WOODWORK | TURNING | TOOL TESTS | FEATURES

October 2020

The Woodworker

& Goodwoodworking

THE ORIGINAL & BEST SINCE 1901

MUSIC MAKER

Matthew White recreates the Esherick music stand – with a few added upgrades

PLUS...

- PHIL EDWARDS MAKES A KRENOV-STYLE CABINET
- CLASSICAL GUITAR IN THE BAROQUE STYLE – PART 3
- PAUL GREER EXPLORES THE ROLES OF WOOD IN THEATRE

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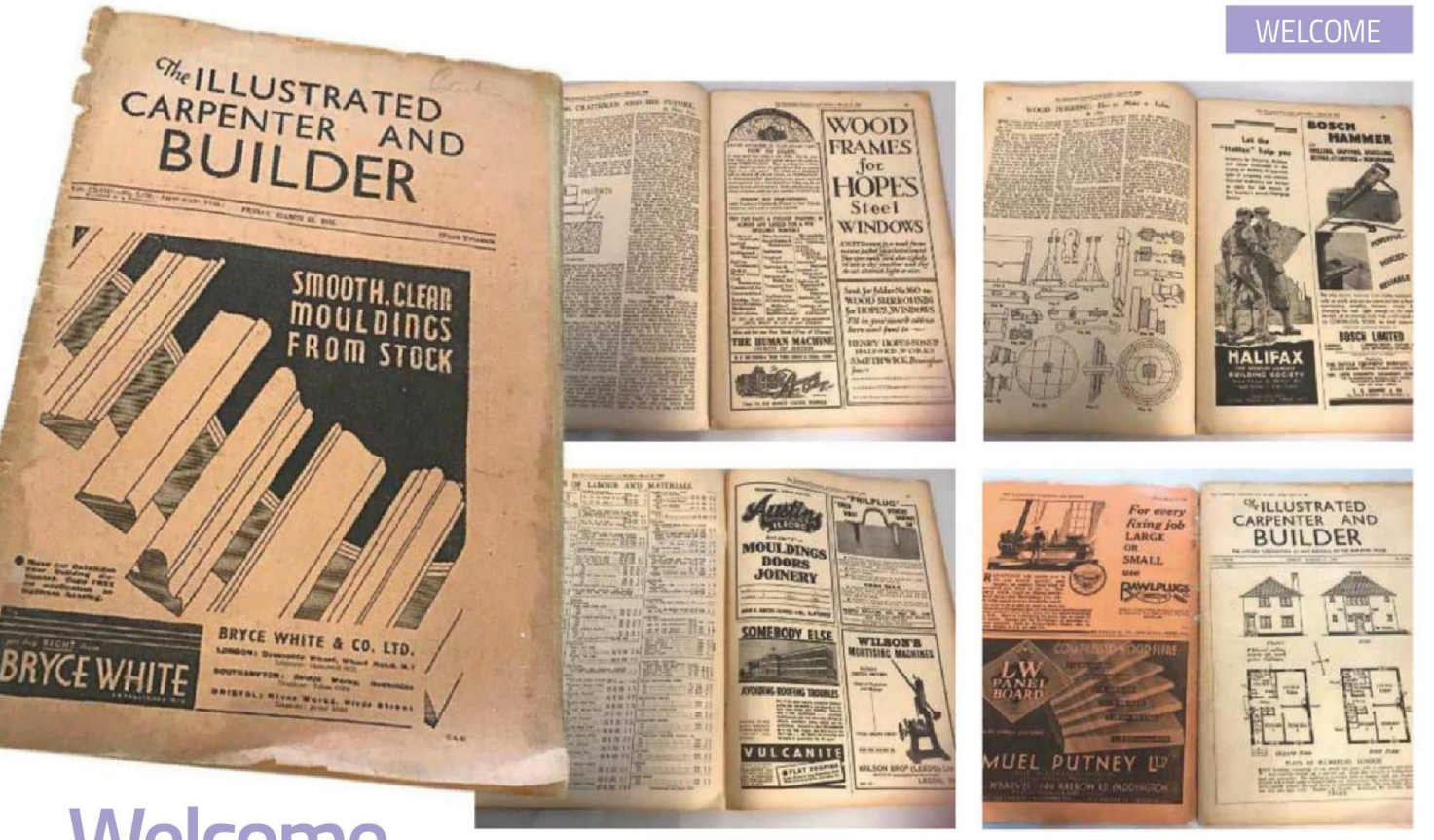


Welcome

Even though lockdown has ended and the world is returning to some semblance of normality, I find, and I'm sure I'm not alone if any of your emails and letters are anything to go by, that I have been relishing time to read and engaging in other similar activities.

While many are ecstatic that restaurants, bars and shops have now reopened, I've taken a bit of a step back and am choosing to be more selective in terms of how I spend my time (and hard-earned money).

The current situation has definitely made me appreciate things in my life a lot more, especially loved ones and friends, as well as realising how fortunate I am. So rather than rush out and buy a whole raft of new things (which I don't need anyway), I've been going through my book shelves and discovering some hidden gems as well as lots of things I had forgotten about or that had got buried. One such gem is a 1936 edition of *The Illustrated Carpenter and Builder*, which I was given by a friend, who inherited it during his boatbuilding days in Falmouth, Cornwall back in the early '80s.

Old journals

While I can't claim to have been around at the time of its inception, the magazine, which actually referred to itself as a newspaper, had been in circulation for an impressive 59 years when this 27 March issue came on sale. I am fascinated by old periodicals, and it has to be said that this one does bare a lot of similarities to pre-war copies of *The Woodworker*, although obviously I am biased in thinking that ours is far superior! Upon carrying out some research, I discovered that this was actually a weekly journal for architects, builders, joiners, decorators, painters, plumbers and gas fitters, and was illustrated with numerous practical engravings. Like *The Woodworker*, there were binders available with gilt letting, allowing readers to organise their copies into bound volumes, which also made them highly collectible. In each there was a volume title page, cumulative index, along with a page of errata. Published by John Dicks Press, London some of the first issues date back to the mid 1880s.

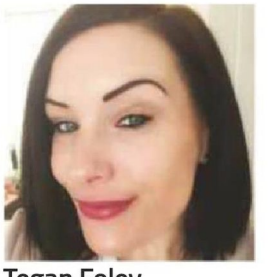
Handling the magazine is a joy in itself and I love seeing all the adverts for tools of the trade, such as 'LW Panel Board' from Samuel Putney Ltd, the 'Little Giant' 6-use mixer from Frederick Parker Ltd, not to mention the 'Zyto' bench wall drill from S.Tyzack & Son Ltd, who were situated on 343-345 Old Street, London. Publishing such an extensive edition each week must have been a task in itself, but it goes to show how authoritative the journal was and how the industry was developing and growing at an incredibly fast rate. While it may not necessarily be entirely dedicated to woodworking per se, it is reassuring to see a special article on woodturning as well as one on the British Columbia Douglas Fir. I wonder if any of our readers have old copies of this particular magazine, or similar, in their collections? If so, please do let us know as it would be lovely to compare notes!

Esherick music stand

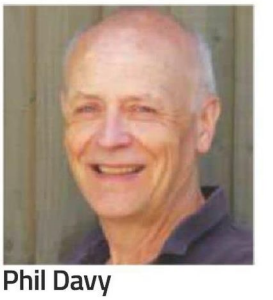
I can't quite believe we're already coming to the end of 2020, and what a year it has been! Despite the pressures we have faced, we're still working hard to bring you a magazine filled with inspirational content, and this month we have the first of a two-part series on Matthew White's recreation of the Wharton Esherick music stand. Despite adding a few modern upgrades, we think his version is absolutely stunning, and a worthy cover star for our October issue. We hope you enjoy reading it and broadening your woodworking horizons!

Tegan

Email tegan.foley@mytimemedia.com



Tegan Foley
Group Editor



Phil Davy
Technical & Consultant Editor

78 FREESTYLE EVENT

Phil Edwards gets inside the imaginative head of the late great James Krenov to recreate his signature cabinet on stand

WIN!

WIN! 1 of 5 pairs of Dickies new Medford boots

Dickies Workwear is giving five lucky readers the chance to win a pair of its Medford safety boots – the newest addition to the footwear range, designed to offer superior comfort, durability & protection – see page 58 for further details. Good luck!

The Woodworker & Good woodworking
OCTOBER 2020

PROJECTS & TURNING

TECHNICAL

REGULARS

ON TEST

FEATURES

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D&M TOOLS 'THE' TOOL SHOW THETOOLSHOW.COM 20 ANNIVERSARY

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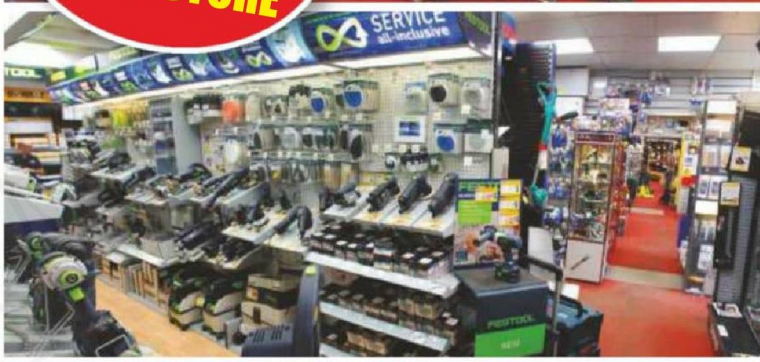

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"**Quality product,** sensible price and amazingly quick service. I am very impressed with this company and would not hesitate to use them again."

★★★★★
"**Excellent service prompt delivery**. Great after sales service will definitely use again."

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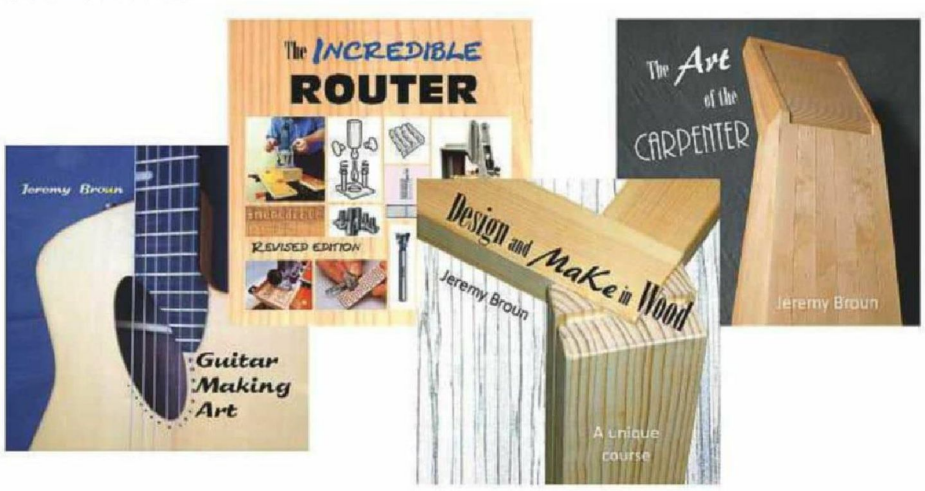

JEREMY BROUN Publishing

Moving forward from time-served award-winning titles such as *The Encyclopedia of Woodworking Techniques*, Jeremy Broun has been able to use the experience of working with the global leader in visual arts publishing, Quarto, to now take the bold move to design and publish his own books, also available in hardback.

Woodworkers will know that Jeremy prefers the word 'excellence' to 'exclusive' but his new range of woodworking books are almost limited editions as they are printed in low volumes and each one is delivered and signed by him.

A unique feature of the attractive slim, square book format is that the books link to online video and print-out documents, which enhance the experience and will keep the content up-to-date. The format also conforms to cost efficient packaging and postal rates and part of his 'make it last' philosophy is to offer a £5 discount on future purchases for returning the eco-friendly packaging envelope. It is difficult for a small, solo British enterprise to compete with Amazon or indeed the Far East, but Jeremy chose to back a local British book printer and this gives him added control over quality.

Hot-off-the-press is *Guitar Making Art*, which has over 300 images; some of the diagrams and illustrations took hours to create. The book aims at all levels of experience. The first half is devoted to the tradition of acoustic guitar making and the second is a guide to building one of Jeremy's unique electro acoustic guitars, which in the short foreword Nicholas Chandler describes as a 'why not' guitar. The bonus pack addition includes numerous highly detailed video tutorials.

Jeremy's unique and radical course *Design and Make in Wood* is the next title to be announced at a later date, so watch this space.

The range of books are available to purchase from his website: **www.woodomain.com**.

CLARKE CMS200 orbital 3-in-1 multi sander

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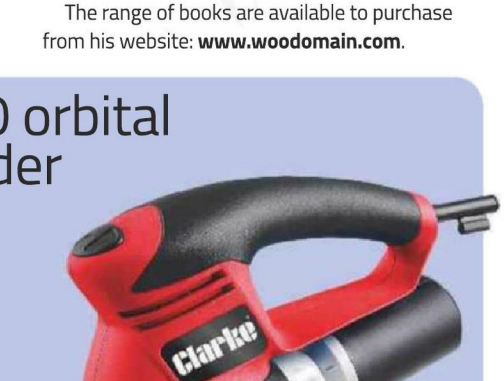

DIARY – OCTOBER

3–4 Greenwood stool making
4 Willow sculpture
10–11 Spoon carving weekend
12–13 Ash splint basketry
15–16 Bowl carving
19–20 Square basketry
19–25 Windsor chairmaking
24 & 25 Kuksa carving
26–1 Windsor chairmaking
Greenwood Days
Ferrers Centre for Arts & Crafts
Staunton Harold, Leicestershire LE65 1RU
Tel: 01332 864 529
Web: www.greenwooddays.co.uk

16–18 Make an English long-bow
West Dean College
Nr Chichester, West Sussex PO18 0QZ
Tel: 01243 811 301
Web: www.westdean.org.uk

17–18 Wood machining
John Lloyd Fine Furniture
Bankside Farm, Ditchling Common
Burgess Hill, East Sussex RH15 0SJ
Tel: 01444 480 388
Web: www.johnlloydfinefurniture.co.uk

11 Mill experience
17 Traditional wooden rake making
Weald & Downland Living Museum
Singleton, Chichester PO18 0EU
Tel: 01243 811 363
Web: www.wealddown.co.uk

1 Basic drill skills
3 Intro to spoon carving
4 Intro to woodturning
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Web: www.thegoodlifecentre.co.uk

7, 14 & **21** Beyond basics: table making
Black Horse Workshop
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Tel: 020 8531 1612
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3 Introduction to greenwood furniture making
5 Creative seating
16 Tool sharpening & maintenance
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Devon Green Wood Centre, Lambside Farm
Newton Ferrers, Plymouth, Devon PL8 1HG
Tel: 07814 470 432
Web: www.peterlanyonfurniture.co.uk

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Web: www.adhectic.co.uk

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Web: www.aharrisonwoodturning.co.uk

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

Black Isle Woodturning (Scotland)
Tel: 07842 189 743
Web: www.blackislewoodturning.com

Brodies Timber (Perthshire)
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Brooks Brothers Timber (Essex)
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Web: www.brookstimber.co.uk

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Web: www.cilfiegansawmill.com

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Web: www.emmersontimber.co.uk

Earlswood Interiors (West Midlands)
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Web: www.earlswoodinteriors.co.uk

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

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

Eynsham Park Sawmill (Oxfordshire)
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Web: www.eynshamparksawmill.co.uk

FH Ives (Essex)
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Web: www.fhives.com

Fulham Timber (London)
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Web: www.fulhamtimber.co.uk

G&S Specialist Timber (Cumbria)
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Web: www.toolsandtimber.co.uk

Good Timber (Northamptonshire)
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Web: www.goodtimber.com

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Web: www.hardwoodoffcuts.co.uk
sales@hardwoodoffcuts.co.uk

Horndon Timber Products
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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)
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Web: www.iscawoodcrafts.co.uk

Joyce Timber (London)
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Web: www.joycetimber.co.uk

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Web: www.lincolnshirewoodcraft.co.uk

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

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Tel: 01588 620 884
Web: www.ockenden-timber.co.uk

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Web: www.oliverswoodturning.co.uk

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Web: www.owr.org.uk

Stiles & Bates (Kent)
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Web: www.stilesandbates.co.uk

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

Scawton Sawmill (North Yorkshire)
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Web: www.scawtonsawmill.co.uk

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Web: www.slhardwoods.co.uk

St. Andrews Timber (Scotland)
Tel: 01316 611 333
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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)
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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

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Web: www.wlwest.co.uk

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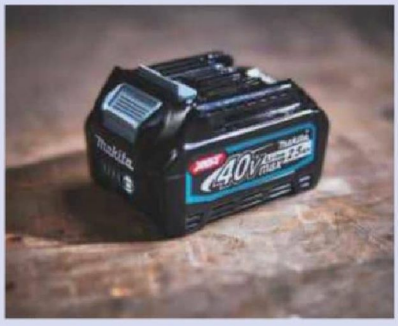
Claim a free battery with **MAKITA'S** latest promotion



To celebrate the launch of its new XGT 40V Max battery platform, Makita UK is offering professionals the opportunity to claim a free 40V battery (2.5Ah) with selected XGT product purchases via a brand-new redemption scheme.

The battery promotion entitles end users to claim a free 40V 2.5Ah Lithium-ion battery with purchases of selected products within Makita's new cordless 40V XGT range. The selected products must include the suffix 'GD101', 'GD102', or 'GD103' and be purchased before 30 September 2020. The promotion offers customers a cost-effective way to expand their capabilities with XGT, as a genuine solution for high demand, industrial applications with a simple claim process.

Once a qualifying XGT 'GD101', 'GD102', or 'GD103' product has been purchased within the promotional period from an authorised Makita dealer, the end user needs to register their claim within 28 days of purchase, via a dedicated microsite, by submitting their details and proof of purchase. On successful application, customers will receive their free gift after 30 days. Claims must be submitted between 1 July and within 28 days of the offer closing on 30 September 2020.

Kevin Brannigan, Marketing Manager at Makita UK, said: "We are delighted to release a new redemption scheme that celebrates the launch of our new XGT 40V Max battery system. XGT machines offer the same high power associated with corded and petrol machines, but with the increased flexibility of cordless, making XGT the ideal solution for high demand applications. We are pleased to offer a cost-effective gateway into our new 40V XGT system so that professionals can enjoy more flexibility with equipment that is durable, reliable and perfect for the job."

For more information on the promotion, plus a full list of qualifying products and terms and conditions, visit **www.makitauk.com/redemption**.

One-handed clamp EZ series from **BESSEY**

The high-quality one-handed clamps from Bessey are now available with an additional option. In addition to EHZ, EZS and DUO, users can choose from four sizes and a total of 10 variants within the new EZ series for a wide range of applications. This gives professionals and DIY enthusiasts even more choice to find their ideal tool when their second hand needs to be kept free.

Large selection

The new EZ series of one-handed clamps from Bessey offers users an impressively wide range. It comprises of four sizes (S, M, L and XL) with a total of 10 variants that can both clamp and spread. With opening widths from 110-900mm, spreading widths from 80-1,090mm and clamping forces from 200-2,700N, the EZ series covers an enormous range of applications. Whether light handicraft work or heavy gluing work has to be accomplished, overhead work is pending or a hand is needed to align the workpiece, with the EZ clamps this is possible without any problems.

Practical convenience

Ergonomics and practical comfort were also pivotal to the development of the new one-handed clamps series: the high quality two-component plastic handle with pump lever behind the rail allows safe access from both directions, and thanks to the release lever integrated in the handle, the sliding arm can be quickly adjusted and the clamp released. With the three larger versions – M, L and XL – the upper part can even be changed from clamping to spreading without the need for tools – the push button release mechanism makes this possible. The large, soft protective caps also protect sensitive surfaces. A crossed V-groove is also integrated into the caps for secure fixing of round, pointed and angular parts.

Robust design

For the new EZ series, high-quality materials such as glass fibre-reinforced polyamide for the upper and lower part and tempered and burnished steel for the profiled rail are used. The plastic housing also protects the handle mechanism from dust and splintering.

In the UK, these clamps are available from Rowland Tools – see **www.rowland-tools.co.uk**. Please note that the smallest version with 110mm opening width and 40mm throat depth is sold as a set of two.

FORESTRY ENGLAND makes significant land purchase

Forestry England's North District has bought a significant area of land in Northumberland for a new woodland. Last autumn the Government unveiled proposals to create the Great Northumberland Forest. The first stage of this ambition to increase woodland cover in Northumberland is for three new public forests covering up to 500 hectares. Buying this land means Forestry England will create the second of these.

In Forestry England's North District, they are reinforcing their commitment to producing high-quality, sustainable timber, providing health and well-being havens for people and habitats for wildlife. There is a new urgency too; we need to create new woodland to help tackle climate change by reducing the amount of carbon dioxide in the atmosphere.

Forestry England has started planting Rushy Knowe, a new 145 hectare woodland on land it already managed, on the shore of Kielder Water.

However, with limited suitable land for new woodlands, Forestry England needs to buy more. Monkridge, West Woodburn offered an unmissable opportunity. The 100 hectares are just eight miles from North District's office in Northumberland. Forestry England recently completed the purchase and bought the land once it had been screened by Forest Services (part of the Forestry Commission) under the Environmental Impact Assessment (EIA) regulations; the equivalent of 'planning permission' for creating a new woodland.

Forest Services (part of the Forestry Commission) worked closely with the previous owner and their agent to develop a plan for the new woodland so that it met all the requirements of the UK Forestry Standard and will provide benefits for nature, people and the economy.

Phil Wilson, Woodland Creation Officer, Forest Services said: "The planning for this new forest was funded through our Woodland Creation Planning Grant. We have all worked hard to develop a good plan for a productive and diverse forest that recognises the interesting features of the site and fits well in the landscape, taking account of the views of a range of interested parties."

Forestry England are thinking beyond the short-term and during this time, are continuing their work to ensure that they play an integral role for climate change, environmental and cultural heritage as well as the public's health and well-being – see **www.forestryengland.uk**.

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A new shed for the **SHEDMAN** as lockdown boost triples demand & creates high-quality new jobs in Glasgow's East End

It's said that every man needs a shed, and the nationwide lockdown appears to have hugely amplified that basic requirement, according to Shedman, one of the East End of Glasgow's most high-profile businesses.

