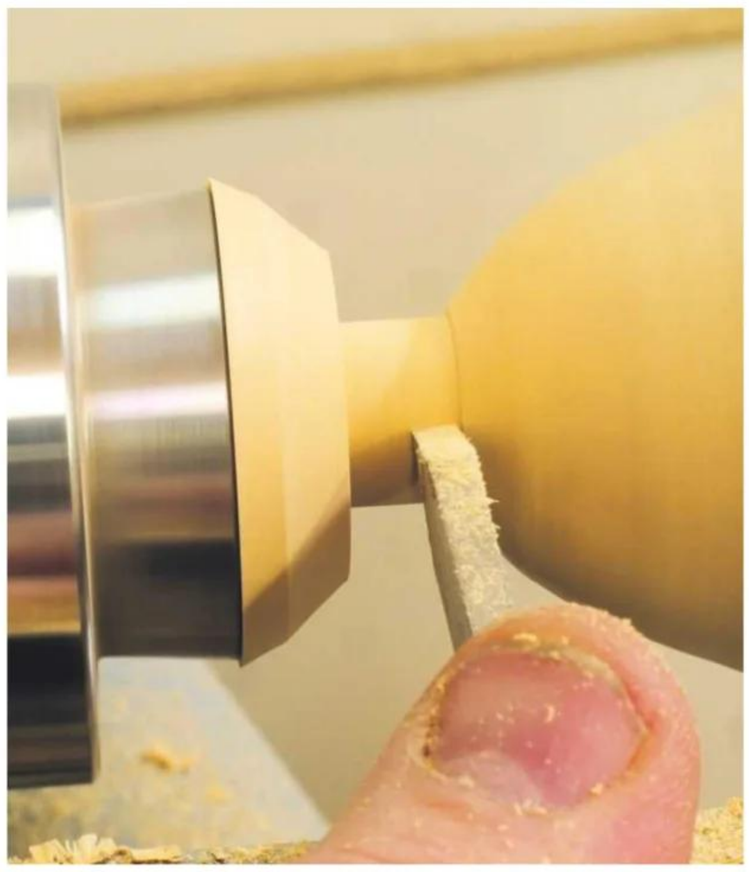
9 When sanding the inside, be really careful not to let the abrasive catch the goblet's edge. Keep a gap at the top and reduce lathe speed if possible



10 The best way to measure wall thickness is using your built-in finger gauge. If doing this with the lathe running, be very careful not to trap your digits



11 The bowl's exterior shape can now be turned down using the 13mm spindle gouge. To guarantee control and a quality finish, ensure the tool bevel is on the work



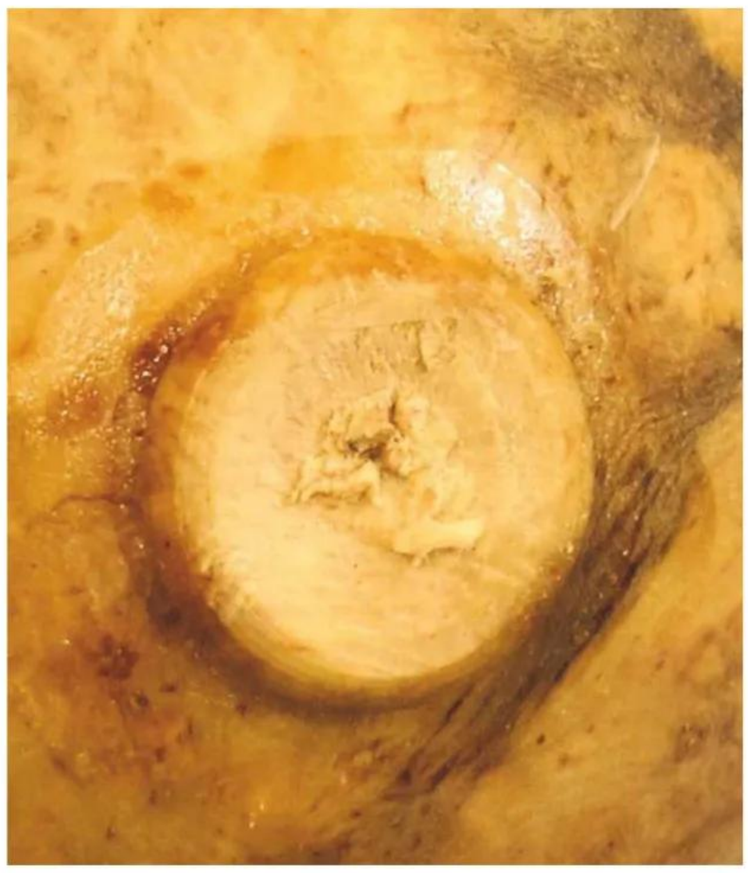
12 Once happy with the outside shape, take down some of the material using a parting tool; this will be the diameter of the bead at the base



13 The transition point at the goblet bowl's base is a bead. I like to turn this with a skew chisel as it gives good definition, while allowing a fine, sharp groove



14 Using a half-skew chisel made from a 3mm parting tool with a bevel on one side only to slice through the fibres, part off the bowl section



15 I'm not happy with the finish as I like it to be slightly concave. You're aiming for a small indentation in the middle on which the piece can be centred



16 Turn a conical shaped piece of timber that'll fit the bowl interior snugly. Use masking tape to hold it on, checking to ensure all's running true



17 For accuracy, start the hole with an engineer's centre drill. As I need a small hole, I won't have to drill any further than this