Demand has increased to such an extent since the country was closed down in March that the 32-year-old company is having to build a massive new shed for itself in order to keep turning out high quality sheds, workshops and play huts. Scotland's premium shed manufacturer has seen sales nearly triple in June, easily outstripping last year.

To maintain output at its new levels, Shedman is investing £450,000 to increase the size of its production shed from 7,000-12,000sq.ft, as well as installing new saws, extractors and health and safety equipment. The expansion will create eight new full-time and two part-time jobs, taking Shedman's workforce to 25.

Bill Roddie, Director of family-owned Spectrum Properties, which bought Shedman in 2019, said: "This new investment, which is bringing more high-quality employment to the East End, will allow us to increase capacity at the factory by 100%.

"While we have also invested heavily in marketing and smart use of social media, the increase in demand has been quite dramatic and it is hard not to believe that it is directly related to the pandemic quarantine.

"For the past three months, people have been using their unexpected free time to do jobs around the house and garden and a shed is a great boon for securely storing all kinds of DIY equipment.

"Many furloughed workers have also found themselves with extra money since their daily expenses were reduced, and we have seen a big increase in sales of dog kennels for people who have bought a new pet. Play hut sales are also up as parents try to keep their children occupied while they are off school."

Shedman has built a strong reputation for providing quality, affordable, hand-built structures from fully treated, 14mm tongue & groove timber from Sweden. It has an indoor showroom at Dalmarnock and an outdoor showroom in Glasgow City centre on West Street.

During the lockdown, it distributed more than 100 'shopping boxes' to vulnerable people in the East End and beyond so that neighbours could leave groceries sheltered from the elements for shielding individuals who could not get out of the house.

Spectrum Properties directly employs 75 people and the same number of sub-contractors. It is actively recruiting to cope with rapid expansion. Established by Mr Roddie in 1988, the company now has a portfolio valuation of £60 million and a turnover in excess of £5 million. To find out more, see **www.shedman.co.uk**.

Stunning colour tints for epoxy creations added to **ENTROPY RESINS®** range

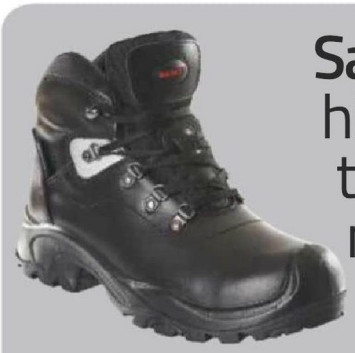
An exciting line of liquid colours has been released to add bold and beautiful tints to epoxy. The tints are part of the bio-based Entropy Resins® product range and can be added to epoxy creations (after the resin and hardener is mixed) to bring stunning deep colour, or to add softer translucent tones. Specifically designed for epoxy river tables, jewellery and other crafts as well as sporting equipment like surf, skate and snowboards, the beautiful selection of colours come in two thematic packs: Soft and Vivid. The Soft Tint Pack contains: Lavender Hills, Flamingo Pink, Caribbean Blue, Turquoise, Snowy Peaks and Fresh Apricot. The Vivid Tint Pack contains: Berry Red, Lemon Zest, Eclipse, Lily Pad Green, Snowy Peaks and Celestial Blue.

The tints are in liquid form and, in keeping with Entropy Resins' ethos of being environmentally friendly, they are water-based. Each tint comes in a 25g recycled plastic bottle with a droplet nozzle designed for precision control. Both packs contain six complementary tones, ready to inspire all creatives. They're available from all good retailers as well as **www.entropyresins.com**, with an RRP of £19.99 (inc VAT).

The tints are straightforward to use as a blanket colour, a translucent effect and/or to add highlight threads into designs. They are particularly effective when used with Entropy Resins products. That's because the bio-based epoxy has low viscosity for easy pouring, is brilliant at degassing and has a lengthy pot life to allow time for stunning creative work.

"The Entropy Resins tints were developed in response to customer needs," says Ian Oliver, Managing Director of Wessex Resins and Adhesives. "There are people all over the world using Entropy Resins for the bio-based formula, being kinder to the environment. They're making stunning river tables, wonderful jewellery and a whole range of crafts, and they were clamouring for colour tints specifically designed to work within the crystal-clear finish of Entropy Resins Clear Casting epoxy. We are really excited to see what they produce with the tints."

Also in the Entropy Resins product line are recycled plastic graduated mixing pots (800ml) and wooden mixing sticks. As well as crafts, Entropy Resins products are used in a variety of applications, from coating and laminating at room temperature, compression moulding, and casting and embedding to produce water clear, UV-stable finishes. Due to their sustainability credentials, Entropy Resins epoxies are used extensively by action sport goods manufacturers for the construction of items such as surf and snowboards. Find out more at **www.entropyresins.com**.



Safety is at its highest when the footwear matches the job function

If you work in an environment where there is a risk of falling objects, slippery surfaces or pressure from heavy loads, then sturdy safety footwear is particularly important for your safety. MASCOT's newly developed safety boots provide extra safety from pressure and impact to the metatarsal area, and are the ideal choice if your metatarsal area is particularly exposed in your job. To achieve the highest level of safety, it is essential that you choose footwear that suits your job function.

The sole is crucial for your footing

If you work mainly on varied, uneven terrain, it is particularly important to have secure footing. If you walk and stand without being in full control of your balance, you risk straining both your legs and back while you work. If you stand without secure footing, your body will need to work extra hard to keep you balanced, on top of performing a job function. So always be aware of the sole you have on your safety footwear. It is the safety footwear's sole material and sole pattern that is key to how you 'grip' surfaces. In the MASCOT® FOOTWEAR INDUSTRY collection, all safety boots comply with the highest standard for slip-resistant soles (SRC). Furthermore, the sole material is made from PU/rubber, which has been specially developed for challenging environments, and is heat-resistant up to 300°C of contact heat. PU/rubber is also shock-absorbing, contributing to a high level of comfort.

Safety footwear with special properties

The MASCOT® FOOTWEAR INDUSTRY collection offers sturdy safety footwear, including the new F0220-902 safety boot, which provides extra protection against pressure to the metatarsal area and which minimise the risk of impact and breaks. Metatarsal protection is integrated in the boots' upper and is designed to be completely unnoticeable while you walk or work. The boots also come with a composite toe cap, which are neither cold or heat conductive, as well as anti-static, shock-absorbing insoles, which are particularly durable and easy to remove. To find out more, see **www.mascot.dk**.

A place for everything with **SterlingOSB Zero**

Like many of us today, Edinburgh-based joiner John Penny was planning a space of his own at the bottom of the garden. But, what started life as a 'man-cave', ended up a valuable spraying studio allowing John the space to prepare the materials for his growing portfolio of jobs. The other side of the building was turned into kennels for the family pets.

As with all his framing jobs, John used Norbord's SterlingOSB Zero for the build. "I've always found SterlingOSB Zero makes a structurally sound building. It's easy to work with and accepts studs and nails well. Other brands of OSB I've tried in the past have had a tendency to expand and contract, but not SterlingOSB Zero", said John.

John purchases his SterlingOSB Zero from the Edinburgh Newcraighall branch of MGM Timber – to find out more, see **www.norbord.co.uk**.

What's new from

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D&M TOOLS

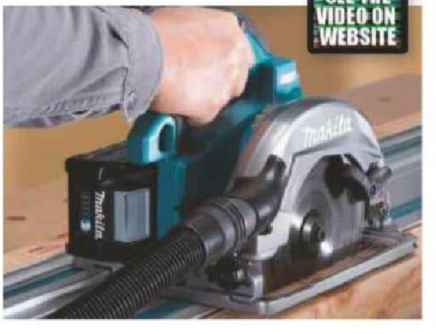
YOU'VE GOT THE POWER WITH MAKITA'S NEW 40V LINE UP

MANUFACTURER: Makita
D&M GUIDE PRICES: See our website

Introducing Makita's range of highest power cordless solutions yet: XGT 40V Max. The XGT range of machines – including combi drills, grinders, rotary hammers, impact drivers, circular saws and reciprocating saws – offers high output, durability and fast charge times, keeping you working for longer without the worry of disruption.

XGT 40V Max is the new stand-alone cordless battery platform from Makita, with its own range of tools, Lithium-ion batteries and chargers. The new 40V Max system will stand side-by-side with Makita's industry-leading LXT platform to offer a battery solution for all applications.

To optimise battery performance and charge times, XGT features Makita's unique smart system technology. This in-built programme allows digital communication between the battery and charger, as well as the battery and tool, to provide protection against issues such as overdischarge and overheating. For example, if the battery has overheated, the charger will cool it down before charging begins. This significantly speeds up the charging process and minimises downtime.



NEW HAND TOOL RANGES FROM WERA

MANUFACTURER: Wera
D&M GUIDE PRICE: See our website

Kraftform Turbo screwdriver

The construction of the Kraftform Turbo allows a quadruplication of the speed experienced when manually screwdriving – purely mechanical, without electricity! If required, the turbo function can be activated by simply pressing a button. Turning it off is recommended for loosening or for fine adjustment and final tightening of the screw with a high torque.

Joker 6003 ring spanner

This ring spanner with its smart mouth geometry significantly expands the range of uses in confined spaces. The Joker 6003 will automatically find the respective placement point after every turn.

Joker 6004 self-setting adjustable spanner

This spanner's continuous and parallel jaws replace several single spanner dimensions and the ratchet function ensures fast and consistent screwdriving without removing the tool.
See the full ranges on our website.

Wera
BE A TOOL REBEL

Above: Kraftform Turbo screwdriver system
Below: Joker 6004 self-setting spanners
Below right: Joker 6003 ring spanners

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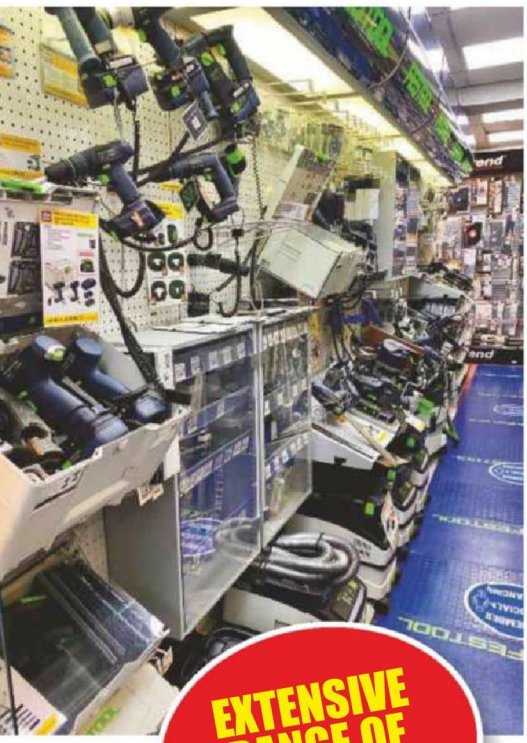

Have you visited us at our Twickenham Superstore?

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!

We also have an area dedicated to a wide selection of woodworking machinery by leading manufacturers including Record Power and Scheppach, which is available to view on request.

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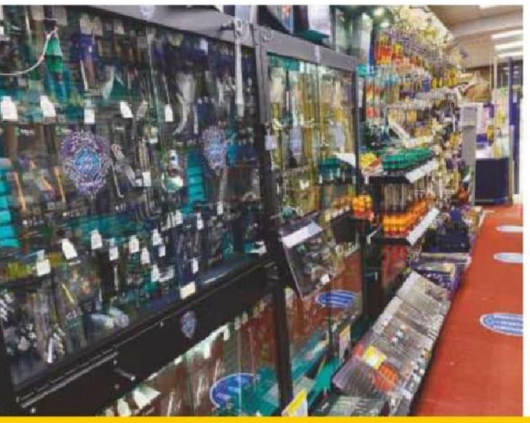
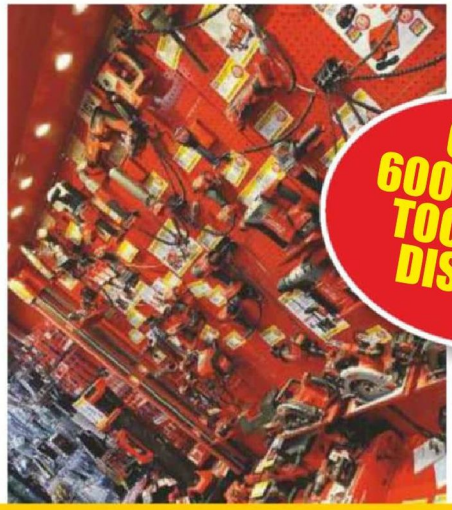
EXTENSIVE RANGE OF HAND TOOLS





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NEAT ELITE HINGE & LOCK

Fine Box Hardware have sent **Jonathan Salisbury** a lock and a pair of hinges to fit into a box. He always says that he likes a challenge...

The things you have to do if you don't own a router table

Make sure you check the settings on the correct size offcut

When looking for hardware to add to boxes, such as locks, catches and hinges, I am still surprised at how difficult it is to get something I'm really happy with. My planning tends to be dreadful in this respect and I'm always trying to obtain them after the box is underway rather than buying them at the beginning of the project. There is plenty of choice; if you want butterfly hinges or other similarly pretty shapes, or small butt hinges: some are surface mountable, others need a recess of some sort; some are held on with screws, others require small tacks. Many are very thin, some are pressed to make them look more bulky. They look fine in the photos, but the finish and quality can be disappointing.

With an everyday box, you can usually get away with whatever you can lay your hands on, but what if it really matters? What if your box is going to be used for something precious or it needs to make an impression? What if it's being made for royalty? No, not by me, but by Ian Hawthorne, boxmaker extraordinaire, who was so dissatisfied with what was available that he developed his own lock and hinges. Read the whole story on his website: **www.fineboxhardware.com**.

The Fine Box Hardware stainless steel hinges and lock set that landed on my doormat are remarkably heavy for their small size, and are really quite lovely. They are not perfect, but you'd only notice if you looked very, very, very closely, and then only at the bits that will be hidden from view. The highly polished finish on the hinge plates extends to the (perfectly aligned) countersunk holes. The hinges are apparently made from just two pieces, which partly helps to explain the flushness of the pin ends. The lock is too good to hide in a mortise, really, with a plate screwed onto the body to cover the mechanism. There are no folded-over tabs or crimped edges here. All brass and stainless steel hinges and locks are made from solid metal – nothing is plated. Hinges are supplied in matched pairs, which open to between 91.5° and 93.5°. I think I've worked out how they stop in that position – there is certainly something clever hidden inside, as there is nothing visible to give it away.

Easy fitting

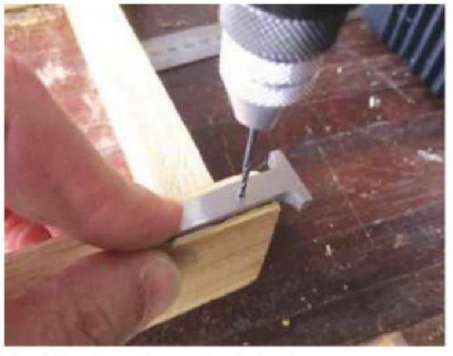
One of the first things I read about these hinges in my research was that they are easy to fit. With the semi-circular ends, a routed slot was all that would be required. The information said 8mm, and a few days later the router cutter arrived and I continued to read through the instructions. "Set your router table up with a sharp 8mm/⅜in down cut spiral bit."

Router table? Well, one of those would certainly make the job easier and quicker, but I don't have one (yet) and so had to proceed with just the router. I set up a wooden face on the fence and a melamine shelf on top of the frame, with guide marks and blocks for starting and stopping the cut, all clamped to the bench. Routing the more conventional way is certainly viable, if only I had set the cutter with an offcut from the piece I was making the box with.

Excuses, excuses

I recommend completing a test cut or two in the timber you intend using, to check its suitability prior to committing to the final project.

Test fit 1 – almost there



The drilling jig makes perfect hole placement easy

Fixed in place


The last screw is the hardest


Looking good...


... although the ends needed rounding

The idigbo carcass created especially for this review was adequate, but I found there was a little splintering. I think that a custom jig to guide the cutter would have prevented some of this, however.

Back to the test

If you have a router table and experience of cutting slots using it, including climb cutting, the hinges and lock are indeed straightforward to fit. The provided instructions are very clear and include diagrams, dimensions, explanations and safety tips (bonus mark, Mr. Hawthorne). It's worth reading them a couple of times to ensure you set up correctly, and do test the settings before your beautiful box goes onto the operating table. The mortise for the lock has to be drilled out; a router jig to make this easier is due out in October, as is one for cutting hinge slots with hand-held routers, so watch this space.

The attention-to-detail prize is won by the two complete sets of screws that are provided in case any are damaged during test-fitting and need replacing when everything is reassembled at the end. Not one or two spares, just in case, but a whole set.

Conclusion

If you've taken the time and effort to make a beautiful box, isn't it worth finishing properly? Ian Hawthorne is a craftsman who makes luxurious, bespoke boxes for clients with exceptionally high expectations, so he is not in a position to compromise. He proudly claims that these are the "best available" and the "world's finest" – and I can't argue with that. We're dealing with high-end engineering here, not your everyday hinge or lock for a box knocked up in an hour from a bit of wood found lying around and pocket-hole screws (I mean, who'd do that?) – although having said that, they do lend it a certain *je ne sais quoi* to my crate.

But the world's finest come at a price. If the cost of the Neat Elites is putting you off, head to the website and take a look at the other locks, hinges and catches that are available. You may even get lucky and pick up some Neat Elite 'seconds'. Good luck, though – they were well and truly out of stock when I visited.

The Neat Elite range is superb and I hope that Ian will one day offer versions for those who want the best but prefer to avoid routing grooves. Perhaps one with square ends, or one that fits into a hole drilled using a Forstner bit...


The strike plate tucked in place

SPECIFICATION

Neat Elite Hinge
Size: 8mm wide × 43mm long × 3.3mm thick
Opening: Matching pair open between 91.5-93.5°
Typical prices: Stainless steel – £45; brass – £25
Complete with two sets of screws

Neat Lock
Size: 8mm wide × 76mm long × 25mm deep
Features: Solid action and positive click lock
Typical prices: Stainless steel – £42; brass – £36
Includes strike plate and screws

Simple drilling jig
Typical price: £20 (for drilling pilot holes)

Both hinges and lock are made from a single metal; they are not plated, and are supplied mirror polished on exposed surfaces

Web: www.fineboxhardware.com


The lock too, although the keyhole needs a tidy-up


The catch springs up suddenly with a click


Here's the one I'd liked to have made


This is how they are supposed to look

THE VERDICT

PROS

- Top of the range for a high value finish; exceptional quality; thick, solid metal for superior function and long life

CONS

- Requires experience (and a router) to fit; quality costs...

RATING: 5 out of **5**

Ian would like to offer any reader interested in purchasing either of these locks 10% off the original price. To order, please quote code '**WWLOCK10**' when buying direct

HENRY TAYLOR BEVEL EDGE CHISELS

You'd be hard pressed to find a decent set of chisels that keep such a sharp edge at this price elsewhere, says **Simon Frost**

The chisels required some flattening before sharpening, but no more than expected

Paring is a pleasure with such sharp tools

In terms of price, this set of five bevel edge chisels from Henry Taylor sits comfortably in the mid-range, at £130 for the set, including a basic fabric tool roll. More expensive than run-of-the-mill DIY chisels and not as costly as some professional tools, it's unusual to find a set of such high-quality chisels as reasonably priced.

At blade sizes of 25mm, 19mm, 12mm, 9mm and 6mm, it is an excellent all-round set. Most woodworkers are unlikely to need bevel edge chisels in sizes beyond this range very often, although if you're hand-cutting dovetails, you'll need to purchase a 3mm or smaller chisel separately for the daintier sets of pins.

Long-lasting edge

I flattened the backs of all five blades using my sharpening films adhered to dead-flat float glass, and although they varied a little in flatness, none were out of flat any more than one would expect from a new set. The blades are hand-forged in Sheffield from high speed steel, and due to their hardness take a bit of work on the films (or stones) and final stropping to get deadly sharp, but this results in an edge that lasts very well indeed.

Handles & ferrules

The handles are an attractive dark stained beech and secured with handsome brass ferrules, making them suitable for use with or without a mallet. They're well balanced and nicely finished, although I found the rounded profile a little bulky when applied to the smaller blade sizes, and felt a further refined handle shape providing more secure grip would be better for finer work.

I daresay that many people would be tempted to remove the jarring red 'Diamic' stickers from the handles, too, but that's a matter of personal preference.

Conclusion

If desired, wooden handles can always be adapted or replaced by the user – what matters most is that cutting edge. These chisels are capable of paring beautifully smooth, thin slithers of material and chopping waste very cleanly and accurately from hardwoods. You'd be hard pressed to find a decent set of chisels that keep such a sharp edge at this price elsewhere.

SPECIFICATION

Blade length: Approximately 125mm (5in)
The set includes: F55 – ¼in (6mm); F56 – ⅜in (9mm); F57 – ½in (12mm); F59 – ¾in (19mm); F60 – 1in (25mm)

Typical price: £130
Web: www.classichandtools.com

THE VERDICT

PROS

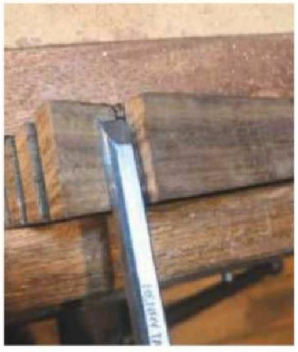
- Excellent value for money; keep a sharp edge very well

CONS

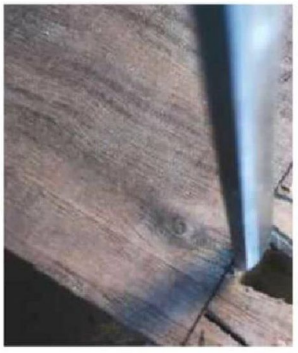
- Handles can be a little cumbersome for fine work

RATING: 4.5 out of **5**

The stained beech handles are durable and attractive, although I found the rounded profile wasn't ideally suited for fine work with the smaller chisels



The blades are perfectly adept at cleaning up waste from dovetails, although I felt the handle shape was better suited to less intricate work



These can site in a knife line and chop through hardwood with ease, although the smallest chisel in this set will not do for daintier dovetails

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The Woodwork lesson

Robin Gates finds a lesson in self-help on the cover of *The Woodworker* from December 1947, and takes heed of advice from the 'reverend' Charles Hayward

You received a modest 24 pages of *The Woodworker* for your one shilling in 1947, but in this December issue there's a solid bob's worth right there on the cover. This summary of 'General procedure in woodwork' caught the spirit of the age – the will to build a better world out of the ruins of World War II, which had ended just 18 months earlier. Six years of hostilities had brought people almost to their knees, often losing everything in just a few hours. That was certainly the case for my great-grandparents who returned home from fire watching during the Portsmouth blitz to find a pile of smoking rubble. There followed years of making do and mending until little remained of the original fabric beside the nails and thread of repairs.