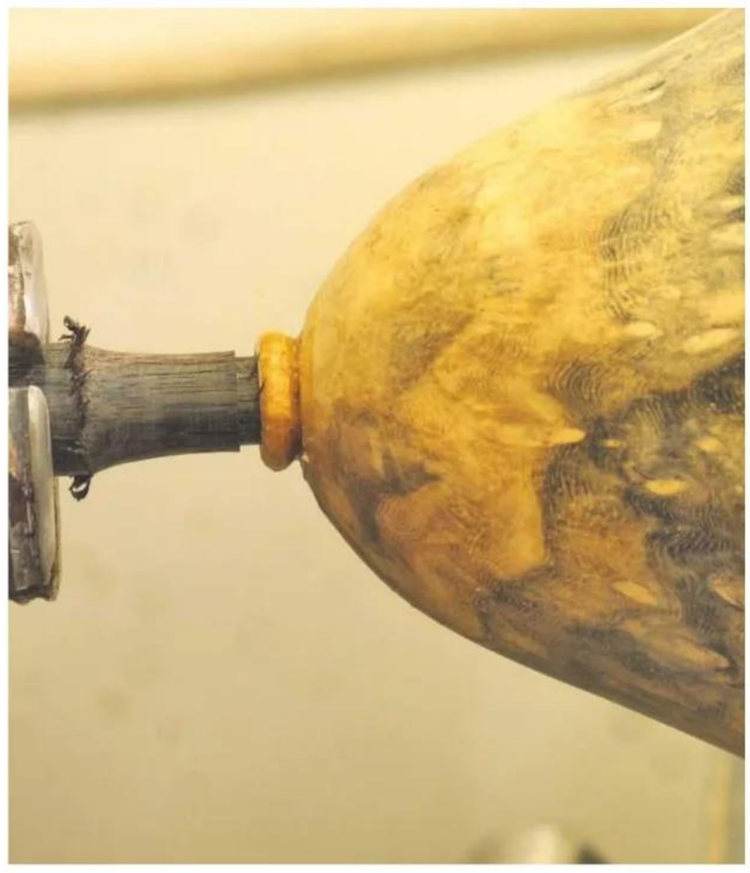
18 The stem can now be put between centres. I use a small Steb centre drive in the headstock, and take light cuts starting from the tailstock end



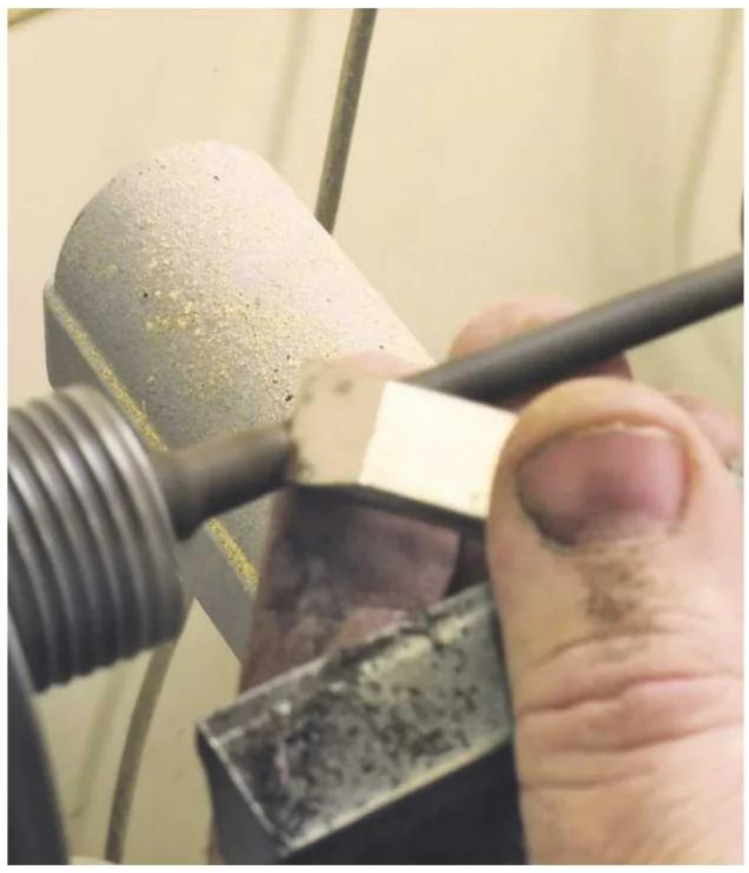
19 Due to the piece's very small diameter, you may need to support it with your fingers. Only do this if you're confident and have been taught a safe technique



20 Turn a spigot on the end, which is the same diameter as the hole in the bowl's bottom – 4mm in this case. Use Vernier callipers for accuracy



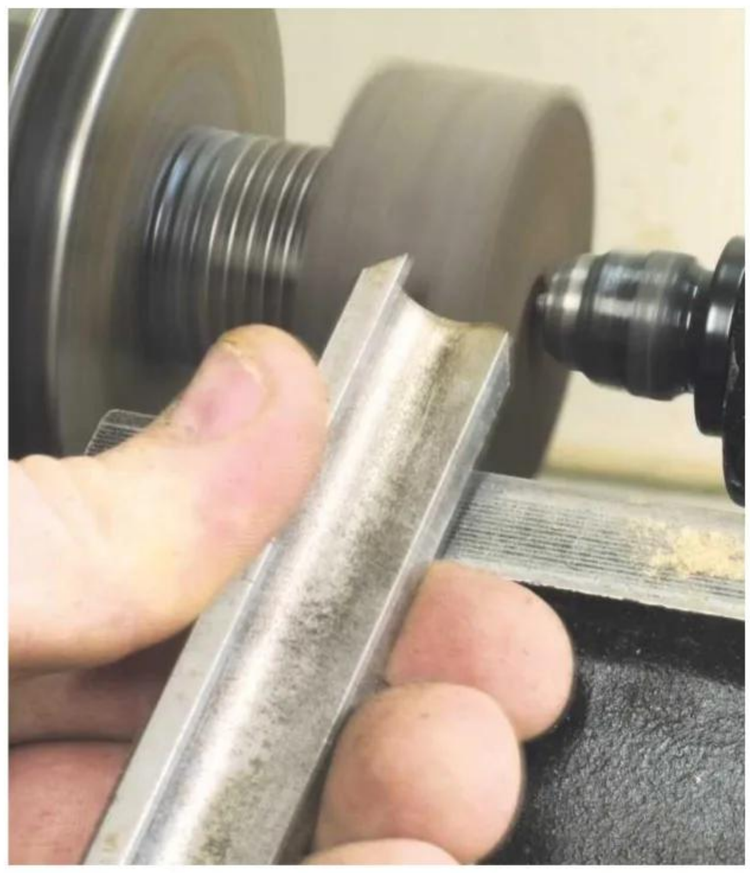
21 The stem fits and the diameter is in proportion to the bead size. I put the stem through the headstock while working on one end



22 Using the skew, which puts less pressure on the wood, keep moving the dowel out from the chuck as you take it down to the desired diameter



23 With the wood the right size all the way through, cut a spigot to fit into the base on the left-hand side; taper the stem, increasing diameter towards the base



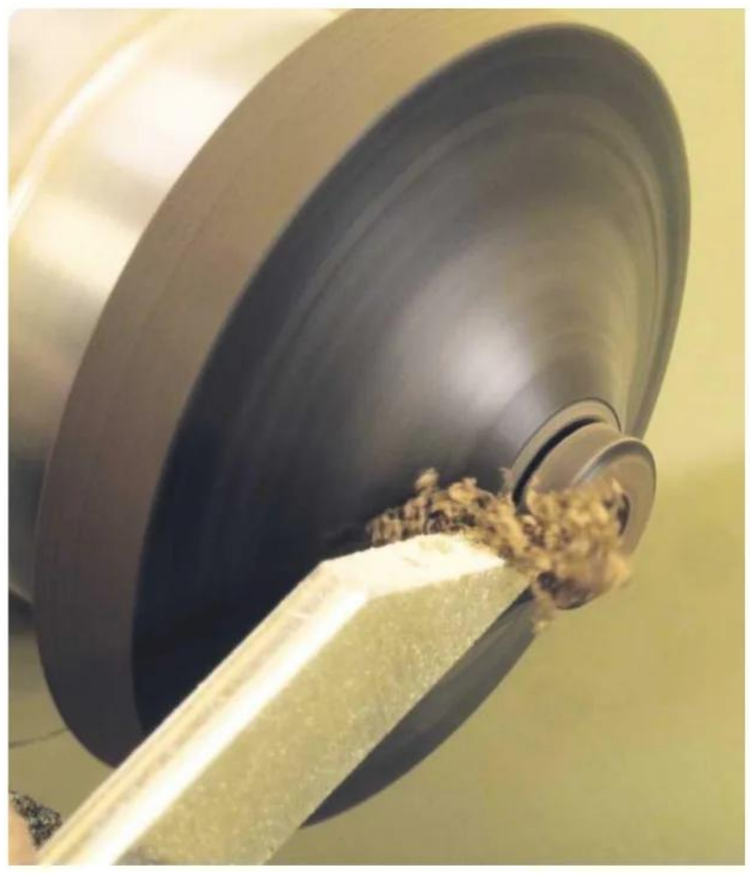
24 The piece of wood for the base is mounted between centres and roughed down until it's round. Using the small jaws, put a chucking point on it



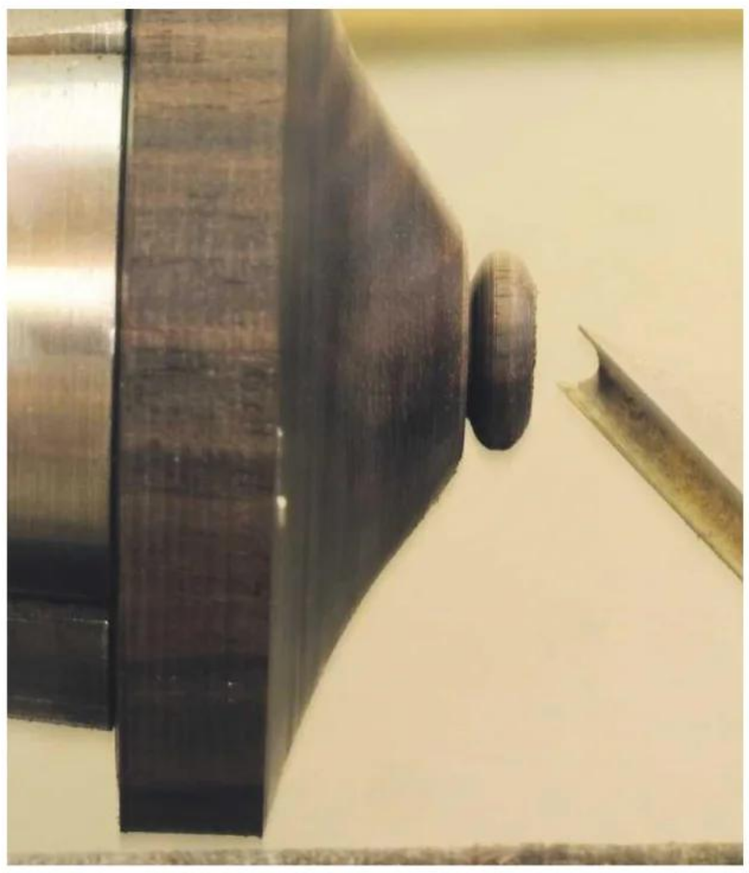
25 I favour a simple ogee for all my bases. Here I'm using the Signature gouge in a bevel rubbing cut, working down towards the centre