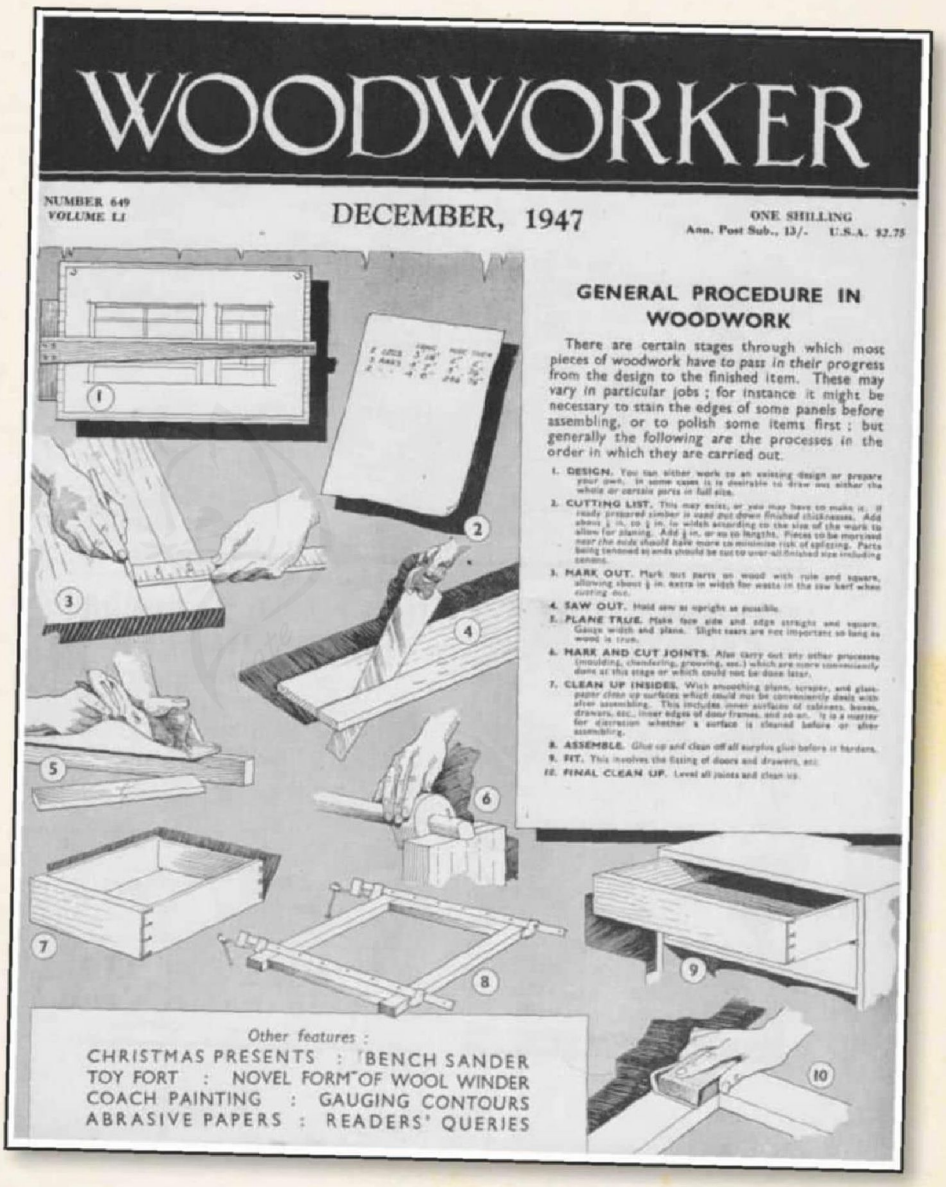
Looking to our present crisis, with the world in the grip of a pandemic that's testing our resources to the limit, causing many to reevaluate their aims and priorities, and perhaps emerge onto a more self-sufficient and planet-friendly path, I'm taking more than just a woodwork lesson from this 73-year-old cover.

But lets consider first its drawings and notes at face value, presenting each step in making something useful all the way from drawing board to cleaning up the assembled piece. It's the stuff of old school woodwork classes, the kind of thing which set up the average householder for life but which has all but disappeared from today's curriculum, including tips now regarded as gold-dust knowledge. Things easily overlooked like adding a little extra to dimensions in the cutting list to allow for planing and saw kerfs, and thinking forward to the assembly where parts may be awkward to chamfer, stain or polish.

Notice too the hints on using tools efficiently – the rule and pencil marking constant width from an edge, the index finger pointing beside the blade while planing, and the angle of the saw when ripping a plank. It's the voice of experience expressed through illustration for anyone wishing to make the essential domestic furniture of tables, chairs, cupboards, beds, and sheds that's always figured prominently in *The Woodworker*'s repertoire, assisting the reader towards greater self-sufficiency and self-worth.

It was a voice especially prescient in December 1947 because the very stuff of the woodworker's craft – wood – was in very short supply. Restrictions on timber introduced during World War II to secure supplies for the war effort were still in place, forcing readers to make the best of wood recycled from old floorboards or broken furniture. The situation doubtless influenced the scale of projects to be found inside this Christmas issue – a lamp stand, tray, clock case and book rack to be made 'from odd scraps of wood' and a toy fort from 'odds and ends of material... even stout cardboard'.

The Editor then was Charles Hayward and readers would turn to his 'Chips from the chisel' column as we might now turn to Radio 4's morning Thought for the Day, seeking guidance in uncertain times, and indeed his delivery on the page was not unlike that of the gently chiding vicar.


WOODWORKER

NUMBER 649
VOLUME LI

DECEMBER, 1947

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GENERAL PROCEDURE IN WOODWORK

There are certain stages through which most pieces of woodwork have to pass in their progress from the design to the finished item. These may vary in particular jobs; for instance it might be necessary to stain the edges of some panels before assembling, or to polish some items first; but generally the following are the processes in the order in which they are carried out.

1. DESIGN.
2. CUTTING LIST.
3. MARK OUT.
4. SAW OUT.
5. PLANE TRUE.
6. MARK AND CUT JOINTS.
7. CLEAN UP INSIDES.
8. ASSEMBLE.
9. FIT.
10. FINAL CLEAN UP.

Other features:
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COACH PAINTING : GAUGING CONTOURS
ABRASIVE PAPERS : READERS' QUERIES

"We are thrown back on our final best resource, ourselves, because only our own hands and minds can get us out of the rut of stagnant living," the 'reverend' Hayward wrote. "Anything that develops skill adds a zest to life, and if we can look upon the difficulties of these next few years as a challenge to self-help, we shall find nothing humdrum about living. The craftsman is coming into his own again, both as a resourceful individual and a national asset, and every woodworker who makes the most of his opportunities today will have no reason to find life dull." Well said, that man.

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STANLEY FATMAX

HOW TO START SANDING WITH DREMEL

This handy beginners' guide to sanding from **Dremel** will show you the tools of the trade and where to start

Whether you want to sand down an old piece of furniture or reshape a surface, it's a good idea to consider the sanding basics. Dremel's handy beginners' guide to sanding will show you the tools of the trade as well as where to start.

TIP 1 Know the basics of sanding

What is sanding and why do we do it? Wood straight from the mill can be rough or contain dents and other marks. Sanding helps to smooth the wood's surface and it can also emphasise the beauty of the natural grain. In addition to wood sanding, sanding tools can remove rust from metal and polish fibreglass. Sanding also prepares the surface for painting – it ensures the paint or varnish goes on smoothly and looks the best it can. Sanding is one of the most important steps in determining the end finish and quality of any project.

TIP 2 Choose the right abrasive grit

'Grit' refers to the particles that make up the abrasive. Larger, fewer particles with more space between them is coarse grit. The smaller and more packed together the particles, the finer the grit. Coarse abrasive removes imperfections faster and with less effort than fine abrasive – great for shaping or levelling. Fine grit is used for the later stages of wood sanding – for smoothing and polishing. Begin with a coarse grit to level the wood, then buff scratches with finer grits until you reach the desired smoothness.

TIP 3 Know the best sanding tools for your project

The sanding tool you use depends on the sanding surface. A high-speed stationary sanding machine is best for larger surfaces. Abrasive can also be used on its own, with a sanding block, an orbital sander or a rotary tool, such as the Dremel Multi-Tool. Hand sanding techniques are best when light sanding is required, or when the surface is quite soft. Many woodworkers favour orbital sanders for flat surfaces, and the Dremel Multi-Tool for detailed jobs and hard-to-reach areas. For example, decorative chair legs would be impossible to smooth with the flat surface of an orbital tool.

TIP 4 Pick your Dremel sanding accessories

Dremel has a range of sanding accessories – below are just a few in order of coarseness:

- **Sanding bands**: best for flat surfaces and edges. Coarser grit removes more material. Great for roughly shaping wood.
- **Flap wheels:** move with the material, making them suited for contoured surfaces.
- **Sanding discs:** less coarse than bands and flap wheels. Suited to light shaping and removing chips.
- **Abrasive brushes:** perfect for detailed jobs like grooves. Remove the surface layer without damaging what's underneath.
- **Abrasive buffs:** flexible accessories that take the shape of whatever you're sanding or buffing. Great for hard-to-reach areas.

TIP 5 Take safety precautions before you start sanding

It's important to always wear a mask to ensure you don't inhale dust while sanding. You should also sand in a well-ventilated area to further minimise harmful inhalation. If you're working with materials that release toxic particles during sanding, then be sure to create a seal around your face. Direct vent goggles are also useful as they have a foam seal to keep particles out of your eyes.

TIP 6 Clamp either the project or your tool before sanding

Sanding is all about preparation and finish, so it's important that what you're sanding is firmly in place and isn't going to move during the project. Non-slip pads are great for gripping

flat pieces of wood during sanding, or simply use a clamp. The Dremel Multi-Vise is perfect for detailed projects. It can grip the tool itself so you can hold the object in need of sanding. It can also hold the object steady while you handle the product.

TIP 7 Keep your sanding surface clean

It's important to prepare the surface before turning on the sanding tool. To do this, use a damp cloth to clean your surface and make sure it's dry before you start sanding. If you're in the middle of sanding and want to change to a coarser grit, use a vacuum cleaner or a brush to remove all the dust that has accumulated. A vacuum cleaner will also prevent dust being pushed back into the grains of the wood, which could compromise the piece.

TIP 8 Know when to stop sanding

If you want to finish the wood with a light stain, you'll need the surface to be as smooth as possible. Scratches from coarse grits will absorb more of the stain, making it darker in the scratched areas. This means you should finish with a very fine grit. This kind of finish requires a bit more patience and several levels of coarseness. Check for scratches by shining a torch at an angle over the surface as the scratches will cast shadows. However, if you're going to be using several layers of paint, you don't need to sand it as finely.

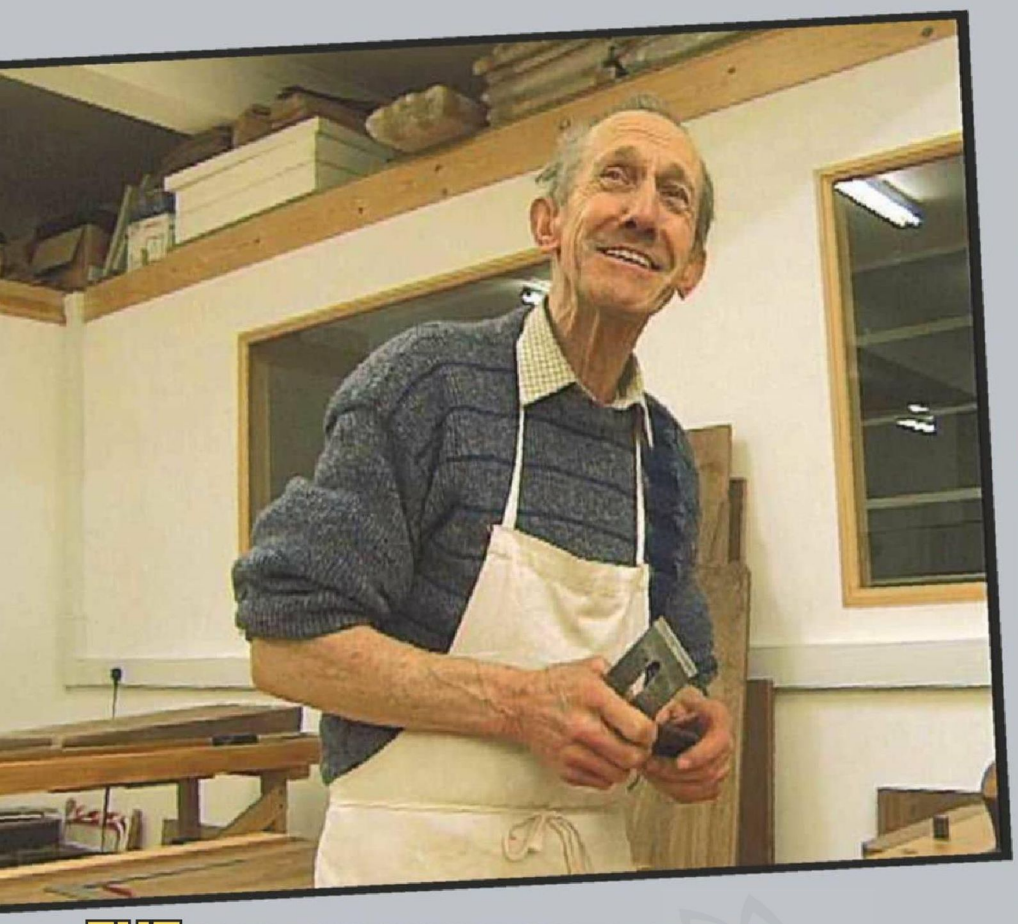
TIP 9 Finish sanding project with a wipe

Whether you plan on staining or painting your newly sanded surface, you need to ensure it's clean. The vacuum cleaner clears away most

of the mess, but it will still leave traces of sawdust and other residues. Remove even the finest grains of dust with a damp sponge or cloth. When the wood begins to dry, the loose fibres will stand up. When completely dry, lightly sand the entire surface with the highest grit abrasive. Finally, use a clean cloth and alcohol to take away the last traces of dust so you're perfectly prepped for a coat (or two) of dust-free varnish or paint.

FURTHER INFORMATION

If you're looking for more inspiration, then take a look at Dremel's website – **www.dremeleurope. com** – which is full of projects and ideas, or follow Dremel on Facebook – **www.facebook.com/UKDremel** – for regular hints, tips and competitions



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THE ALAN PETERS FURNITURE AWARD

Don't miss out on the opportunity to be part of this prestigious annual award, which champions UK furniture designing and making talent while celebrating the life and work of the late **Alan Peters OBE**

This newly evolved annual award celebrates the legacy of one of Britain's most prominent furniture designer-makers of the late 20th century – Alan Peters OBE – while aiming to encourage emerging talent in the craft of furniture design and making.

Any woodworker who is a resident UK citizen over the age of 18, and who has a passion and talent for designing and making contemporary furniture, is invited to submit up to two items of furniture that echo the philosophy of Alan Peters. Judging is based on the appropriate use of wood, the quality of workmanship, functionality and originality of design. Both one-off designs and potential batch-produced designs are encouraged.

Applicants should be familiar with the work of Alan Peters prior to applying and are encouraged to read Jeremy Broun's 64-page video-integrated online e-book, which is offered free-of-charge (via the website link opposite).

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. He was apprenticed to Edward Barnsley and had a direct link to the English Arts and Crafts Movement. He was hugely influential internationally in his practice, teaching and publications. Above all, his respect and understanding of how wood behaves and the value of hand skill, yet moving tradition forward, resulted in the creation of many timeless pieces. He created affordable functional furniture, which was made to last, making an art of his craft in some of his subtle innovations.

Alan Peters and Jeremy Broun in 2005

Alan Peters chest with silver inlay

Blanket chest in Douglas fir

History of the award

The original award was called 'The Alan Peters Award For Excellence' and was initiated by Jason Heap in 2010. The prize was offered to three winners, each of whom were given free exhibition space alongside the professionals at his annual furniture exhibition in Cheltenham. The award ran for eight years, and some of the past winning pieces are shown here. The judges were Jason Heap, Keith Newton and Jeremy Broun.

Fan Table detail

Award judges

Jeremy Broun (organiser) – designer-maker and co-exhibitor with Alan Peters 1978–2002;
Andrew Lawton – designer-maker who worked with Alan Peters and on his last commission;
David Barron – professional furniture maker who also produces his own range of hand tools.

PRIZES OFFERED

1st prize
£1,000 Axminster Tools & Machinery voucher

2nd prize
£500 Triton Tools voucher

3rd prize
£300 Judges' prize

Winning pieces will be exhibited at Axminster's Nuneaton store and then at The Wilson Gallery (Cheltenham Art Gallery & Museum).

Award deadline is **currently open-ended due to postponement**.
A £20 entry fee applies and a maximum of two entries can be made (£20 per entry).

The judging ceremony will be held at Axminster's Nuneaton store in 2021 (**date TBC**), and an exhibition at the store will run afterwards.

Following this, the pieces will then be exhibited at The Wilson Gallery – **dates to also be confirmed**.

To download an application form and the 64-page e-book, please visit **www.woodomain.com/alanpetersaward**. The form can be found at the right of the page. Payment for entry can also be made securely via the website.

For further information, please contact either Group Editor, Tegan Foley (**tegan.foley@mytimemedia.com**), Organiser, Jeremy Broun (**jb@woodomain.com**)

PLEASE NOTE

Due to the Coronavirus outbreak and having to postpone the judging ceremony, the deadline for the award is currently open-ended. Please use this extra time to hone your project and make it as good as it can possibly be. Thank you for your cooperation and understanding during this time

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BEST SELLER

INCLUDES LEFT & RIGHT TABLE EXTENSION

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CTS800B	600W	200mm	£72.99	£87.59
CTS11	1500W	254mm	£149.98	£179.98
CTS10D	1500W	254mm	£179.98	£215.98

Clarke 4" BELT/ 6" DISC SANDER

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

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

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

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- Ideal for cross cutting, ripping, angle and mitre cutting
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Clarke 10" TABLE SAW WITH STAND

- 1600W motor
- 250mm blade size
- 0-45° tilting blade
- Cutting depth: 73mm at 90° / 53mm at 45°

CTS16

INCLUDES LEFT & RIGHT TABLE EXTENSION

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- Extra tough triple layer weatherproof cover
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CIG81020	6.1 x 3 x 2.4M	£279.00	£334.80
CIG81216	4.8 x 3.7 x 2.5M	£279.00	£334.80
CIG81220	6.1 x 3.7 x 2.5M	£349.00	£418.80
CIG81224	7.3 x 3.7 x 2.5M	£419.00	£502.80

Clarke 1" BELT/ 5" DISC SANDER

- Includes 2 tables that tilt & lock
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CBS1-5B

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Offering low cost, efficient heating

DUAL VOLTAGE 230v 110 VOLT IN STOCK FROM £226.80

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Devil 900	24.9	£139.98	£167.98
Devil 1600	36.6	£169.98	£203.98
Devil 2100	49.8	£259.00	£310.80
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DEVIL 7003	230V	3	£59.98	£71.98
DEVIL 6005	400V	2.5-5	£69.98	£83.98
DEVIL 7005	400V	5	£84.99	£101.99
DEVIL 6009	400V	4.5-9	£109.00	£130.80
DEVIL 6015	400V	5-10-15	£169.00	£202.80
DEVIL 7015	400V	15	£199.98	£239.98

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CDP152B	450 / 12	£149.98	£179.98
CDP202B	450 / 16	£189.00	£226.80
CDP10B	370 / 12	£199.98	£239.98
CDP352F	550 / 16	£229.00	£274.80
CDP452B	550 / 16	£239.00	£286.80
CDP502F	1100 / 12	£569.00	£682.80

Clarke BELT SANDERS

Makita

CBS2

- Ideal for surface removal, sanding and finishing

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*was £45.59 inc. VAT

ABRASIVE SANDING BELTS IN STOCK

MODEL	MOTOR	M/MIN	EXC.VAT	INC.VAT
Clarke BS1*	900W	380	£34.99	£41.99
Clarke CBS2	1200W	480	£79.98	£95.98
Makita 9911	650W	75-270	£99.98	£119.98

Clarke 4" BELT/ 8" DISC SANDER

- Includes two tables
- 550W 230V motor

£159.98 EXC.VAT £191.98 INC.VAT

CS4-8

Clarke DUST EXTRACTOR/ CHIP COLLECTORS

CDE7B

CWE1

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- Powerful 1100W motor
- 50 litre bag capacity
- Flow rate of 850M3/h

MODEL	MOTOR	FLOW RATE	BAG CAP.	EXC.VAT	INC.VAT
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CDE35B	750W	450 M3/h	56Ltrs	£149.98	£179.98
CDE7B	750W	850 M3/h	114Ltrs	£159.98	£191.98

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CPS160

MODEL	MOTOR	EXC.VAT	WAS	INC VAT	INC.VAT
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CPS160	1200W	£129.00	£166.80		£154.80

Clarke CIRCULAR SAWS

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- Ideal for bevel cutting (0-45°)

CON185

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*Includes laser guide

MODEL	MOTOR	MAX CUT 90/45 (mm)	EXC.VAT	INC.VAT
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CON185*	1600W	60/40	£59.98	£71.98

Clarke DISC SANDER (305MM)

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

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CDS300B

Clarke DETAIL SANDERS

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CON320	230x115mm	320W	£34.99	£41.99

Clarke CPF13 ELECTRIC POWER FILE

- Variable belt speed
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KA900E*	350W/230V	13x455	£59.98	£71.98

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- 2 forward and reverse gears

Powered by Li-ion

4Ah Li-ion

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CVAC20SS*	1400W	16/12ltr	£59.98	£71.98
CVAC20PR2	1400W	16/12ltr	£64.99	£77.99
CVAC25SS*	1400W	19/17ltr	£69.98	£83.98
CVAC30SSR*	1400W	24/21ltr	£89.98	£107.98

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- Adjustable front handle improves control
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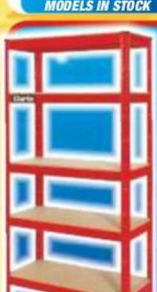

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MODEL	DIMS WxDxH(mm)	EXC.VAT	INC.VAT
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- Produces razor sharp cutting edges on chisels, planes, etc.
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CPT800	8"	120mm	£219.98	£263.98
CPT1000	10"	120mm	£299.00	£358.80

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

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COEBS1

30180LH

Clarke 40" WOODTURNING LATHE

Ideal for woodturning in the workshop

• 1016mm distance between centres allows for turning longer spindles • Inc. tool rest, tail stock, drive centre, face plate & 3 chisel • Large turning capacity of 350mm • 4 turning speeds

BENCH MOUNTED
LOCKABLE TAILSTOCK
BEST SELLER
CWL1000B

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

• Large 980mm distance between centres • Variable speeds 600-2200rpm • Inc. copy follower assembly, tool rest, drive centre tail stock assembly, face plate, eye shield, 2 chisels & stand

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INCLUDES STAND
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Clarke BENCH BANDSAWS

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CBS190B

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REMOVABLE DUST TRAY
CBS225

Clarke PROFESSIONAL BANDSAWS

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

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

MAGNIFIED MITRE GUIDE
QUICK RELEASE FENCE
DRIVE-BELT TENSIONING
SOLID GROUND CAST IRON TABLE
CBS300

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

MODEL	THROAT DEPTH	MAX CUT 90°	MAX CUT 45°	EXC. VAT	INC. VAT
CBS250B	250mm/10"	100mm	75mm	£219.98	£263.98
CBS300	305mm/12"	165mm	115mm	£398.00	£477.60
CBS350	340mm/14"	225mm	160mm	£498.00	£597.60

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BAROQUE BEAUTY PART 3

In the final instalment of this unique build, **Shaun Newman** constructs the back of the instrument, bridge and 'mustachios', fits the frets, strings up and tunes, before making a custom carrying case

In part 2 of this series, I looked at the construction of the soundboard and described how it is fitted. This was followed by the complex methodology needed to create the outer rosette and the 'parchment rose'. In this final part, I will show you how to construct the back of the instrument, bridge and 'mustachios', fit the frets, stringing up and tuning, before making a custom carrying case.