26 The bead on the base must correspond to that on the bowl bottom; this is achieved using the spindle gouge, which saves have to pick up another tool



27 The small bead is formed with a profile tool; this will give consistent results and on a dense wood like ebony, it'll produce a good finish



28 Here you can see the beading tool's end and the sort of bead it can make; this double-ended tool is available from Simon Hope Woodturning



29 Using the gouge, I cut the ogee shape underneath the bead then chamfer the base near the chuck, which aids cleaning up the base's underside



30 Part off the base using a 3mm parting tool; as it'll be re-turned, I don't need to put a concave on the underside at this stage



31 The gripper jaws on my Oneway chuck are great for gripping the base's diameter. Alternatively, making a jam chuck does a similar job



32 The sharpness on the base's edge will fit into grooves in the chuck jaws; if the jaws are in a circle and you don't over-tighten them, this shouldn't result in any damage



33 As before, I'm using a 13mm spindle gouge to clean up the base's underside, in a pull or push cut orientation. A slight undercut ensures the base sits well



34 It's obligatory to put a decorative groove in the base; the skew's long point is used as a scraping tool, but ensure not to present the tool vertical when making this cut



35 When working with ebony, signing your work is difficult. An engraving tool is perfect for the job, so use this as opposed to a pyrography machine or felt tip



36 The completed natural-edge goblet

THOMAS FLINN & Co LIMITED

CELEBRATING 100 YEARS OF MANUFACTURING 1923 – 2023

Manufacturing premium quality handsaws and Clifton hand planes for 100 years in Sheffield, England.



Our craftsman produce an extensive range of saws under famous traditional brands that have origins in the 18th century.

Garlick
MADE IN SHEFFIELD
ESTABLISHED 1858

E.T. ROBERTS & LEE

PAX
ESTABLISHED 1776

CLIFTON

Scan Me

Visit, browse and buy products via our website:

www.flinn-garlick-saws.co.uk

MADE IN SHEFFIELD

NEXT MONTH

Coming up in the next issue...



HAT TRICK

Bob Chapman first came across these little hats during a demonstration he gave to Suffolk Mid-Coastal Woodturners – a great idea and ideal as elegant small gifts, he takes us through the steps for turning them

The Woodworker & Good Woodworking **February 2024 edition** – on sale 19 January

veritas

SEND IN YOUR TOP WORKSHOP HINT/TIP/ POINTER OR PIECE OF ADVICE & YOU COULD BE IN WITH A CHANCE OF WINNING A **VERITAS APRON PLANE WITH VM-P11 BLADE**



WIN!

trend tool technology

MS/T/SET3/ PROTRANSIT 3-PIECE STORAGE SET – worth £130 – & 1 OF 2 MS/P/TB1 14 LITRE PRO MODULAR STORAGE TOOLBOX 500S – worth £36.92 each!



A compact storage system designed for easy transportation around the jobsite, we're giving **three lucky readers** the chance to win **IP54-rated cart, box and organiser prizes** from **Trend**'s new **ProTransit Modular Storage System range**

See inside the issue for further details



THE BUILDING OF A NORDFJORD FAERING
John Greeves talks to Charles Lyster about the building of a Nordfjord faering; a boat with historical pedigree dating back to the Viking era



TIME: THE CRUELLEST CUT
As Phil Davy explains, while the ageing process can't be stopped, you can, however, help to protect and preserve your wood

PLUS ▪ Tony Sutton's workshop bench ▪ Pippy oak desk ▪ Chisel handles ▪ Hand tool box ▪ Pyrographed bowl ▪ **Woodwork foundations:** recreating carcass joints ▪ **In profile:** woodturner Daniel Salvucci



Did you miss a copy of

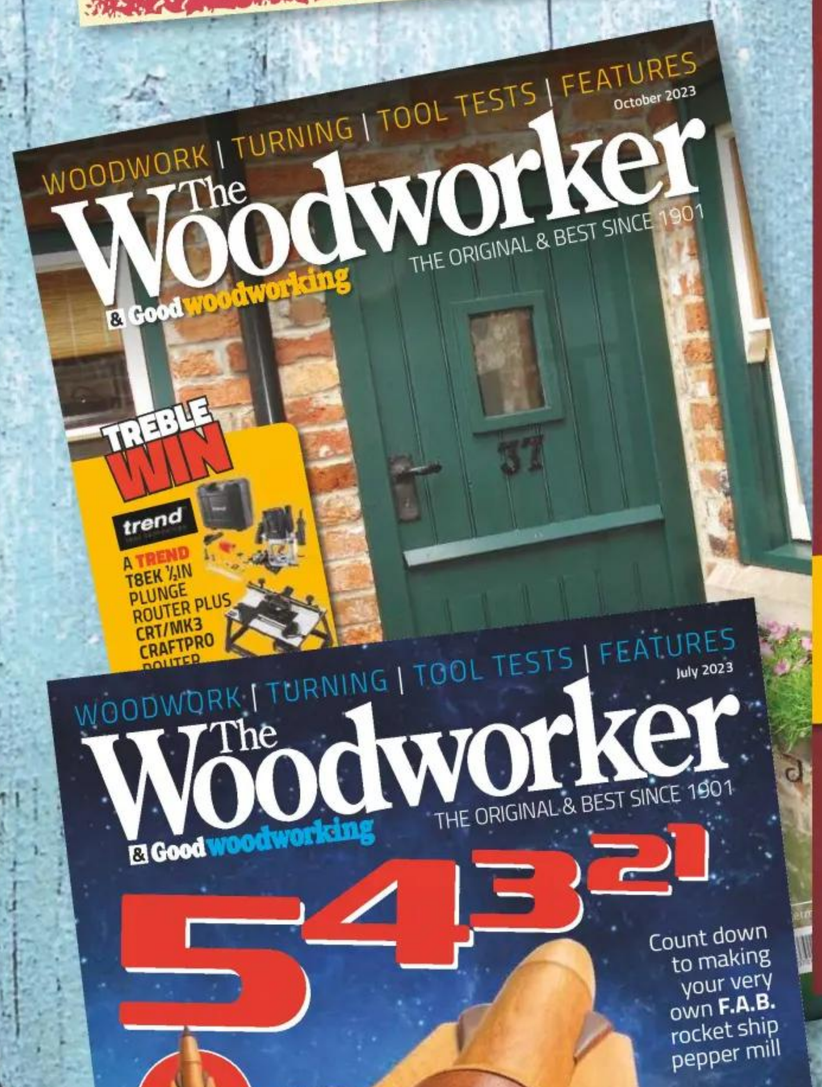
The Woodworker & Good woodworking

(You can now order these online)