The back

It's now time to consider the best way to construct the back. In some early guitars, particularly during the Renaissance period, and then later in the Romantic era, the back of a guitar would be made from a single piece of timber, possibly with little or no decoration. Some were even made from inexpensive spruce and veneered with a more expensive and exotic timber. The Baroque era, however, enjoyed some very complex and decorative designs on the back of the instrument as well as the front. A glance at some of the instruments made by the Voboam family, and many Italian makers, show extraordinary designs featuring stripes, chevrons and many forms of parquetry. I chose to stay with the idea of a couple of contrasting timbers, so made up a series of pieces of spruce and mahogany. The mahogany strips were made to a slightly narrower width as those used for the ribs, i.e. 16mm. The maple pieces were wider and tapered to lend a more elegant appearance. All of the edges to be joined were trued to an exact right angle as with the soundboard, and able to make a perfect join along the entire length. Between the mahogany and maple are black tulipwood inserts, and at the centre is a herringbone back strip made from two pieces of purfling placed side by side to create the pattern. Getting the whole lot safely into the wedge and lace jig was a bit like herding recalcitrant cats, but when everything had been pressed into place by the wedges the overall look of the back of the instrument appeared and looked pretty good. Once out of the jig, the back had to be brought to a thickness of just 2mm. This involved extremely careful handling not least because of the sheer number of butt joints.

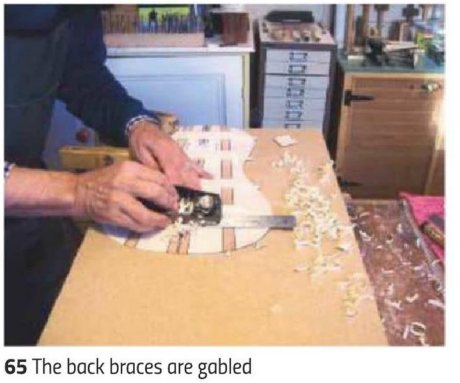
Bracing the back & fitting it

Given the delicate nature of the back I decided to put four bracing struts in rather than the customary three (**photo 62**). Each strut is made from spruce, and as is the case for the soundboard braces, they are 6mm wide and 15mm high. To create the characteristic look of the back of the instrument they were previously arched. I usually aim to gain a 4mm 'lift' at the centre of the back, so the struts are shaped on a sanding stick to conform to that curve (**photo 63**). They are then treated in the same manner as the front braces, i.e. scalloped at the ends and gabled (**photos 64** & **65**). Once again, the ends of the braces overhang the edges of the back by a couple of millimetres. At this point, I decided to put my brand label in, though

62 The four back braces are cramped into place

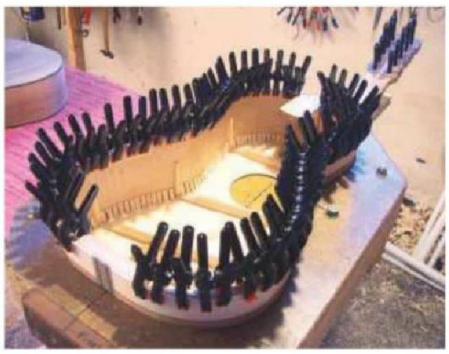
63 The back braces are curved on a sanding stick

64 The ends of the back braces are scalloped



65 The back braces are gabled

66 The maker's label in place

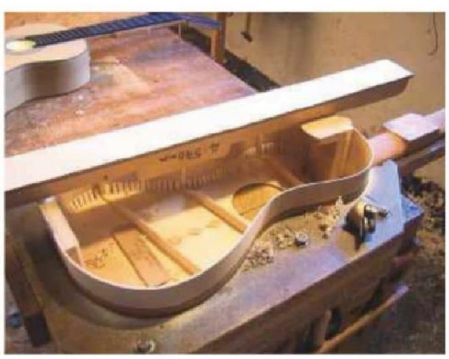


67 The kerfed lining is held in place with mini clamps

of course it will never be visible due to the presence of the parchment rose (**photo 66**).

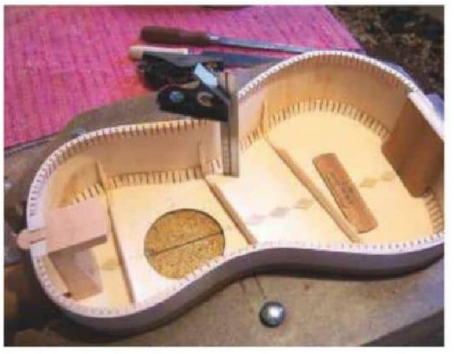
It would be difficult to use tentellones to help attach the back to the ribs, so a continuous strip of kerfed lining is used. This lining has a triangular end profile and is normally made from mahogany or perhaps lime and is 15mm high, and 7mm wide. Such strips are commercially available, but can easily be made with the use of a bandsaw and the right angle slot of a mitre block. Each kerfed cut goes almost through the strip, but not quite, by just 1mm.

68 A thumb plane can be used to level the lining



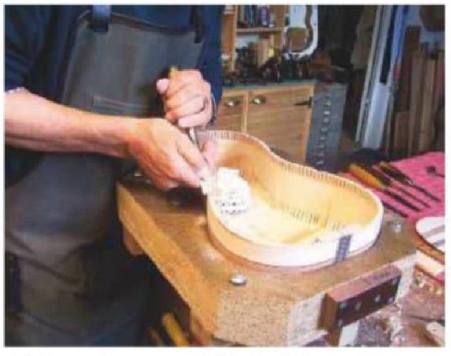
69 Curved sanding stick used to produce the 4mm lift

70 The jig that measures the curvature



71 A depth gauge keeps you on track

72 The razor saw is good for fine cuts



73 The notches are carefully chiselled out

74 Rebates for the bindings and purflings applied to the back

75 Rebates for the bindings and purflings applied to the front

The spacings are usually 6mm apart. When glued into place with small clamps (**photo 67**), the edges of the ribs, including the linings, are trimmed flush with a thumb plane (**photo 68**) and curved with the same sanding stick that was used on the braces. This sanding stick is long enough to cover the length of the back as well as its width enabling both the heel assembly and tail block to share the same profile (**photo 69**). Once the curvature seems to have been achieved, everything can be tested with a simple jig. This is made from two pieces of maple, with a cross halving at the centre of each piece. As the crossbar is run backwards and forwards along the centre rail, high and low spots can be seen and adjustments can be made with the sanding stick to ensure precision. Both crossbar and centre rail are curved to produce the 4mm 'lift' required (**photo 70**). To ensure opposite sides are the same height, a combination square is used as a depth measurer (**photo 71**).

To ensure the correct position of the back it is placed over the ribs, heel and tail block, lined up centrally, and the location of the edges of the struts are marked onto the ribs. A pencil mark shows up well on the pale spruce. As each strut has been scalloped down to 3mm, a notch 3mm deep and 6mm wide is cut into the top of the ribs with a razor saw (**photo 72**) and chiselled out (**photo 73**). These notches are where the ends of the bars will neatly sit. A dry fit is recommended before proceeding with adhesive and if all is clear, the back can be attached and held in place with small cam clamps. These are expensive, and not truly necessary. Long elastic bands located on pins tapped into the sides of the mould can be used or even long strips of linen tape. Indeed some traditional makers insist on linen tape as there is no risk of damage to the wood.

When the back is at last in place and the overlap is trimmed off with a bearing-guided router bit, we have a 3D instrument that actually looks like a guitar!

Bindings & purflings

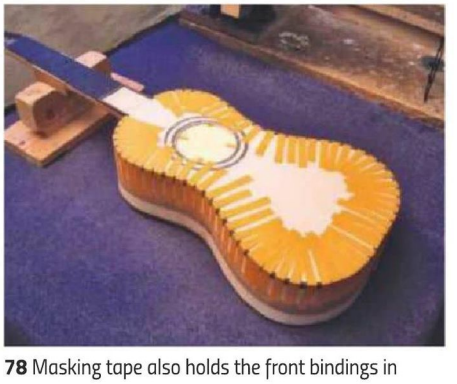
Many early instruments did not have bindings fitted, let alone purflings. In the Baroque era, however, some makers really went to town on this part of their build with striking designs that often took up a good deal of the soundboard and back respectively. Coupled with complex headstock and rose designs, and bridge, the purflings often added a very exotic touch.

The bindings are present to protect the edges of the instrument, which is particularly important for the soft spruce of the soundboard. The purflings are for decoration, but can also act as a barrier preventing colour from bleeding from one type of timber into the one next door. Rosewood is often a culprit.

Before fitting either, a rebate must be cut around the edges of the instrument back and front. This can be done with a small hand tool known simply as a purfling cutter. These are not expensive to buy, but quite tricky to use. It is easy to damage the instrument during this operation, so a small hand-held router with bearing-guided rebate cutter is safer. Bindings are normally around 2mm thick and between 6 and 8mm deep. The cutter must be set in such a way that the rebate is even in depth and width all around the instrument. For this purpose, cutters are available with a range of bearings that will allow rebates

76 Bending the bindings on the hot iron

77 Masking tape holds the bindings in as the adhesive cures



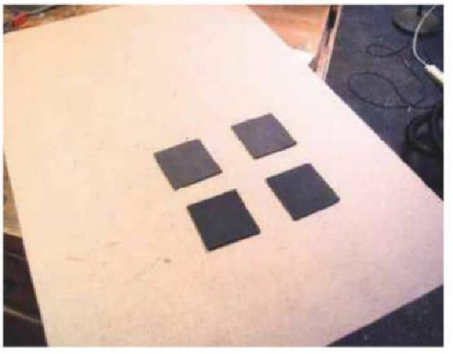
78 Masking tape also holds the front bindings in

79 Cleaning up the bindings and purflings

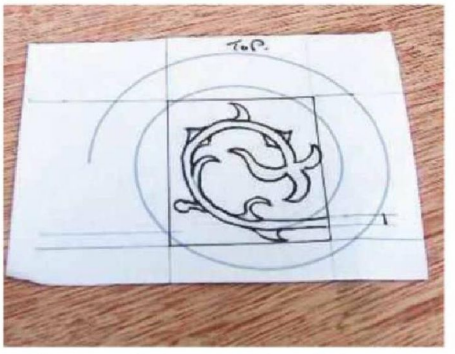
80 A small thumb plane does a neat job

81 A simple billet of ebony will become the bridge

82 The bridge pin holes drilled



83 Laminated squares of ebony for the mustachios



84 The pattern for the mustachios scribed onto white paper

of different widths to be cut (see supplier list). When the rebates are ready for the bindings, a shallower and narrower cut is made for the purflings. There is no standard width nor height for the purflings, so the correct bearing must be selected (**photos 74** & **75**).

The next stage is to bend both purflings and bindings on the hot iron. This can be a tricky operation as the bindings in particular break easily. A thin flexible stainless steel ruler (which is normally around 0.15mm thick) with the binding placed between it and the hot iron helps to avoid any such accidents (**photo 76**). If care is taken to bend everything accurately, fitting will be made very much easier. On the back of the instrument the bindings and purflings simply meet at the centre line. This requires accuracy, as if they are cut too short it can be difficult to disguise the gap, and if they are too long they may bulge at some point leaving a part which is not properly held in place. For the front, the bindings and purflings meet at the tail end, but are mitred at the heel end as they must continue around that part of the soundboard, which meets the fingerboard.

Once all looks good and ready to fit, strong masking tape is used to hold everything in place as the glue cures (**photos 77** & **78**). I normally leave the job overnight before taking the tapes off. During this process care must be taken while removing any tape from the spruce as the grain has a tendency to lift, particularly if a high tack one is used. When the masking tape has been removed it is time to level the bindings and purflings and to clean up. Both a thumb plane and razor file can be used for this operation, or in their absence, a sanding stick (**photos 79** & **80**).

The bridge & 'mustachios'

The bridge and characteristic 'mustachios' are often very ornate indeed on Baroque guitars, and on instruments made right through until the 1850s or so. They are made in three parts, the central section which holds the string ends and the two wings, so-called mustachios, at either end. The whole thing is made from ebony, the wings from laminated pieces, and the tie block and bridge itself from a single billet (**photo 81**). On most Baroque guitars the strings are tied over the bridge through tunnels cut from back to front. For this instrument I decided to use bridge pins as I only wanted to fit six strings, and if I chose ebony pins with mother-of-pearl dots they would be in harmony with the sound hole rosette. I chose special pins known as 'presentation bridge pins', which have larger than average pearl dots (see supplier list). For decorative purposes I placed a bone cover along the lower edge of the bridge, inlaid with a double herringbone purfling once again to be in harmony with both the headstock design, and that of the tail block insert. I then drilled the six holes needed to accept the bridge pins. The spacings are carefully laid out with the two outside holes (i.e. for the treble and bass 'E' strings) exactly 60mm apart. The remaining holes are equally spaced between these two. A slot was then cut along the bridge 4mm from the edge that would face the headstock ready to receive a 2.5mm thick bone saddle (**photo 82**).

The mustachios are made from four pieces of ebony each 1mm thick and measuring 60 × 60mm (**photo 83**). Two are laminated with epoxy with the grain running at right angles between each piece.

85 The shape of the mustachios is carefully fretted out

86 The matching mustachio bridge wings

87 The bridge mask

88 The mustachios carefully held in place

89 Drilling down through the bridge is a life shortening moment...

90 The bridge pin holes are reamed

The other two are similarly treated and when the epoxy has cured all four are stuck together with a piece of newspaper between them and fish glue. The grain on the top piece of the four must run in the same direction as the bottom piece. When the fish glue has dried a piece of white paper can be attached to the face of the stack, and with the grain running horizontally, the design is drawn onto the paper. A white, self-adhesive address label will serve well for this purpose (**photo 84**). The design is then carefully cut out with a fine blade fitted to a small fretsaw (**photo 85**). Once the design has been cut out and satisfactorily cleaned up with needle files, the assembly is dropped into hot water, which, after a while, will dissolve the fish glue and the two halves can be separated. The good thing about this method is that any slight error will look intended when the two halves are laid out like butterfly wings, so there is no need to worry about the blade going slightly off track (**photo 86**).

Before the mustachios can be attached to the soundboard the central part of the bridge must be put into place. The edge of the slot which will receive the bone saddle should be exactly 628mm from where the inside edge of the nut will sit. The outermost bridge pin centre lines should allow the two 'E' strings to lie 3mm on the treble side and 2.5mm on the bass side from the edges of the fingerboard. The area onto which it will be glued is masked off with tape (**photo 87**), finish is applied to the soundboard (see below further details on the type of finish used) and the bridge is attached after the mask has been removed. Normally the bridge on a classical guitar is attached with long reach clamps through the sound hole, but in this case, because of the parchment rose, weights are used. The mustachios are next coated on the back with a very sparing layer of epoxy and held in place on the soundboard, also with weights. Applying as little adhesive as possible will make the clean-up much easier. It is important that neither mustachio moves while it is being glued, so a straightedge attached to the soundboard with masking tape and some small wooden strips (cut from coffee stirrers) strategically placed help to locate the exact line up of the two parts and does not allow either of them to move. Small pieces of masking tape can be made into handles, a little like stamp hinges, to pick up the mustachios as the adhesive is applied and to manoeuvre them into position (**photo 88**).

Finally, the holes that had been drilled down through the bridge to accept the pins should be further drilled to allow the bridge pins to pass right through the soundboard, and the mahogany strengthening plate directly beneath the bridge itself (**photo 89**). These holes are reamed to the same profile as the pins, which is usually 3° or 5° (**photo 90**). The pins are ready slotted to allow the string, which will have a stop knot tied in the end, to pass through the soundboard and then be trapped in position. Great care must be taken during this operation as it is very easy to ream too much material from the holes and the pins will jump out as the string is brought up to tension.

Fitting the frets

Originally the Baroque guitar would have had gut frets tied over the fingerboard around the neck. This method allowed the frets to be moved up or down slightly to adjust the tuning, which at the time had not been standardised. However, there is no need nowadays to have moveable frets, other than for the purist who might like to stay with tradition. As I wanted to play this guitar using modern tuning at standard pitch, I chose to go with fixed nickel silver frets. I fitted just 12, which give the opportunity to play three full octaves. Some Baroque guitars have up to 15 or 16 frets, and they are often attached directly onto the soundboard from 12 on. Given that two or three more frets would not extend the playing range very far, I decided to stay with simplicity and stop at 12, which usually lines up with the shoulders of the instrument.

The fret slots had already been cut into the ebony part of the fingerboard to the depth of the tang with a fine dovetail saw before the fingerboard was fitted. The last three slots, which pass across the tongue of spruce at the top of the soundboard, must be cut after the fingerboard has been attached. The frets are tapped in gently with a soft-faced hammer and trimmed flush (**photo 91**). Each fret end is trimmed off at an angle of 30°, smoothed with a fine file and wet and dry abrasive to take any rough edges away.

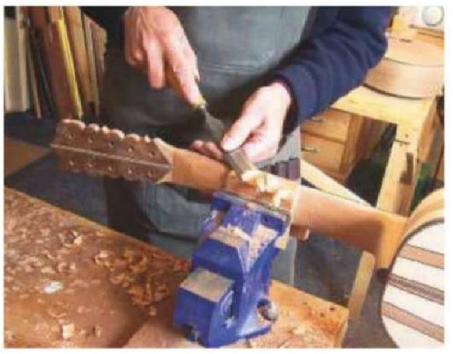
Once each stage has been achieved the final shaping of the neck can be undertaken. I usually begin with my old Marples 1in bevel-edged chisel and continue with a rasp. Eventually fine abrasive must be used to get the final, smooth finish for ease of playing (**photos 92** & **93**).

Next, consideration can be given to the finish. Originally a Baroque guitar would have been sealed with egg tempera, and finished with oil or similar. I chose to use a product from General Finishes in the USA. It is a satin acrylic resin, which is straightforward to use, water-based and environmentally friendly. It is available in the UK (see supplier list). As the resin had already been applied to the soundboard the task was somewhat reduced.

The bone nut & saddle

The top nut and bridge saddle on modern guitars

91 Fretting... keep calm and carry on

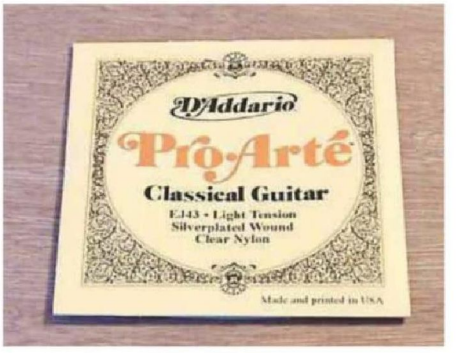


92 Final shaping of the neck with a chisel...

93 ... and rasp

94 The saddle, before and after

95 The nut, before and after



96 D'Addario EJ45 low tension strings

97 The interior of the case

are usually made from bone, but on many Baroque instruments ebony was used. Bone is always my preferred option as it is more durable. The saddle is made to fit the slot previously cut and sits around 4mm above the top surface of the bridge on the bass side, and 3mm on the treble. The strip of bone should sit comfortably in the slot and should not have any backward or forward movement. It is normally just over 2mm wide. The height measurements are a rough guide to begin with, and when the strings go on they may be adjusted according to the type of action required. Some guitarists who enjoy playing fast runs and scales will often look for a low action; others look to a high action to be able to get more tone colour from each note. This is very much a matter of personal taste. The edge of the saddle nearest the tail block is sloped downwards to allow the string to sit securely on its way to the bridge pin. Many makers will put an opposite camber where the 'G' string sits, to help improve intonation by lengthening it by a fraction (**photo 94**). At the other end of the fingerboard the nut is also made from bone but is thicker at around 5mm. The height of the nut should allow the strings to sit just under 1mm above the height of fret one and requires six grooves so they can be held in place as they are plucked. The grooves that hold the strings in place in the nut may be lowered if the player wants a low action at fret 1. As mentioned earlier the top 'E' string (also called No.1) is usually no more than 3mm from the edge of the fingerboard on Baroque guitars, whereas today on a full-sized classical guitar, it can be as much as 6mm. The bass 'E' (No.6) string sits at around 2.5mm from the edge while the remaining grooves are equally spaced between these two. As with the saddle, the back of the nut should be sloped down towards the headstock (**photo 95**).

Stringing up & tuning

There are very many makes of classical guitar string to choose from. The Early Music Shop in Saltaire, for example, can supply gut and so called 'Nylgut' strings for those wishing to reproduce a relatively authentic sound. For this guitar I chose D'Addario EJ45 low tension ones (**photo 96**). I have used D'Addario strings for over 50 years and they have always been very reliable (see supplier list). The instrument is then tuned in the standard way – 'EADgbe', where middle 'C' is the 'b' string held at the first fret.

The carrying case

The final task is to make a case – although cases for smaller guitars are available from good music shops they can be expensive and almost never fit perfectly. This case is really just a box lined with foam rubber covered in crushed velvet. A neck support should be put in place and a method of keeping the instrument firmly located is necessary. Hook-and-loop strips hold the neck nicely (**photo 97**). It is a good idea to fit 90° hinges to the lid as guitars are often damaged by lids falling on them while they are taken out or put into the case.

To protect the outside of the case I painted it with Ronseal cupboard paint, which is very hard and durable. The corner caps are optional but add a professional looking touch. A strong handle is needed as once in the case things are quite heavy (**photo 98**). The guitar is deliberately a tight fit in the case to prevent it from bumping around while it is being carried (**photo 99**).

The beautiful instrument that you will have made during the course of this series will certainly become a family heirloom.

In closing I would like to express my gratitude to Chris Large of Nantwich, a superb luthier who gave me help and inspiration in my first attempts to build guitars in the Baroque style, in particular with an understanding of the intricacies of the parchment rose. Thank you, Chris.

98 The exterior of the case

99 The guitar is intentionally a tight fit

SUPPLIERS

These suppliers stock everything from Baroque guitar tuning pegs, through to strings, finishes, tools, timbers, bindings, purflings, calfskin vellum, drawings/plans and books and videos on guitar making and in the one case (Elena Dal Cortivo…. and just look at her work!) complete parchment roses made in traditional patterns

- **www.stewmac.com** – for all materials, tools, plans, drawings and accessories, and in particular bearing-guided router cutters for purflings and bindings
- **www.tonetechluthierssupplies.co.uk** – for timbers, tools and rosettes (not parchment roses)
- **www.luthierssupplies.co.uk** – for timbers, tools and plans
- **www.madinter.com** – for tools, exotic timbers, Baroque guitar pegs and many accessories
- **www.tonewoods4luthiers.co.uk** – for beautiful, exotic timbers and inlay materials
- **dictum.com** – for fine quality luthier tools and some fine timbers (especially Alpine spruce)
- **www.smallwonder-music.co.uk** – for inlay materials, purflings and m.o.p materials
- **www.eurofinishes.com** – for General Finishes acrylic resin
- **www.luthiersnook.com** – good for Baroque guitar pegs
- **www.williamcowley.co.uk** – calfskin vellum for the parchment rose
- **www.schreinerhistoricalguitars.com** – information source for help building a Baroque guitar
- **www.harmonialutherie.com** **www.cincinnatiearlymusic.com** – as above
- **www.parchmentroses.com** – just look at her work on parchment roses and gasp!
- **www.graphtech.com** – for 'Presentation Style' bridge pins with m.o.p inlays
- **www.earlymusicshop.com** – gut and similar strings for early instruments
- **www.stringsdirect.co.uk** – for D'Addario strings in full or part sets

Former principal Anselm Fraser (left) with son and current principal, Tom Fraser (right)

CELEBRATING 35 YEARS OF FINE FURNITURE MAKING

2020 marks the 35th anniversary year of the **Chippendale International School of Furniture**. Here **Tom** and **Anselm Fraser** reflect on the history of the School and the exciting opportunities that lay ahead

2020 has been a year with its fair share of challenges, but it also marks the 35th anniversary year of the Chippendale International School of Furniture. From humble beginnings in 1985, the School was founded by former principal and my father, Anselm Fraser, who developed it over the years into the world-renowned institution it is today. Fast forward to now, where I have been principal for one year after taking over from my father.

From humble beginnings to global recognition

The Chippendale School has grown from modest workshops that accommodated just four students, to renovating a derelict farm building into the new School campus – where we now number about 45 students in total at any one time. Countless students have joined us over the last 35 years to hone their furniture making and business skills, with many of these travelling from around the world, from Germany and the US to Japan and Barbados, to study here. Of course, we couldn't have grown without the expert knowledge and commitment of our valued tutors, some of whom started with us as apprentices and are still with us today – they are truly part of the furniture!

Overcoming adversity

Of course, the last 35 haven't come without their own set of challenges. Immigration rules have been tightened up over the years, and since we are committed to welcoming students from around the world, we endeavoured to become a tier 4 sponsored learning institution, and have a highly trusted sponsor status.

Living on campus when the School was a building site was difficult to begin with, but it has more than paid off with the high-quality workshops we now have access to everyday.

COVID-19 has of course been a challenge – it may be too early to celebrate, but we feel we haven't done too badly considering the circumstances of this year, and have even received a record number of applications to our Professional Course.

The School now teaches up to 45 students at any one time

The School attracts students from around the world

Success stories

Former principal Anselm Fraser reflects on the School's history: "It is extraordinary to look at the School as it is today when I remember what it was when we started out all those years ago. It has certainly not been an easy journey, but on the whole the highs most certainly outweigh the lows.

"It is immensely rewarding to hear how our School has impacted the lives of our alumni around the world. I had a vision of what I wanted the School to become, but the reality has far exceeded expectations."

Some of our notable students include Ewan Ogilvie who set up Ogilvie's of Haddington upon graduation, and Mike Whittall, who founded his business Ochre & Wood. Both create unique custom-made designs for clients, and are only two of the many successful businesses that have been set up as a result of our Professional Course.

Evolving with the times

The exciting thing for me as principal is that I can see such an opportunity for developing the School even further. My aim is to build on the existing reputation of the Professional Course, while at the same time expanding our short course offering. As we establish these short courses, we will look to attract a whole new team of tutors from around the world. As we move into other crafts such as pottery, metal working and weaving, we will welcome new students that would otherwise not have come across our School.

A brilliant example of the students' work will be on display at our end of year show, which is taking place later this month. It's always so exciting to see the fruits of their nine months of hard work, and provides a glimpse of student work to watch out for in the future.

Plus, we are also looking ahead to the new class of students coming in later this year – it's always so inspiring to have fresh faces and ideas in the workshops. Finally, a huge thank you to everyone who has been part of the fabric of the School over the past three and a half decades – here's to the next 35!

FURTHER INFORMATION

If you're thinking of becoming a part of the Chippendale School's legacy, why not take a look at the range of courses on offer: **www.chippendaleschool.com/cabinet-making-courses**

LAGUNA REVO 12|16

Innovation and build quality have been key to Laguna's success and they are fully embraced here in the new Revo 12|16 Midi lathe.

Turn to Perfection

Precision heavy duty cast iron bed, headstock, tailstock and banjo for accurate turning.
1Hp motor with 'Pulse Width Modulation' to ensure constant torque and speed.
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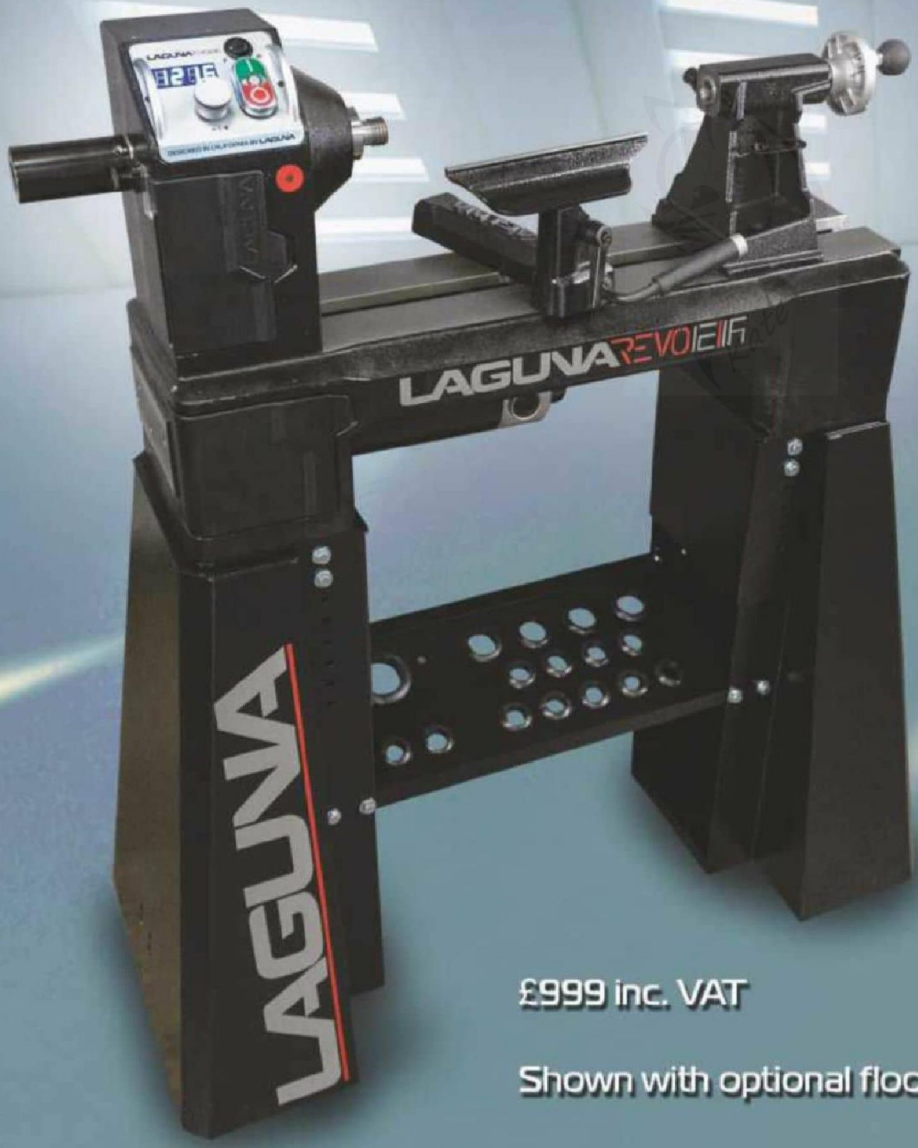
This is a unique high quality midi lathe unlike any other out there.



Optional Expansion Set:
10" Bed extension kit
also allows outboard
turning up to
16" diameter.
£179 inc. VAT

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Shown with optional floorstand : £329 inc vat

For more details and stockists please visit www.lagunatools.uk

TURNED TREASURES

Using an old dismantled satin walnut sideboard, **Andrew Hall** is commissioned to make two cigar box guitars and two trinket boxes using various upcycled parts

This was an unusual commission. A friend had sold his mother's house after she had moved into sheltered accommodation and all the furniture sold or distributed among family, with the exception of an old 1930s satin walnut sideboard, which had a lot of sentimental value.

My commission was to make four small trinket boxes: two for his sisters, one for his wife and another for his mother. We were chatting and I was showing him my Blues Bowls and cigar box guitars and he said he would love a cigar box guitar as he plays a standard six-string version. I suggested making one using pieces taken from the sideboard, and that's how the commission came about.

1 I started by carefully taking the sideboard apart and cutting up the panels and framing, keeping the pieces to one side for the guitar and trinket boxes. I soon realised there would be enough for two guitars and decided to make one four-string and one three-string, so he could have the choice of which he'd like

2 I then glued up the framework, which I think was mahogany due to the age of the sideboard and the fact a polyurethane glue was used

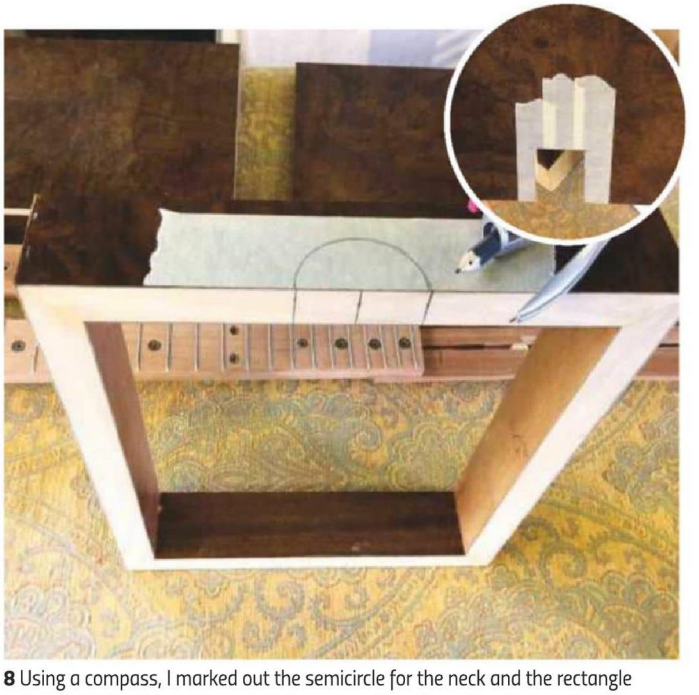
3 I paper-jointed the two sections together using PVA glue as I would need to split the necks once turned and then remove the excess polyurethane glue using a chisel

4 I placed the section between centres on the lathe, and as an additional means of security, put a 75mm screw in each square section at each end to make sure the material didn't separate with centrifugal force, as the two sections were paper-jointed. Once the turning was complete, it was basically a case of turning a spindle from square to round using a spindle roughing gouge

5 I split the turning at the paper joint using a bevel-edged chisel, ready for shaping on the bandsaw

6 Shaping of the head of the guitar and heel then took place using the bandsaw

7 Using the tops and sides of the sideboard, I cut up the sections to form the boxes. Using a router, I cut a groove around the edges of the boxes so that only the veneer of the satin walnut would be seen when they were complete. The boxes were then mitred and glued using picture frame clamps

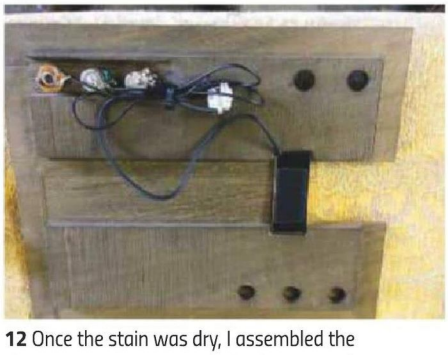


8 Using a compass, I marked out the semicircle for the neck and the rectangle to house the fret board. To protect the veneer, I used masking tape and a very fine jigsaw to cut the pieces out

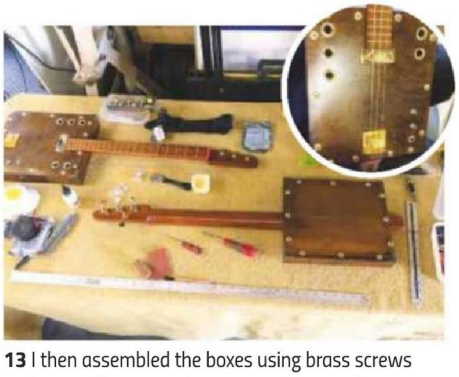
9 The necks were then marked and cut to fit. The boxes and sections from the sideboard frame were also used to make the fret board. I only had short sections left, so I joined them at fret positions and used screws as the fret markers. Next, using a crown guitar fret saw, which has the exact blade thickness for the fret wire, I cut the remainder of the frets

10 Fret wire was then fitted using a nylon hammer. I used fret pliers to cut the frets, then filed, sanded and lacquered them using Chestnut melamine finish

11 I lacquered both necks at the same time and then stained the inside and edges of the boxes using Colron Jacobean dark oak spirit stain. When I use stain, I always ensure to wear a solvent-proof mask and gloves when applying it

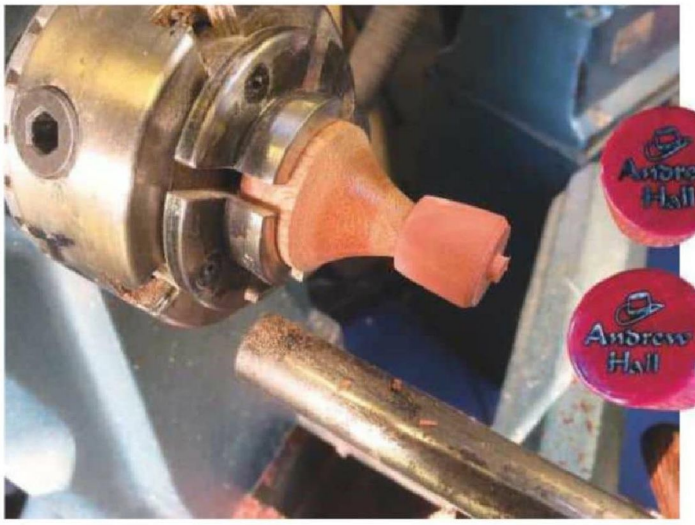


12 Once the stain was dry, I assembled the electronic components, which I buy as ready soldered kits from Amazon. They comprise a pick up, tone, volume and jack plug



13 I then assembled the boxes using brass screws and cups. I don't use glue in case I ever need to get into the electronics. Strings were then added and tuned to G, D and G for the three-string guitar and G, D, G and B for the four-stringed version using a small electronic tuner on the head of the instrument. The brass acoustic holes are canvas eyes

14 I used pink ivory for the nut and tail bridges...



15 ... and decided to use the same wood for the tone and volume knob. I made them large enough to accept my brand. I also tried the carbide tools, which turned the very dense pink ivory beautifully

16 One of the completed cigar box guitars

17 Finally, I made four 120mm diameter trinket boxes from walnut. I inlaid the tops and bottoms of the boxes using veneers of satin walnut, then the commission was complete

WOODWORKER'S ENCYCLOPAEDIA PART 20

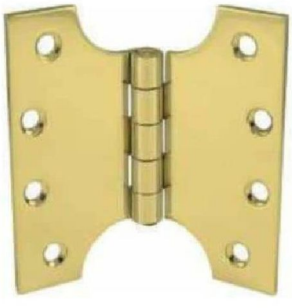
A-Z

Peter Bishop takes us on through 'H' and another letter bites the dust. We're hewing and hogging, finding honeycombs and slipping on into the Is to discover more secrets from the woodworking world

A German carpenter (Zimmerer) hewing a log into a beam. Note the blue chalk line snapped on the log to which the hewer works

Hewn timbers

This is lumber and timber sections that are roughly cut to size using axes and/or adzes. It's not a production method used today although you will still see it practised in some remote regions. The use of an adze can produce a beautifully, slightly indented surface, which is hard to achieve any other way.



102mm steel Parliament hinge in polished brass, available from Toolstation

'H' hinge

As the name suggests, this is a hinge shaped like a capital 'H'. It also has an alternative name – the Parliament hinge. These are often found on period furniture. Because the central sections are rather short, in comparison to the rest of the hinge, they tend to wear easily. The modern versions are not so refined or defined. These tend to have bigger wings each side, which I'm not so keen on.

Different types of hinges

Hinges

I don't really have to say much here; we all know what these are! However, there's a mass of different types, shapes and sizes out there. Just be sure that the ones you pick for your project will do the job required and last as long as needed.

Hip joints on a roof

Hip or hip joint

This is the point at which two sloping roof sections meet.

An industrial wood chipper

Hipped roof designed and built by Melingoed LTD

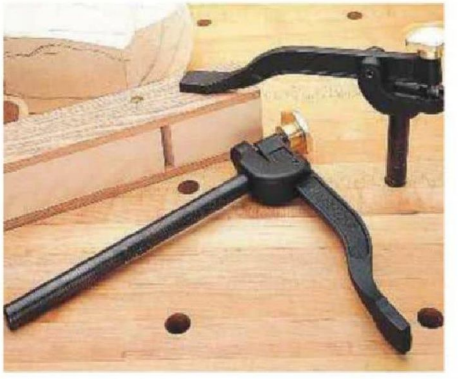
Hipped roof

This is where, at the end of a ridged roof, a gable end is not formed but rather slopes away. More of a design feature than for saving wood. Creating a hipped roof is more intricate and requires more attention to finishing off the roofing materials, such as slate or tiles. It also restricts space in the attic.

A mobile wood chipper

Hogs & chipping machines

Hogs are machines that are often found in sawmills. They are usually fixed in place and you take the wood to them but some can be fitted onto the power take off systems at the back of a tractor. Their function is to break down and shred into wood chips anything that is presented to them. It's a way of controlling waste and turning it into something useful. They can also be found in production lines and used specifically to produce a range of chip sizes for the production of chipboard. On the other hand, chipping machines tend to be mobile. I suspect we've all seen these at work on the roadside. When the verges start to get overgrown with small saplings and brushwood, a gang of workers will appear to clear it. The chipping machines deal with the small stuff, which is usually left behind, and the big stuff is cut up for firewood.



Veritas bench holdfast

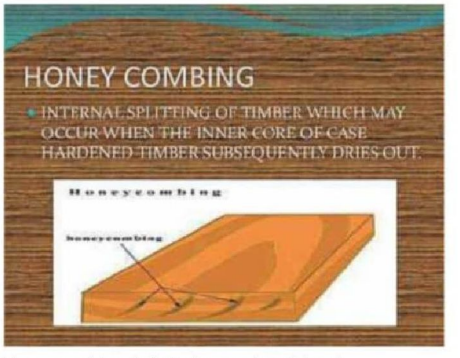
Holdfast

A simple device that can help you hold down a piece of wood on your workbench. The original holdfasts were made from a strip of steel rod or bar. They have a straight shaft with a curved head. Fitted through a hole in the bench you tap them down onto the workpiece to hold it in place. This type is still available. The modern versions slip into a pre-positioned hole and have a wind-down clamping head above.