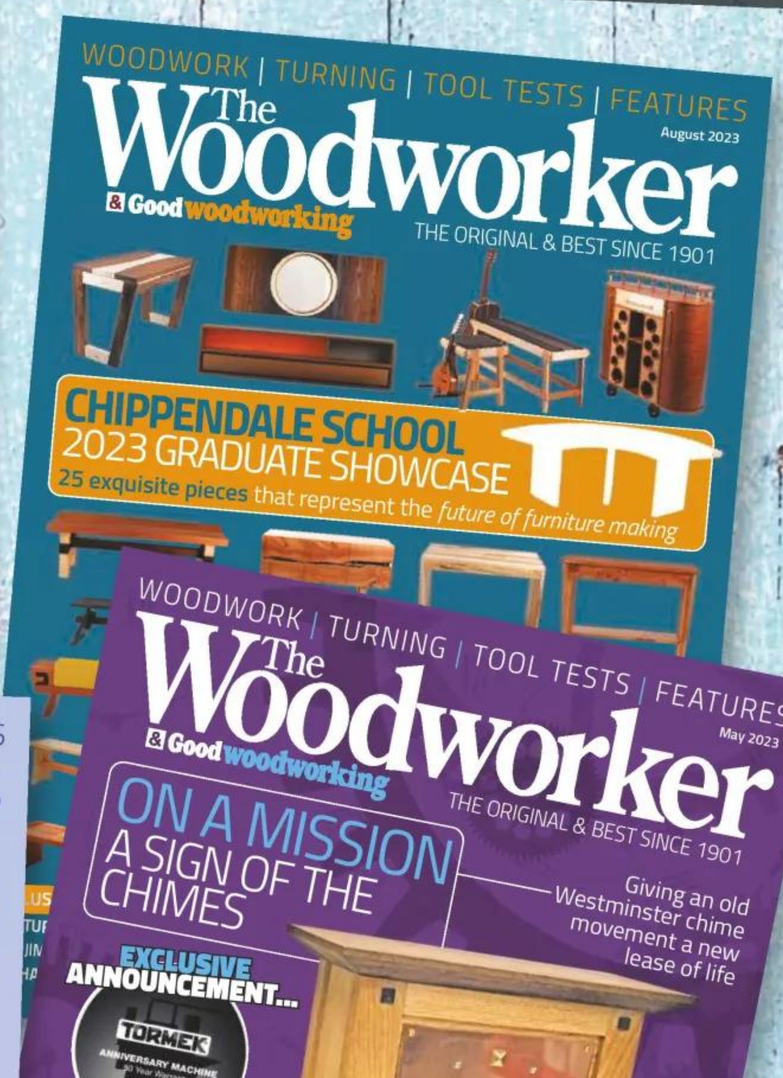
Call: 01795 662976

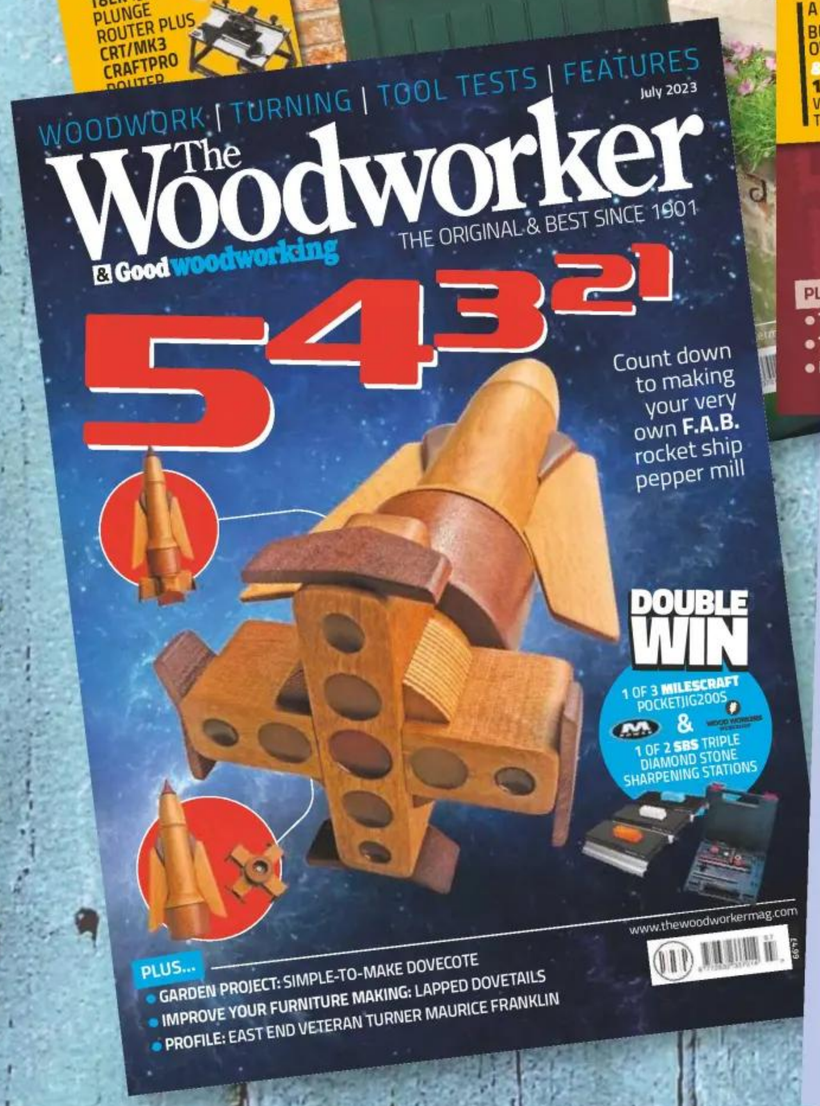
Order Online:

www.mags-uk.com













Please note that we cannot guarantee the availablity of all issues displayed above.

Machine Mart®

34080

CAST IRON STOVES

BUY AND FIT BEFORE THE AUTUMN RUSH

SEE THE RANGE ONLINE OR IN OUR 65 STORES

Clarke®

13 Great Styles

SELLING TOP QUALITY MULTI-FUEL STOVES FOR OVER 30 YEARS

Flue Pipes In Stock



5 EASY WAYS TO BUY...

CALL & COLLECT AT STORES TODAY

CLICK & COLLECT OVER 10,500 LOCATIONS

IN-STORE SUPERSTORES NATIONWIDE

TELESALES 0115 956 5555

ONLINE machinemart.co.uk

Calls to the catalogue request number cost 7p per minute plus your telephone company's network access charge. Calls may be monitored. All prices correct at time of going to press. We reserve the right to change products and prices. All products subject to availability, E&OE.



Old Fashioned THE GENUINE MILK PAINT HOME-MADE since 1974

NATURALLY SAFE HISTORIC PAINTS

www.oldfashionedmilkpaint.co.uk



The original milk paint for an authentic period finish

Eco friendly | Zero VOC | Food safe | Quote WWM01 for 10% off

A wide range of woodworking media - unique video-integrated online project ebooks (+ plans), DVDs, downloads, signed copy hardback books ... for every skill level.

JB woodomain MEDIASTORE

Jeremy Broun (est 1973)
www.woodomain.com
01225 332738 07963 591650

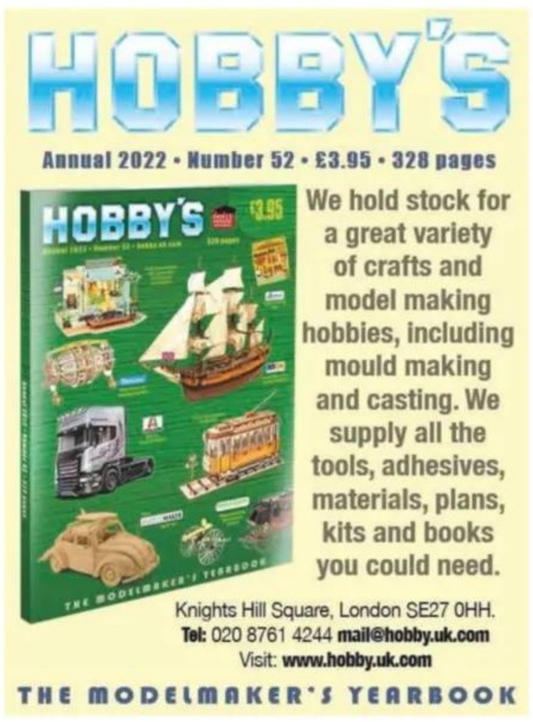
Musical Instrument Makers' & Repairers' Supplies

TOUCHSTONE TONEWOODS

Largest selection of tonewoods, tools & parts in the country. Visit our website or order our catalogue. Callers welcome