Flattening and straightening boards

Hit & miss

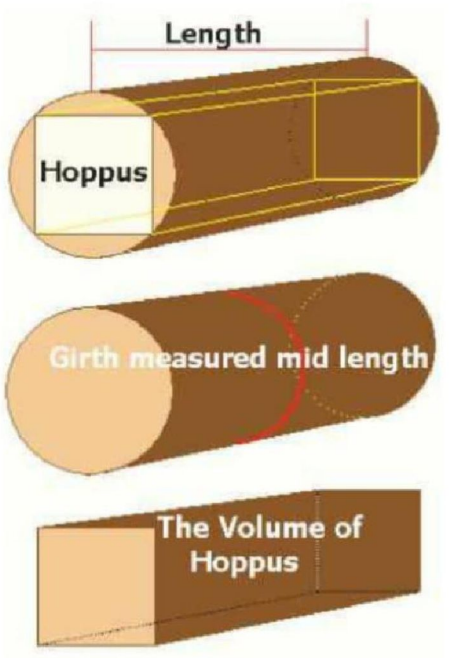
When we plane a surface and do not entirely remove the original saw marks, this is called 'hit and miss'. It might be the result of several factors: the size of the wood we started with was a little bare, or it might be cupped or twisted. To avoid hit and miss, and get a smooth, planed surface, we might have to plane away more than we anticipated. When just regularising stuff to size, hit and miss can be OK.



Honeycombing defects in wood explained

Honeycombing

This is a drying defect in wood where the core part opens up, thus creating honeycomb-like fissures. It's caused through drawing the moisture out of the central part of the plank too quickly, which causes the outside to shrink slower than the core. It's difficult to reverse the damage once caused. The cracks can be closed up but they will show if the wood is cut. Visually it's quite difficult to spot and it's only when cut that the worst of the damage can be seen.



The Hoppus measure explained

Hoppus measure

This is a particularly useful and internationally well known way in which to calculate the volume of a standing or felled tree trunk. It was first conceived and publicised in the 19th century, by someone called 'Hoppus', and has been in continuous use ever since. Measurements are taken of the length and average girth, the circumference of the trunk, and then, using a book with the calculations set out in tables, you are able to work out the volume allowing for an element of waste during conversion. It must be pretty accurate for it still to be in use!

Horns on windows

Wooden window frames have traditionally been made using mortise & tenon joints. In a simple frame the head, the piece that runs across the top and the cill, the bigger piece running across the bottom, are mortised. The two side pieces that make the frame complete, the jambs, are tenoned into them. The head and cill should overhang the edges each side. These overhangs at the top are called 'horns' and are designed to keep the frame up together until just before installation when they are cut off. The cill overhangs are cut to fit round the brickwork but not removed. With the introduction of different jointing techniques, we don't see so many windows with horns on them. That's fine as long as they don't fall apart.

Housed strings or stringers

Enclosed stairs are made with a pair of 'stringers', the long pieces running up each side, and variations thereof, a riser, the bit in front of the tread and a tread. Open staircases may still use stringers but forgo the risers. Housed strings are so called because they are cut to accommodate the treads and, when required, the risers. It's not a straightforward job to work out where to cut these trenched housing joints. It's best left to the professionals unless you have the time or inclination to sort it out yourself.

Housed stringer stairs

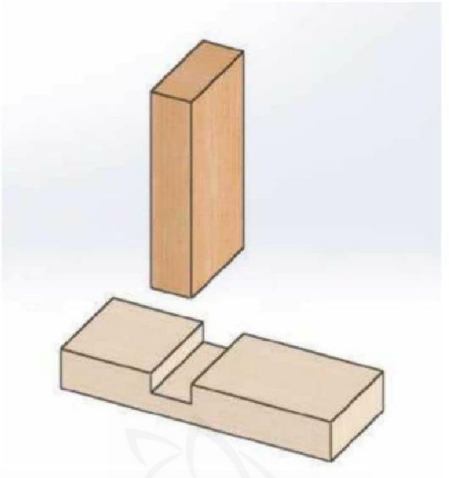


Diagram showing a housing joint

Housing joints

These are joints that are made with a trench on one component that will then have fitted into it – 'housed' – the other component. They are simple, easy to make and have a range of uses, including the strings as described above.

Traditional willow hurdle fencing

Hurdles

Today hurdles are made as fencing panels in many shapes or forms. Before becoming popular as a design feature in our gardens they would have been used for practical purposes on farms. etc. I guess they came about as a useful way in which to use local wood products. They're made from coppiced hazel and willow in most cases. Onto vertical staves the coppice wood is woven to make a strong, solid panel. These can then be put to good use in a variety of ways.

Incipient decay

This is the early stage of a fungal attack on wood. The associated features will be a 'musty' smell and, most likely, some signs of surface discolouration.

Indigenous

This refers to plants, in our case trees, that are naturally found and grown in the home county. For example, here in the UK the first ones that spring to mind are oak, ash and beech, etc. Some of these, and various different types thereof, will also grow in different parts of the world but our local ones are 'indigenous' to us. The alternative is 'exotic'. These are trees that would not be naturally found in the UK. They might have been introduced, by the Victorians in particular, but they will always be exotic to us.

An inlaid table top

Inlay

This is the art of cutting away part of the host wood, the carcass, and inlaying into it another, or several, contrasting materials. This may or may not be wood but the objective is the same. Its purpose is to enhance the overall appearance of the piece they are applied to. Don't confuse with marquetry and parquetry, which we'll deal with later on in the series.

Inserted or loose tenon

You might use an inserted tenon when you need to make a stronger joint in lighter wood. Effectively you'll cut two mortise holes – one in each of the joining pieces – and then make a loose tenon to fit. For general jointing, you can use a flat dowelling machine to make the joints for you and then insert a pre-shaped tenon into the holes.

Insulation board

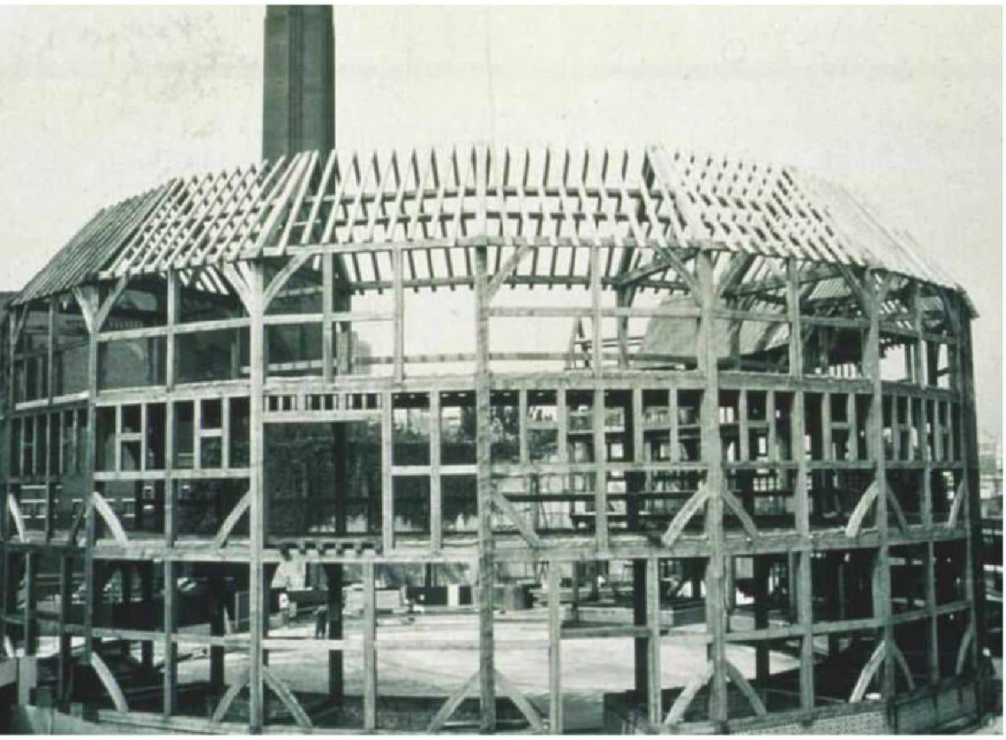
This is another sheet material from the fibre boarding family. This time it is not compressed so much and is lightweight to handle. It has little integral strength but has uses in wall divisions and partial insulation.

Interlocked grain

We mentioned this previously under the 'grain' heading. It's a grain pattern that is created by wood fibres running at varying angles across the face of the board. It's difficult to achieve a flat, planed surface without care and attention.

NEXT MONTH

In part 21 of this ongoing series, Peter looks at timber, including on the round, jacker or surface plan, jigs, joints, kerf, keyhole, and many more



Reconstruction of the original 'Globe' theatre

In the speech introducing Shakespeare's *Henry V*, first performed in 1599, the Chorus refers to the 'Globe' theatre, which staged it as 'This Wooden O'. However, wood was being used extensively for dramatic presentations long before the Elizabethan age.

The Roman writer Horace tells us that the ancient Greek tragedian Thespis (from whom our word 'thespian', for actor, is derived) travelled with a wooden cart, which he employed as a stage in any suitable open area, such as a market square. This was, in fact, the location of the ancient Athenian theatre, which used temporary wooden stands (known as 'ikria') for seating.

Although the Romans later became familiar with Greek theatres, they preferred to design their own. These, too, were of wood, but for specific festivals, and made to be easily erected and dismantled. This didn't, however, prevent many being both large and very elaborate.

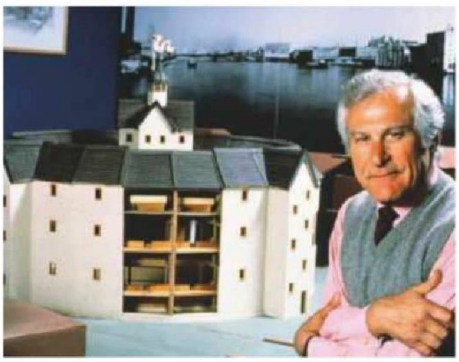
Wagons & masks

Like the Greek Thespis, the guilds, which performed the medieval mystery plays, did so on wooden pageant wagons. Their exact appearance is uncertain, but they could be dismantled and re-assembled. One of the four major cycles of the plays was at Coventry, and Shakespeare, as a boy then living at nearby Stratford-upon-Avon, may have watched one there in the 1570s. Wooden carts are still used in modern enactments of the mystery plays, those at York being the best-known.

Masks were an important element in Greek theatre, and made of lightweight materials, including wood. Highly-stylised wood masks are still used today in the Noh theatre of Japan. A carved wooden base is coated in plaster, and the dried plaster then lacquered and gilded. This is very skilled work, and the woodcarvers are held in high regard. Wooden masks also feature in the drama cultures of Bhutan, Java, and Bali.

'A remarkably complex machine'

The theatre stage has been described as 'a remarkably complex machine'; it can entail multiple entrances and exits, fly spaces, trap



Sam Wanamaker with an early model of the Globe Project

Cart as used by Thespis, the Greek travelling player

This wooden ‘O’

Paul Greer explores the various roles wood has played in a theatre environment through the ages

rooms, and revolves (turntables), requiring expert carpentry. Dramatists in ancient times sometimes resolved their story by divine intrusion. This was known as the 'deus ex machina' (Latin for 'the god from the machine'), and involved an actor descending from on high onto the stage. This was achieved by operating a pulley on a wooden 'crane', and introduced a powerful effect, typically forming the denouement of the play.

Wood is also used in the theatre to make 'flats'. A flat is an upright piece of scenery, consisting of a timber frame covered with plywood or canvas. Its function is to enable easy changes to the stage set, or obscure areas best left unseen by the audience, including spaces holding props. Hardboard is sometimes used instead of timber, but is heavier, and prone to losing its shape.

Most theatres hold a selection of flats made to a standard size, and to achieve realistic settings where required, some have windows or doors already built into them.

Larger wooden stage features (like flats and furniture) are known as 'set' props, and the wooden cubes, which actors often sit on during rehearsals, also fit this category. Smaller ones are called 'hand' props, and may include unusual items. In productions of *Hamlet*, for example, the skull of Yorick, the jester, is typically made of wood.

Where stage action is vigorous or even violent, apparently ordinary wooden items may in fact be specially made. Furniture is an instance, if the plot requires a chair or table to be pushed over, or lifted, possibly for attack or in defence. In such cases, a light wood may be cut or painted to resemble a heavy one. Comparably, in history plays, a shield may need to be manoeuvrable in combat, and therefore made of wood rather than metal.

Medieval mystery Play, Pageant Wagon

Apparently marble columns are actually made of wood, as shown here on the stage of Shakespeare's Globe Theatre

The 'Globe'

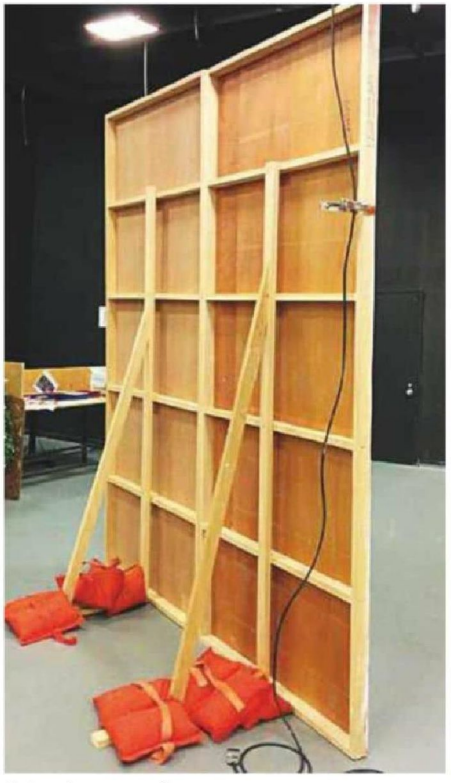
The 'Globe', in Elizabethan times, became the most celebrated theatre; however, a notable carpentry operation was needed to establish it. Shakespeare and his colleagues dismantled the (then) 'Theatre' at Shoreditch, transporting it (during December) in pieces through the city and across the (then frozen) Thames, to Bankside, where it was re-born and re-named.

The original 'Globe' perished, but an exact replica (called 'Shakespeare's Globe') stands on the same site today. It was the dream of the American film-maker, Sam Wanamaker (rightly termed a 'visionary' on the theatre's commemorative plaque), who, tragically, died before its completion. He stipulated that it be constructed of the same materials and by the same methods as the original. This meant a frame of wood, rather than metal, which considerably stretched both the project's duration and budget. However, his insistence has been rewarded by the enhanced authenticity of the building, and the frequently-voiced appreciation of theatregoers.

Two notable features of the new 'Globe' are a wooden gallery above the stage for minstrels, one token of whose importance is that nearly all Shakespeare's plays include music in some form. Another is the (seemingly) marble columns on the stage, which are in fact of skilfully-painted wood.

Wood features less as decoration in theatres built after World War II. This reflects not only enthusiasm for modern materials among architects and designers, but also an ambition to create a distraction-free space in which audiences might best respond to the new and often challenging plays of the 1950s and beyond.

The wooden content of theatres has always presented a fire risk, and during a performance in 1613, the 'Globe' itself was destroyed in this way. In 1794, the Drury Lane Theatre, in London, installed the first safety curtain, which in time became a statutory requirement in large theatres.



A Broadway stage flat

A selection of Japanese wooden theatre masks

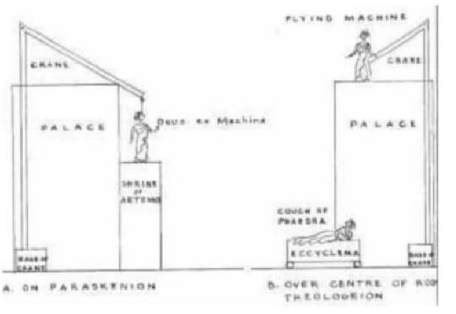
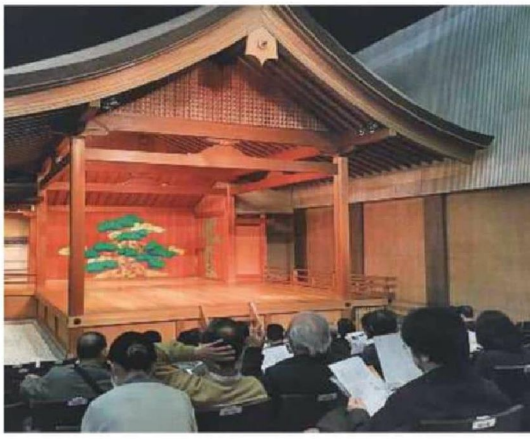


Diagram depicting Greek theatre deus ex machina

A wooden revolving stage with turntable

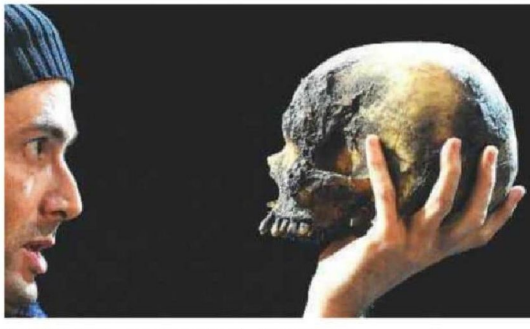
Safety curtain at the Paramount Theatre, Newcastle



Japanese Noh theatre stage

Joey, the *Warhorse* puppet

Wooden cubes for rehearsals



Yorick's skull – an example of a 'hand' prop

This didn't spell the end of conflagrations, though, including one at the Theatre Royal, Exeter, in 1887, which resulted in nearly 200 fatalities.

Warhorse

Internationally, wooden puppets have provided an element in the theatre for centuries, but rarely can one have featured as spectacularly as in the stage production of Michael Morpurgo's novel, *Warhorse*. Made by the Handspring Puppet Company (formed in 1981 in South Africa), the life-size puppet represents Joey, the horse in the novel, who is transported from Devon to France at the outbreak of World War I. He is manipulated with such skill as to produce an uncannily lifelike effect. Leather, steel, and cables make up much of the body, but the frame on which they rest is made of cane, softened to be malleable, and shaped.

Cane's lightness is ideal, as it keeps Joey's body weighing under 70lb, yet strong enough to bear a male rider in certain scenes. Only endless study and ingenuity enabled the designers to devise an apparatus by which Joey could simulate not only walking, trotting, and galloping, but (via ear and tail movements) emotions, too.

Japanese theatre

Wood is a prominent feature of Japanese theatre, the two best-known forms of which are Noh and Kabuki. Both have existed uninterrupted for centuries, and even 300 years ago had introduced advanced staging features such as trapdoors and a revolving stage. The Noh performance area consists of a platform completely covered by a curving temple roof, both being of wood. The audience sits on three sides of the stage, but separated from it by a garden composed of gravel and plants, and more wood, in the form of small pine trees.

Macbeth

Trees also make an appearance in productions of Shakespeare's *Macbeth*, to fulfil the witches' prophecy that 'Macbeth shall never vanquished be until Great Birnam Wood to high Dunsinane Hill shall come against him' (Act 4, Scene 1), as Macbeth's enemies disguise their approach to his stronghold by advancing behind large branches.

We've seen that wood can simulate a material like marble, but wood itself can be counterfeited, something useful when the real object is too heavy or cumbersome. Plastic or papier-mâché, for instance, can be employed to produce large wooden beams, which are entirely convincing.

Courses

Courses in stage carpentry or scenic construction are well-established. The Royal Shakespeare Company (RSC) and Royal Academy of Dramatic Art (RADA) offer them, the latter's including short ones suited to people testing the level of their interest or aptitude, or gaining a springboard for entry to the profession.

For those able to commit three years to learning every aspect, the University of London's Royal Central School of Speech and Drama offers a full-time BA degree course in Set Construction for Stage and Screen.

Fake wooden theatre beams

Set Construction for Stage and Screen students

WW PROJECT

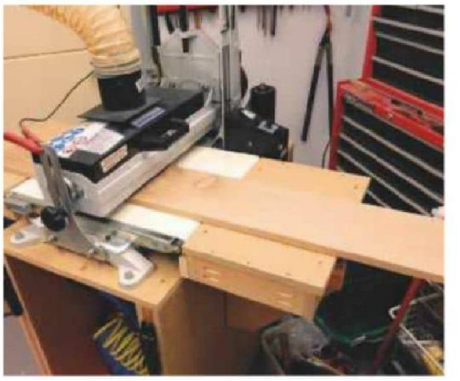
A USEFUL UNIT

Wishing to fill an empty space in his hallway, **Geoff Ryan** is pleased to find he has room for a mirror unit complete with a set of drawers – perfect for housing keys and other items

Redecorating our hallway, including moving a poorly placed radiator, left us with an awkward, narrow space behind the front door. While this was an ideal space for a mirror, it hadn't occurred to me that I might be able to squeeze in some drawers as well to hold the usual collection of hairbrushes and keys (which I was always losing). It was watching a YouTube video on making a small drawer unit that sparked the idea.

1 A friend had given me some oak boards a year earlier – they had been stored under cover in his greenhouse and were sound but damp. After spending a year in my timber store they remained reasonably flat and straight, so I ran them through the planer/thicknesser to get a better look at the grain. Two of the boards shown here were the right width for my purpose but the rest were too narrow – two of these were widened by biscuit jointing strips of oak onto them and then run back through the planer/thicknesser – these would be used for the drawer dividers and bottom panel, which would not be readily seen in the finished unit. The planed boards were then stored in the hallway for about four weeks to allow them to acclimatise to a centrally heated environment before any further work was carried out.