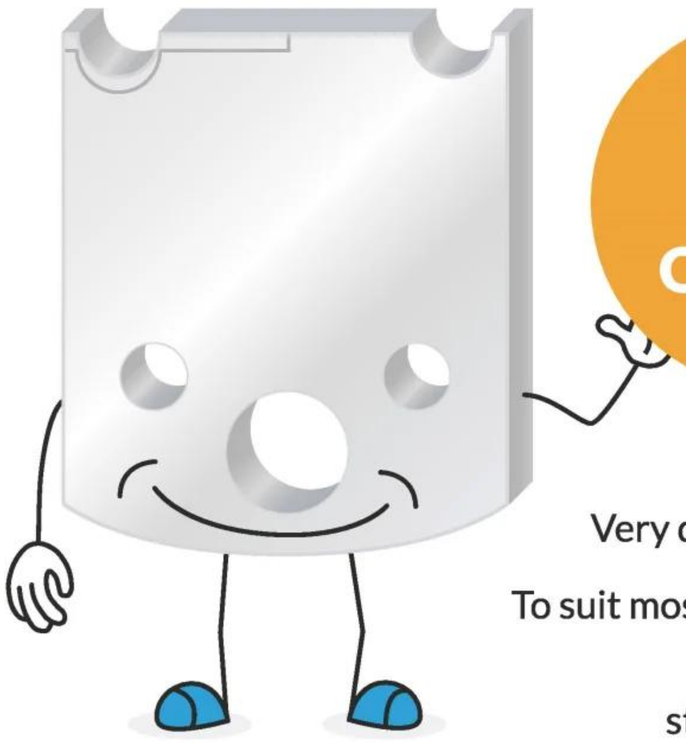
Touchstone Tonewoods, Albert Road North, Reigate, RH2 9EZ
Tel: 01737 221064 Fax: 01737 242748
www.touchstonetonewoods.co.uk





The Woodworker & Good woodworking CLASSIFIEDS

SPINDLE MOULDERS, CUTTERS & LIMITERS



MADE TO ORDER!

Very quick turnaround

To suit most types of blocks

Many low priced standards in stock

Get in touch: 01684 293092

sales@tewkesburysaw.co.uk

www.tewkesburysaw.co.uk

Newtown Trading Est.
Tewkesbury, GL20 8JG

TEWKESBURY SAW COMPANY LTD

Trade, Dropshipping & Stockist Accounts Available

BRUACH

FINISHING & DECORATIVE SUPPLIES

NEW EDINBURGH SHOP OPEN



General Finishes – Official Distributor supplying UK, Ireland & Europe · ENDURO BY GENERAL FINISHES · Rubio MONOCOAT · Fleur – Designer's Paint

Trade accounts available
See website for opening hours

On bus route 12 & close to Minto Street bus stops. Local parking

Tel: +44 131 661 5553

info@bruach.com

13 Ratcliffe Terrace, Causewayside, Edinburgh, EH9 1SX

www.bruach.com

Toolnut.co.uk

Nuts About Tools...



MADE IN BRITAIN · QUALITY TOOLS

Visit www.toolnut.co.uk for the finest carving & hand tools..



Toolnut Carved by Colin Edwards



Our customers rate us 5 star

"It's great that Toolnut offer quality and bespoke hand tools, that are not available everywhere else" ★★★★★

"Excellent service - Prompt service. Product was well packaged in fully recyclable materials." ★★★★★

See all our 5 star reviews on Trust pilot





Ashley Iles (Edge Tools) Ltd. · Henry Taylor Tools · Clarke · narex · veritas · A&E SQUIRE · ECLIPSE · Flexcut · IRWIN Record · STANLEY · Robert Sorby · MOORE & WRIGHT

3 issues for £11!

Saving £££'s on shop price

Subscribe today and save on the normal shop price
Get FREE DELIVERY with every issue, straight to your door



https://checkout.dhpublishing.co.uk/EGENW

Payment will be taken by quarterly DD or CCC

OFFERED

Stanley No.80 scraper plane – in very good condition; £28 (plus postage). Also, Stanley 04 smoothing plane – also in very good condition; £38 (plus postage)
0208 641 4238 (Surrey)

Titan jointer-planer – 1,500W table size – 740-212 – in good condition; £85 – buyer collects
07783 527 708 (Co. Durham)

Hegner Multicut 1 Super Universal scrollsaw/fret saw – new, unused – still in box; £300 – cash on collection
01584 810 881 (Worcs)



Elu electronic router, plus large quantity of cutters; £250 – buyer to collect
01294 673 236 (N.Ayrshire)

Ryobi EMS-18305 double bevel sliding mitre saw – large capacities; excellent condition; £260
01424 892 856 (Sussex)

The Woodworker/Good Woodworking magazines 2004–2023; most in binders and in excellent condition; free for collection
07720 537 912 (Derbyshire)



Record Power No.3 lathe – five speed complete with reinforced Record RPLB 24-48 bed frame. Supplied with bowl turning attachment, faceplate, etc. – all in very good condition; POA – buyer collects
01332 812 197 (Castle Donington)



Viceroy wood lathe – 20 × 20in centre to centre – supplied with two chucks and four faceplates; £150
01142 334 758 (Sheffield)

Holly tree trunk – 5ft long, all weathers for two years; free to collector
02476 445 137 (Coventry)

Turnstyler lathe with chuck and running centre – 16in swing × 24in – floor-standing, 2HP, variable speed
01142 334 758 (Sheffield)



SIP 01344 & 01342 planer/thicknessers with dust collector, plus Scheppach TS 210 table saw – buyer collects; £550
07532 343 735 (Suffolk)