One of the boards had a large but attractive knot, which I wanted to use as a feature in the top panel. The planer/thicknesser had caused quite bad tear-out around the knot but help was at hand with my newly acquired thickness sander. Much of my equipment is second-hand but second-hand thickness sanders are as rare as unicorns, so this is one of the few items I bought new and have had no regrets. I often make boxes from wood I process myself from gnarly tree stumps and the sander excels in turning rough wild-grained wood into beautiful boards that would be difficult and time consuming to deal with by traditional methods (or, to put it another way, I haven't the skill, patience, or time to hand plane, scrape, then hand sand to achieve an acceptable finish)



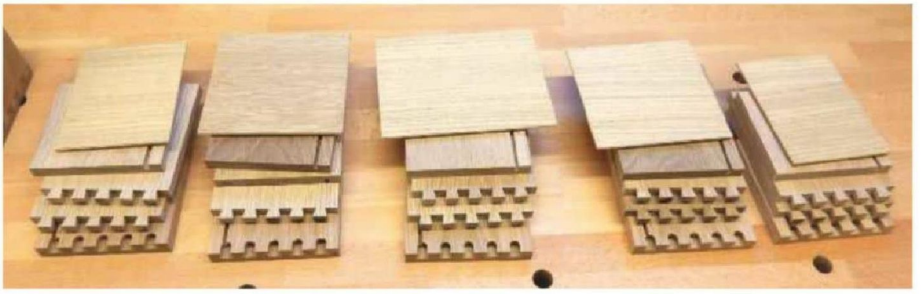
2 Good extraction is vital for a unit that creates such a large amount of fine dust. When I first used my sander I got a huge (and painful) static electric shock when I brushed against the dust extractor hose. All my fixed, plastic 100mm ducting has an earthed copper wire running along its length as static discharge can cause an explosion in fine dust. The solution was to earth the spiral wire in the flexible ducting and you can see a large crocodile clip connecting it to the machine frame here. The boards for the case and drawer fronts ended up at 17mm thick and those for the drawer sides and back 12mm. Having accurately consistent thickness makes the jointing process much simpler

3 Here you can see the tamed knot – it came out absolutely smooth and needed just a run over using a random orbit sander with the finer grits to achieve a perfect surface

THE MAIN BODY

4, 5 & 6 These photos show the assembled body of the unit. The overall dimensions are 840mm long × 154mm deep × 156mm high. The drawer separators are glued into stopped housing joints while the ends are dovetailed using an Original INCRA jig. I also now have a Trend DJ300 router jig, which was a gift from my neighbour who was giving up woodwork to concentrate on his model engineering. While the Trend jig turns out good consistent results the INCRA jig, while taking a little longer to set up and use, is more versatile and I have used it to produce a variety of finger and dovetail joints while boxmaking. In future I am likely to use the Trend jig for drawers and larger items up to 300mm wide and the INCRA jig for more delicate work. The Original INCRA jig is available from several UK suppliers for around £60 while the current Trend jig (CDJ300) is around £100. Photo 5 also shows the wall mounting plates, which are rebated into the back. All edges were well rounded over

THE DRAWERS



7 Here you can see all the components for the five drawers ready for assembly. Rather than have all the drawers the same width, the middle drawer is the widest with the others reduced in width to add some additional interest to the overall look. The front of the drawers is dovetailed while the rear is rebated and glued into grooves in the sides. The bottom is oak veneered MDF (I just happened to have some left over from another project) and floats in a groove in all four sides with enough clearance to allow for any seasonal movement

8 A finished drawer. Again, all edges were well rounded over, the fronts being run across the router table fitted with a small radius ovolo cutter

ATTACHING TO THE WALL

9 & 10 My house has breeze-block inner walls and while they are more robust than modern plasterboard stud walls, you still need to take care to achieve a good solid fixing, so I used 100mm long coach screws with substantial wall plugs. In photo 9 you can see the head of the coach screw – to allow clearance for this I drilled a shallow recess in the back of the two outer drawers using a Forstner bit (see photo 10). Also in photo 9 you can see a narrow strip of oak running along the bottom at the back of the housing – this was an afterthought to keep all five drawers level and required the unit to be dismounted so I could rout a groove along the back to accept it. My 'design' process usually involves a pencil, some paper, and a ruler and it generally works out fine – on bigger projects I do create a rough cutting list just to ensure I have enough material to hand, but I often find I am solving minor details as work progresses. I have tried SketchUp but find the pencil and paper approach adequate for my needs

THE MIRROR

11 & 12 The mirror measures 915mm high × 760mm wide. In the main photo you can see that the side rails are thicker (23mm) than the top and bottom rails (13mm). The glass is set into grooves routed into all four sides. When you buy mirror glass you will usually be asked if you need the edges grinding smooth – this is not necessary if it will be fitted into a frame, but do beware of the very sharp edges and wear gloves when handling. The corner joints are basically end halving joints, which are glued and screwed together. The mirror sits on top of the drawer unit so can be held against the wall using relatively light fixings. I drilled and plugged the wall in four places and inserted round-headed screws until the mirror frame would sit flat against all four. A dab of black paint was then applied to each screw head and the mirror carefully offered up and pressed against them. These paint marks gave the location for routing the keyhole slots shown in the photos. Using a router fence with micro-adjustment allowed me to position the slots accurately. I have found keyhole slots a useful way to hang a variety of items including the many clocks I build, signs, and lightweight shelves. You might also be able to make out some faint wording on the rear of the frame where I was experimenting with a laser engraver (Mirror, mirror, on the wall.... who is the funniest of them all?). In the end I decided not to add anything to the front as it might detract from the unit's simple lines

FINISHING

All surfaces were sanded down to 400 grit. The finish was three coats of water-based clear satin polyurethane, the first coat being slightly watered down to raise the grain for further sanding. I use inexpensive sponge brushes to apply this finish and they work really well, leaving little or no brush marks. Once the finish had properly hardened I gave everything a coat of furniture wax, particularly inside the drawer housings. The unit has been in place for over a year now, nothing has moved and no joints have opened up, but I still lose my keys!

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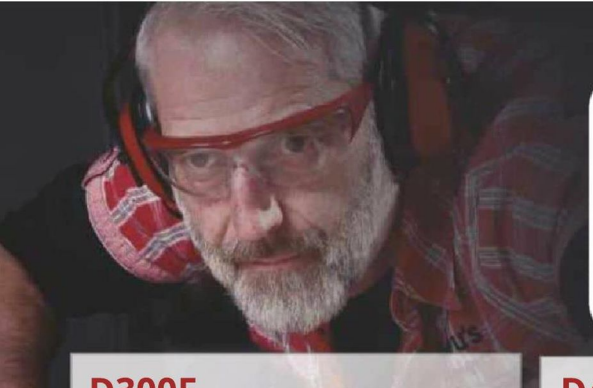

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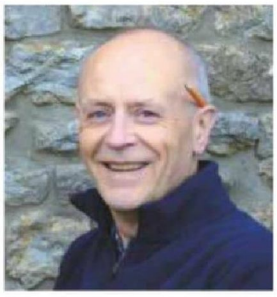
AROUND THE HOUSE WITH PHIL DAVY



Unless we already had a decent stock of timber before lockdown, I guess that for many of us sourcing materials for projects has been a problem. I've needed to replace quite a few floorboards in the house during renovation work and I always like to use new timber if possible. Perhaps it's something to do with making a fresh start. But the other day I had to replace a short piece in the hall before laying new oak flooring on top. With builders merchants closed, I was forced to recycle some old timber I'd been saving for firewood. Actually, the board was the correct thickness and didn't need too much cleaning up – just a few minutes' work with a belt sander to remove old paintwork. Defects were minor, plus I saved money. If we're not already adept at recycling timber, hopefully the current situation will make us think differently about how we source our materials. No doubt we'll get to hear plenty of top tips from resourceful readers over the coming months

USEFUL KIT/PRODUCT:
CLARKE CHT926 CONTOUR GAUGE

A tool that may not get used too often, a contour gauge can be hard to manage without for certain tasks around the house. Fitting flooring, tiles or similar work that involves cutting exact shapes can be tricky where cuts will be visible. A contour gauge creates an accurate pattern to work from, so you can transfer the profile required to the material to be cut. Matching up traditional skirting is a prime example of how it can be really useful, especially if replacement material is hard to find.

Made almost entirely from ABS plastic, the Clarke gauge consists of a series of thin splines that slide against each other. Contained within a rectangular frame, overall working width is 258mm. With the splines in line, you simply hold the tool against the workpiece and press it down as far as possible. This gives a maximum working depth of about 43mm, enough for checking shallow curves or mouldings, but not always sufficient for deeper shapes.

The frame has metric and imperial graduations on both sides, while four magnets along the back enable you to use the gauge conveniently on vertical metal surfaces. It works well enough on tall skirting, though bear in mind that some Victorian profiles can be much higher than 250mm, so you may need to adjust for this.

SPECIFICATION

- Magnetic backing for vertical surfaces
- Made from durable ABS plastic
- Measuring length: 250mm
- Profiles to any solid material

Typical price: £7.19
Web: www.machinemart.co.uk

Conclusion

Although it may have its limitations, this an inexpensive tool that would be useful for those flooring or period house renovation tasks. Handy when making one-off templates in the workshop, too.

THE VERDICT

PROS

- Tough construction; splines slide nicely

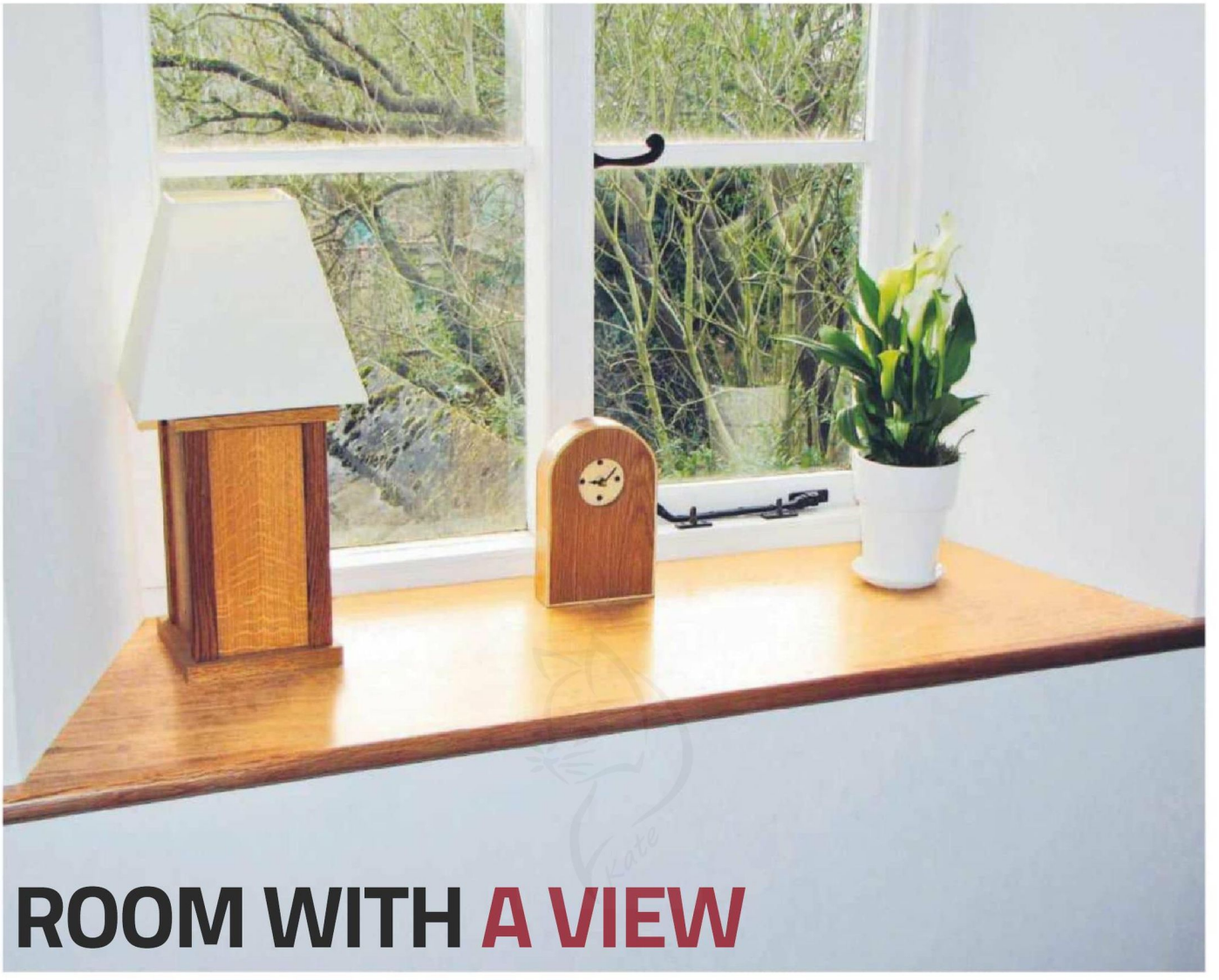
CONS

- Splines could be longer

RATING: 4 out of **5**

Made almost entirely from ABS plastic, the Clarke gauge consists of a series of thin splines that slide against each other

With the splines in line, you simply hold the tool against the workpiece and press it down as far as possible



ROOM WITH A VIEW

WINTER PROJECT: WINDOW BOARD

Takes: One weekend
Tools you'll need: Jigsaw, circular saw, router, sander, drill

Phil Davy creates more room in his cottage by stripping out window seats and replacing boards

When I bought my stone cottage many years ago, the bedrooms and living room all included traditional window seats. As the building was undergoing renovation, I decided to retain this feature but replace the original softwood seating with more durable and attractive oak boards. This was a fairly straightforward job as I'd stripped the old plaster off throughout, so any new timber could be fitted before re-plastering.

Some three decades on came the realisation that these seats had rarely been used to sit on, so it was time to make better use of the surrounding walls. Removing the seating, building up the masonry beneath and fitting new window boards would mean furniture could then be placed in front. Previously, the window seats were too low for this.

As the back of each seat also sloped upwards, the existing window board would be too shallow if refitted higher up. Also, the thickness of the existing oak (30mm) meant the top surface would finish too high up the sill and look wrong. The solution was to fit a new window board some 10mm thinner. To reduce potential bowing, I decided to use 19mm-thick veneered MDF, though this would need lipping along the front edge. Because 19mm thickness would appear too thin, gluing on deeper lipping would give the illusion of a thicker window board.

Out with the old

Once the old plugs were drilled and chiselled out, I could clean the old screw slots with the point of a bradawl. I'm happy to report that removing the screws was surprisingly easy. With solid wood window boards and frames it's standard practice to machine a rebate along the rear edge of the board, with a matching groove along the inner face of the sill. This enables the window board to slot into the sill, though to allow for movement it's important not to glue this joint.

When fitting shelving or similar in an alcove it makes life easier to make a template first, particularly in old properties. Not only will this improve accuracy, but you'll potentially avoid spoiling expensive materials by sawing in the wrong place. You can make a template from any thin material that's reasonably rigid.

Where several identical items need to be cut it's usually better to use 6mm MDF or similar. For a one-off project such as this, however, it's quicker to use cardboard. If you don't have a piece long enough for the template, simply tape a couple of sections together.

If you've not used veneered boards before, take care if sanding with power tools. Don't use a belt sander and always reduce the speed on a random orbit machine. Veneered MDF comes ready prepared, but surfaces will still require fine sanding before varnishing or oiling.

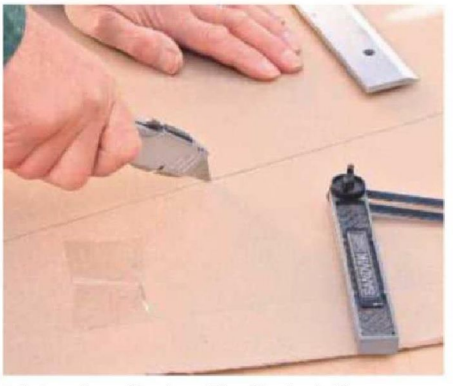
1 Although a traditional feature, the old oak window seat would have to go to free up wall space

2 Chop away plaster around timber with a cold chisel. Drill through plugs, unscrew and remove the existing window seat

3 Wall height has been increased with the new blockwork. After rendering and plastering it can then be painted

4 A template is necessary for making a window board that fits snugly. Use a sliding bevel to transfer the angle

5 If walls are uneven use a scribing tool to mark the card accurately. Tape two lengths together if you find it is short



6 Cut cardboard to size with a Stanley knife and check the template fits the opening. Trim if necessary

7 Cut MDF board to correct depth with a circular saw, running the tool against a straightedge for accuracy

8 Select the best face for the top surface and draw around the template. Stick masking tape over pencil lines

9 Cut MDF carefully with a jigsaw fitted with a fine-toothed blade. Tape will prevent the veneer from splintering

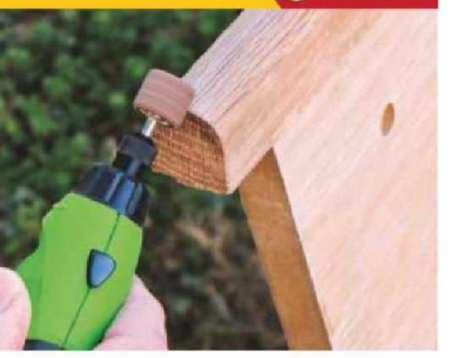
10 Check MDF fits into the opening and adjust if necessary. True up the front edge with a bench plane

11 Prepare lipping slightly oversize from solid oak and glue to front edge of the MDF window board

12 Plane lipping flush with the MDF surface. Use a cabinet scraper to finish, which will avoid damaging the veneer

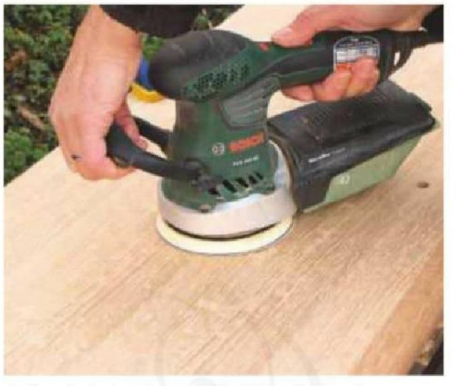
13 Saw to length, then rout the front edge with a bearing-guided rounding-over cutter. Complete with a plane

14 Use 120 grit abrasive paper to achieve a completely smooth profile, finishing with 180 grit



15 Round over ends of the lipping with a file, sanding block or mini-tool fitted with a drum sander

16 Mark screw positions and counterbore to accommodate matching oak plugs. Drill for 5mm screws



17 Sand window board with 180 grit abrasive. Dampen surface to raise the grain, then re-sand

18 Where there's a cavity between internal and external walls, fill with a suitable insulation material, as shown here

19 Mark and drill blockwork, then insert wall plugs. Fix window board in place with 5mm screws

20 Cut matching plugs from solid oak. Brush on PVA glue and tap them firmly into holes

21 When dry, saw off the protruding plugs and trim flush with a finely-set block plane

22 Fill gaps in masonry next to window board and sand down. A second application may be necessary

23 Lightly sand again and brush on a couple of coats of satin polyurethane varnish, thinning the first one

24 The deeper lipping actually makes the completed window board look more substantial

Dickies Workwear is giving five lucky readers the chance to win a pair of its Medford safety boots – the newest addition to the footwear range, designed to offer superior comfort, durability and protection

WIN! 1 OF 5 PAIRS OF DICKIES NEW MEDFORD BOOTS

Ideal for the colder months, the Medford boot features a waterproof leather upper, plus thermal insulation to keep your feet warm and dry in cold and wet weather conditions. The comfort offered by this style makes it especially suitable for those who spend all day on their feet.

Innovative design

Meeting the S3 safety classification, the Medford benefits from Dickies' innovative DTC outsole, which was designed by its footwear experts to achieve the highest grip performance on smoother surfaces. The DTC sole has ergonomic flex lines and geometric tread patterns for maximum ground contact, even in wet conditions.

The Medford style is anti-static and fuel- and oil-resistant. Additional safety features include composite toe-caps, which are lighter than steel alternatives while providing the same level of protection.

The details

To celebrate the launch of the new Medford boot, Dickies is giving readers the chance to win one of five pairs in the colour and size of their choice. The colour and size is subject to availability and alternatives will be offered if needed.

To find out more about the full Dickies footwear range, visit **www.dickiesworkwear.com**.

HOW TO ENTER

To be in with a chance of winning 1 of 5 pairs of Dickies new Medford boots, just visit **www.getwoodworking.com/competitions** and answer this simple question:

QUESTION:

What is the safety classification of the Medford boot?

The winners will be randomly drawn from all correct entries. The closing date for the competition is **23 October 2020**

Only one entry per person; multiple entries will be discarded. Employees of MyTimeMedia Ltd and Dickies Workwear are not eligible to enter this competition

triton

MASTERS OF WOOD

200W Orbital Palm Sander ¼ Sheet

TQT RSS

NEW

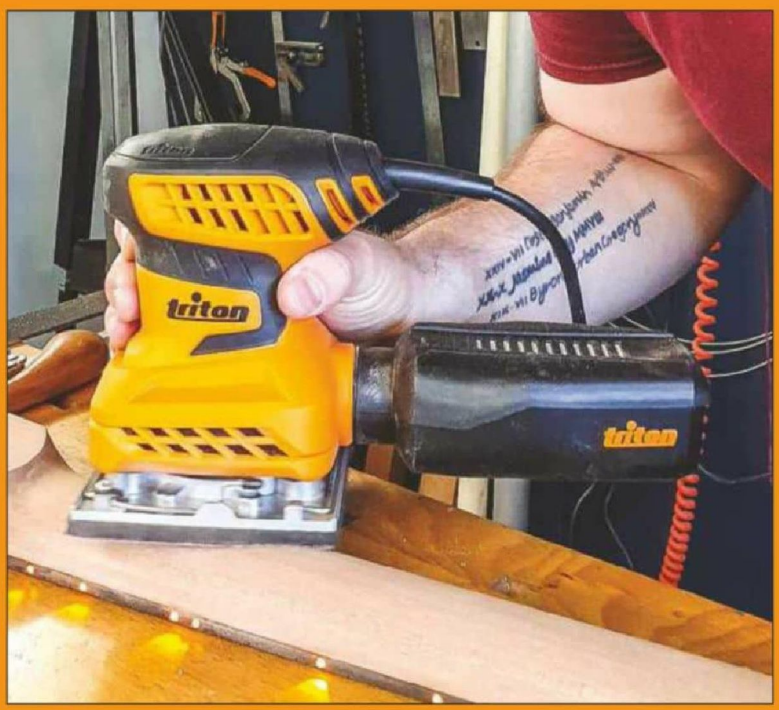
Packs A Punch!

This handy little sander offers lightweight, versatile sanding with exceptional comfort provided by the rubber over-moulded grip.

Featuring both clamp and hook & loop sandpaper attachment systems, and with a sandpaper punch plate included in the box, the 200W TQTRSS is built for your convenience.