Woodworking/ furniture making workshop in Honiton, Devon – available for rent due to retirement. Would suit someone starting out or a small business. Approximately 116sq.m or 1,240sq.ft with small office, toilet and wood-fired boiler with radiators. Machinery, tooling and stock available separately; sliding table panel saw; planer/ thicknesser; radial arm saw; spindle moulder; mortiser; bandsaw; chop saw; lathe; extraction; pillar drill; compressor; timber and hardware, etc. Available from around April 2024; extendable lease until November 2024, with friendly, flexible and helpful landlord – David Lloyd, cabinetmaker
01404 891 800 / 07792 720 075 (info@davidlloydcabinetmaker.co.uk)

Model TW-001 tenoning jig – £25; Bosch GOF2000 professional router – unused – £100; Antique Stanley 50 plough plane with cutters and box – appears unused; Bosch 200 × 2.8 × 30mm unused circular saw blade – £10; Tormek SVH-320 planer jointer blade jig with instructions – unused; £100
07836 585 984 (Bakewell)



Clifton No.6 fore plane – 18 × 3in – an original Clico manufactured product made in Sheffield, supplied with original box and packing materials; no use apart from flattening and polishing the cutting iron on back and honing the edge; no corrosion on plane body and no signs of wear – bubinga handle; £250 cash & collection only
07895 108 405 (Luton)

KGS 300 sliding compound mitre saw – 1,600W 'silent' direct drive induction motor; no noisy gears; 250mm 24-tooth TCT blade; 300 × 53mm cut at 90°. Sliding mechanism runs on linear ball-bearings; German made, very high quality construction; used only once for a small job; in 'like new' condition; includes optional extraction adaptor; selling for £199 (half price paid) – collection only
07895 108 405 (Bedfordshire)

Deluxe Gifkins dovetail jig – with two templates and four 6 & 10mm cutters. Light use; slight chip on one cutter, but it works perfectly well. Supplied with instructions and demo DVD; excellent and versatile piece of kit; £120 – collection only
01462 676 796 (North Herts)

Woodworker **magazines** – 1949–1960 – in good condition; £50 ONO – buyer collects
01428 606 729 (Surrey)

WANTED

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)

BOOK YOUR FREE AD

- This space is available only to private individuals wishing to buy or sell woodworking machinery and tools
- Each coupon is valid for one free insertion in the next available issue
- The publisher accepts no responsibility for errors or omissions in this section

Please publish this advertisement in the next available edition of *The Woodworker*. I am a private advertiser and have no trade connections
PLEASE TICK: FOR SALE ❑ WANTED ❑

Name _____
Address _____
_____
Postcode _____
Daytime tel no. _____
Signature _____

My advertisement (max 20 words please) reads as follows:

_____
_____
_____
_____

Please write your advertisement in **BLOCK CAPITALS** and send it to:
The Woodworker Marketplace, David Hall Publishing, 1st Floor, Nene House, Sopwith Way, Daventry NN11 8EA. You can also email your free ad to:
tegan.foley@dhpub.co.uk. Send/email a photograph of your item and we'll include it with your ad for **FREE**

TAKE 5

From a wonderful sculptural bird carving to a vintage piece made in 1967, this month's selection perfectly exemplifies the ability of woodworking to cover such a multitude of disciplines





1 American redstart bird carving by Gerald Painter – **@geraldpainter** – showing various stages of the process along with the completed piece. Each sculpture he makes is not only beautiful, but also anatomically correct, down to the very last detail



2 Hand-carved cherry vessel with exaggerated rim, made using reclaimed wood – 63mm tall × 438mm long × 215mm wide, by Greg Gallegos – **@naturalselectionstudio**

3 'Bubble Tray' by Timothy Coleman – **@timcolemanfurniture** – made for the recent New Hampshire Furniture Masters Silent Auction, with proceeds going to support various educational initiatives



4 Plane adjusting hammer with big leaf maple burl head, Brazilian rosewood handle and abalone inlay, by Steven – **@acts65_woodworks**. Light in weight, the head is secured to the handle by a wooden tenon and the abalone inlay is located on top of the head



5 1967 chest of drawers in jelutong and mahogany, by Italian design group GRAU – Group Romano Architetti Urbanisti – originally posted by The Aesthetic Channel – **@the_aesthetic_channel**

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

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.

For those who want to experience true Tormek sharpness for a guaranteed 50 years, this is the machine you need. But be quick, before they sell out!



50 YEAR WARRANTY
5+45 after online registration

TORMEK 50 Est. 1973

Hammer®

PRICES FROM £1,440 (INC VAT)
CALL FOR YOUR PERSONAL OFFER!

SENSATIONAL RESULTS FOR AN UNBEATABLE PRICE, YOU WILL ONLY FIND THESE AT HAMMER!

The Hammer planer thicknessers offer high quality detailed solutions and years of machine manufacturing tradition from Austria. Solid cast iron planing tables, precise planer table adjustment and thicknesser adjustment accurate to a tenth of a mm – Hammer machines guarantee a perfect finish. A space saving solution with optimum ergonomics: Planer tables tilt away from the user operating area, this ensures that working with your Hammer planer is as user-friendly as possible and also requires less workshop space.



A3 41



A3 31



A3 26



A2 26

FELDER GROUP UK LTD.
Unit 2 Sovereign Business Park, Joplin Court, Crownhill, Milton Keynes, MK8 0JP | **uk.felder-group.com**
FELDER GROUP SCOTLAND Unit 4 Lindsay Square, Deans Ind Est, Livingston, EH54 8RL