Punch Plate included

Soft Carry Case included



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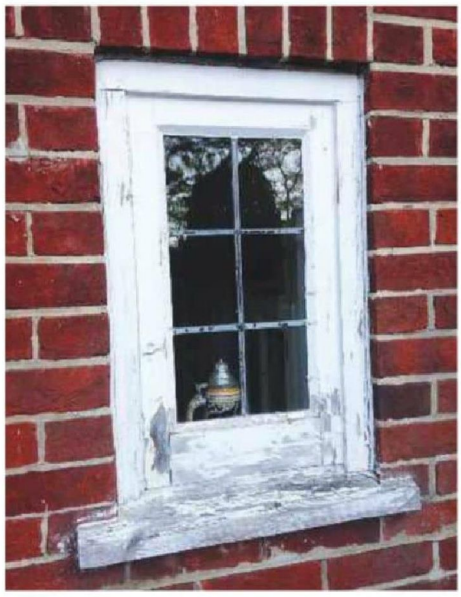
3YR GUARANTEE

WORN OUT WINDOWS

Peter Vivian gives his house a lift by setting about replacing two leaded lights

About 20 years ago we decided to have the windows replaced in our house as I believe they were the original ones from the early 1930s! I had considered making them myself but I was building my workshop at the time and the four bay windows are around 8×4ft, which would have been a struggle on my own, so we commissioned a local joinery to do the job. In addition to the four bays and five dormers, there are four small non-opening leaded lights, which we decided not to replace but repair and repaint. As it turned out, two were pretty rotten (**photo 1**), which wasn't helped by me inadvertently setting fire to one of them when I was stripping the paint (**photo 2**)!



1 A replacement was long overdue

Timber choice

Fast forward many years and I finally got round to making two of the leaded lights. The original windows were softwood and we had the joinery make the replacements in American white oak, but unfortunately I didn't have enough of the same. The oak had darkened over the intervening years, a combination of UV light and many coats of varnish, so the iroko I had in stock seemed a close match. I've been working with wood for longer than I care to remember, both for pleasure and profit, but I never cease to be amazed at how much timber is needed.

'Paneful' extraction

The window I had set on fire didn't offer much resistance to removal, but did throw up one problem: it had been installed at the time of construction and the two horns at the top of the frame – the head – had been bricked in. This didn't present any problems on the first one as the fire had all but destroyed one side. The other, however, was a different story and I had to resort to my reciprocating saw and brute force.

Construction method

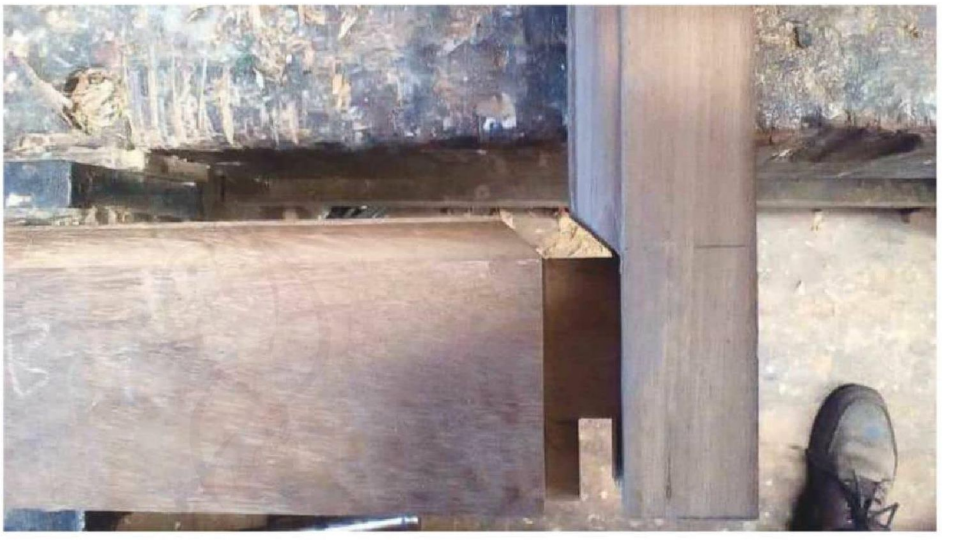
The windows are non-opening and consist of a frame within a frame, the outside comprising the verticals – the jambs, the top – the head, and the bottom – the cill. The inner frame verticals or styles and the top and bottom rails. On the originals with 'horns' at either end of the head, they were joined to jambs with through mortise & tenons, and on the bottom were bridle joints. As they were originally installed when the house was built, I wouldn't be able to get the horns into the sockets in the brickwork, so just used bridle joints all round.

New window given its first coat of varnish

2 Stripping paint = fire!

3 Temporarily boarded up

4 Haunched mortise & tenon marked out



5 Dry fitting

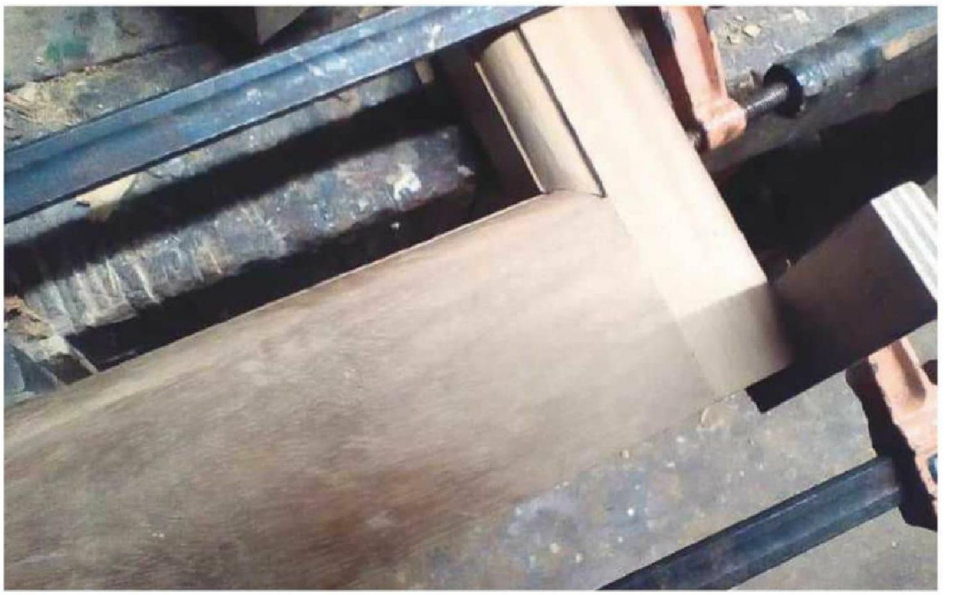
The inner frame is constructed with through mortise & tenons at the top but on the original the moulding for the glass was an integral part of the frame, which meant I had to mitre the moulded part, which has haunched mortise & tenons (**photo 4**).

Leading lights

I would have liked to reuse the leaded lights but they were too far gone. I then considered remaking them but my soldering of the lead 'cames' is a bit hit and miss. In the end I bought a reel of self-adhesive lead, which is available in several different finishes and the antique one was a good match. I had some old glass in the workshop so decided to upcycle it. After making sure the glass was completely clean and dry, the self-adhesive lead can be applied: it needs to be stretched to ensure it is straight and with the supplied plastic burnishing tool, the intersections can be neatened up to make it look almost indistinguishable from the real thing. The original glass panels were fitted with putty, but I didn't have any to hand so used silicone instead.

Installation

I used four 100mm hardened Torx frame fixings to fit each window, which screw directly into the brickwork with no need for plugs. I then sealed the joint between the frame and the brickwork with silicone and after that was dry, I applied two coats of Sikkens varnish. Two down and two to go!



6 Replacement window, glued and clamped up

MUSIC MAKER PART 1

In the first part of this article, **Matthew White** sets about recreating a music stand by the great Wharton Esherick, with a few added upgrades

I'm all about a good challenge when it comes to new and exciting woodworking projects. Although most of my work has been in making flag boxes, another popular subject has been the venerable music stand. Speaking again as an unrepentant band geek, I've had a good eye for building stands that are not only aesthetically pleasing, but functional as well.

I was approached by a local orchestra member to recreate a piece in the Yale University Art Gallery, a music stand by the American artist Wharton Esherick. The simple grace of the original was inspiring in its own right and the artist being a native of Pasadena (also guilty) meant I had to give it a shot (**photo 1**).

The buyer wanted to give it a few needed upgrades, however. My version would need to be played by an upright bassist (instead of seated), a rest added to hold pencils, as well as being able to be folded for transport.

To build your own will require a bit of knowledge of shaping and manoeuvring materials. The legs (basically tusks) are no small feat and the continuous tapers of the various components can be a challenge. That said, I recommend having the following:

- Table saw
- Bandsaw
- Disc sander and/or spindle sander
- Router – full set of roundover bits recommended
- Plane/chisel/spokeshave
- Festool Domino/biscuit joiner or pocket-hole set
- ¾ × 254mm timber for the legs
- 6mm brass pivot rod – 3 × 6mm brass square stock
- Patience (of course)

Planning

As you can imagine, it is extremely important to have a plan going into something this big. Start with an existing music stand, set it at the height and pitch you require, and get a couple of photos. I used my early prototype but any folding or Manhasset stand will work fine. I found that I needed a height of 1,168mm for the rest and a pitch around 20-25° to comfortably view the music (my angle cube came in handy here).

Before cutting any parts, draw up a plan (mine was built in Publisher, which is an easy system for building scaled drawings). Both of my views (the legs and top) are shown in **Figs.1 & 2**.

1 Wharton Esherick's original music stand, from 1962

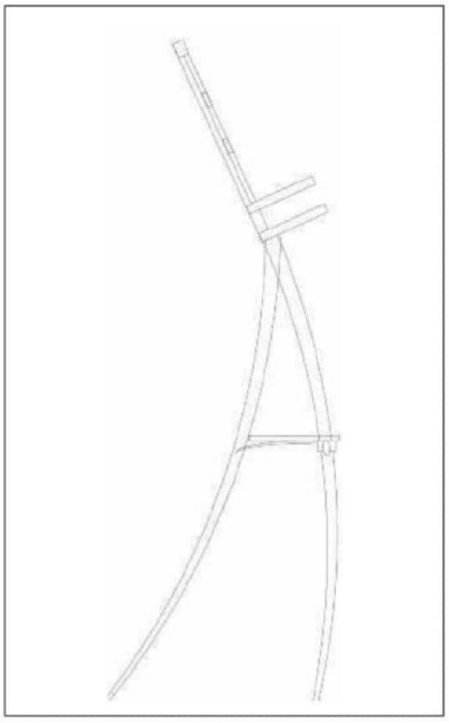


Fig.1 Music stand shown from the side

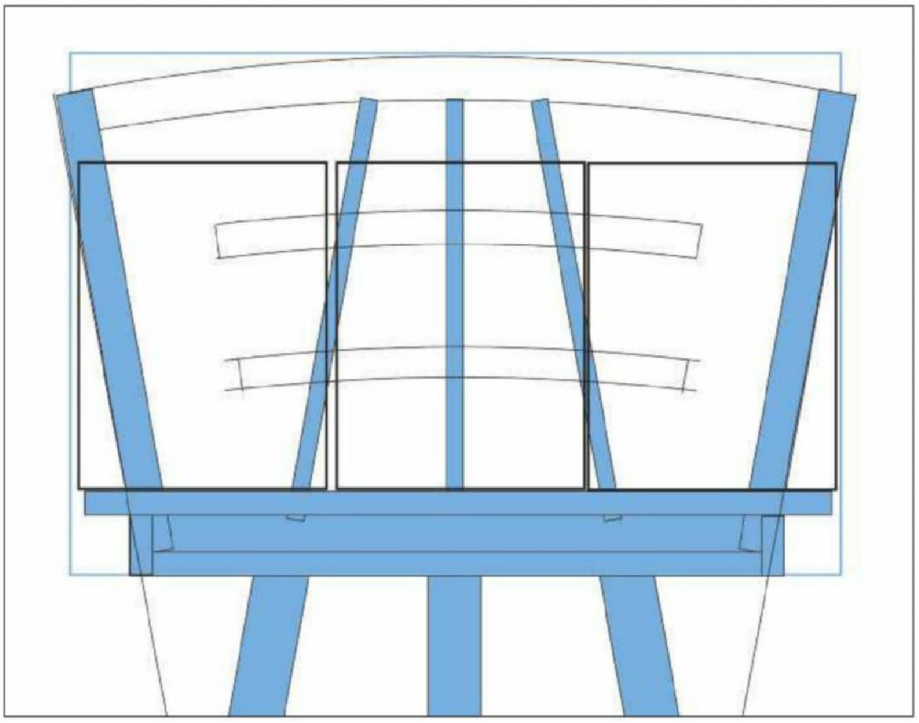


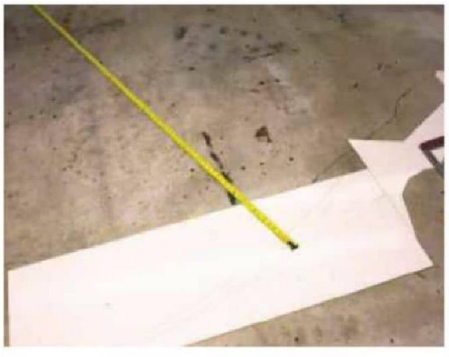
Fig.2 Music stand top

The first real action is to make a pattern for the legs. Set out a 6mm sheet of plywood and use a heavy tape measure to build a beam compass.

4 Estimated position of the shelf

Mounting a pencil at the end, keep the pivot just above the floor line and trace an arc roughly the height you're looking for. Keeping the pivot above the floor will give your stand the impression of being pushed forward like the original; I ended up with a pivot of about 2,032mm.

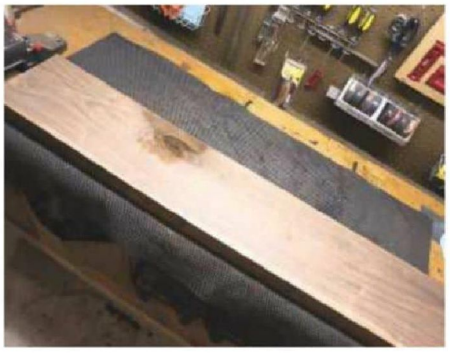
To make the taper, I went with a sweep from 50mm at the top to 20mm at the bottom. Mark both of those to the inside of the first arc and adjust the compass as needed to connect them. In addition to the legs, I made a pattern of the side of the music rest so I could get an idea of where everything would fall once assembled. This also let me attach the patterns together and adjust the placement to get the look I wanted. At this point, I also added a 25 × 75mm stretcher that I would use to mount a shelf and the hook to catch the back leg once it was deployed. Mark that now, at a height that would be comfortable to reach while in use. Once you are happy with the pattern, cut it on the bandsaw, keeping the edges as smooth as possible.



2 Using a tape measure as a beam compass

3 The second piece became the top, to aid in visualising the height

5 The completed leg profile pattern



6 Here I tried to avoid the knot but still clipped it and had to fill the void with epoxy

7 Cutting the primary tapers

8 The tapers all cut to length

9 Breaking out the lathe-mounted disc sander

10 Here you can see how the ends have been mitred at 10°

11 Use a bull-nose bit in a router table to cut the pencil slot

Tusks – part 1

Table legs are easy, right? Square upright posts screwed in place… not so much here. These guys are bent in one dimension, tapered in two, continuously rounded over along the length, two will be splayed and attached by an arbitrary stretcher and the last one needs to pivot… No sense in backing out now.

Use your pattern to mark all three legs beside each other on a single board – 50 × 254 × 1,069mm at a minimum. Cut them on the bandsaw outside the line and use a disc sander to get the sizes the same. Stacking them up and comparing can also help with this. Do the same for the inside with a spindle sander, if you have one. If you don't, drag them along the edge of the disc or use the spokeshave.

The tops of the outer legs are tapered to match the supports on the music rest. Looking at the photos from the gallery, I noted that they were splayed at 10°. I clamped the pair together and made a mark to cut them on the mitre saw.

The music rest – lower

Before going further with the legs, we'll need to

12 The peg blank mounted on the lathe

13 Once turned to shape

14 Mounted in a long-nose chuck

15 The matching pair of tapers

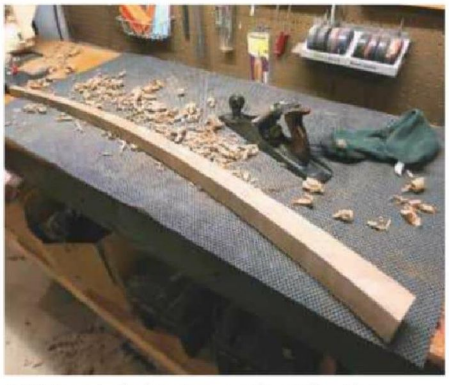
16 A guide for drilling dowel pegs will give a good placement near the edge

17 The peg glued and clamped into place

18 Making the secondary tapers

19 Using the legs as a straightedge

20 Tusks after tapering on the bandsaw



21 Using a jack plane to smooth out the sides

attack the top so we have something to anchor them to. I used a block of 32mm-thick walnut for the back, and a 12mm-thick piece for the lower pencil rest. These will need to be cut and assembled before moving on to attach the legs. Use a bull-nose bit in a router table to cut the pencil slot and use your joiner of choice to attach the lower rest to the thicker back. Let this dry completely and we'll use it to dry-fit the legs.

As a later addition, I had planned to add a bracket to the sides, which would cap the assembly and provide a place for the musician to rest a bow. After creating a few prototypes, I decided that I didn't like the look as it seemed to distract from the rest of the piece. The lines didn't match up and from what I could tell, the top didn't need the additional support.

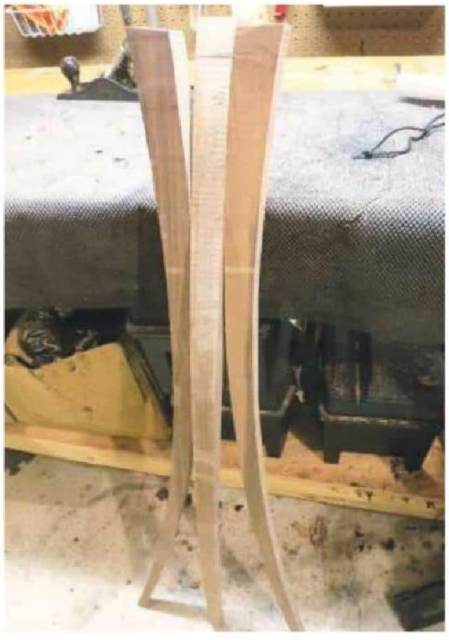
Instead, we'll add a pair of pegs sized between cup hooks and shaker pegs. A simple dowel would also work but if you have access to a lathe, you can make your own. Load up a 20 × 20mm blank and turn it to the general shape you'd like, leaving a flare and 10mm tenon at the bottom. I also tapered the tenon to ensure a tight fit in the stand. Use a set of callipers to make the pair match and sand them like the rest of the stand.

The mounting holes are easy enough, but a guide of some kind can help. I used a guide for drilling dowel pegs, which gave me a good placement near the edge. Adjust the hole as needed, then glue the pegs into place.

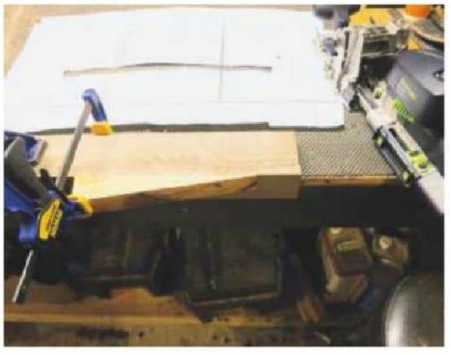
Tusks – part 2

We now have the legs splayed and roughed out in one dimension. Using your pattern, mark the location of the legs on the lower rest (sides and centre). You'll now need to attach these together.

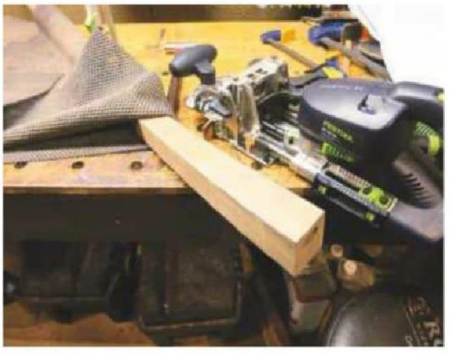
Depending on your skill set and equipment, you could use dowels, mortise/tenons, or pocket holes. I'd shy away from biscuits since these joints will need to take a little bit of force. For mine, I made a 10° wedge and clamped it in front of the joint, then ploughed a 12 × 140mm Domino into it. Very carefully, I repeated this process on the leg, letting the fence balance on the inside edge of the mitre made earlier. In order to improve alignment, I stepped down to an 8mm cutter, increased the offset and added



22 Comparing the tusks after removing saw marks



23 Homemade wedge to cut Dominos at an angle



24 I later added a second, smaller Domino to help with alignment

25 Test-fitting the outer tusks

26 The progression of router bits

27 Using a spokeshave to blend the transitions

28 Sanding with a soft-pad random orbit sander using an 120-320 grit pad

29 Cutting the notch for the centre tusk's pivot

a 50mm Domino closer to the front. For the taper, mark the blanks at the feet, leaving your 12 × 20mm foot pad, and use another blank to trace from nothing at the top to the mark at the bottom. Head back to the bandsaw to slice the waste away. Once complete, use the disc sander or a jack plane to smooth the sides out.

Dry-fit the two legs, stand the assembly upright and use a sliding bevel to check that both sides have the same pitch. Clamp a board to use as the stretcher in place, checking it with a level, and mark the top and bottom on the legs, as well as the back of the board.

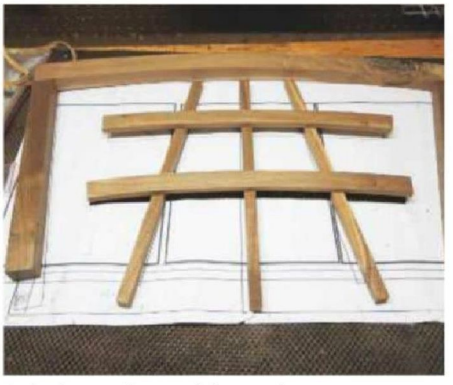
Next, we need to round over the edges of the tusks; we'll go for somewhere between round and squircle (Zune folk, represent!). To make this a little easier, start with some roundover bits and make a rough mark across all three legs where each one can be used. I ended up with a gradient of 8mm at the bottom, 10mm next, followed by 20mm and the 32mm at the top (from a chairmaking set). Once this is complete, use a spokeshave to blend the transitions together and further define the shape. I stayed

30 Completing the slot for the pivot with chisels in the corner

31 I used a 6mm dowel for practice, then moved to brass rod for the final version

32 Test-fitting the centre tusk

33 Routing profile and pencil tray on the music rests



34 Laying out the top of the stand

35 Chiselled lap joints to align music supports

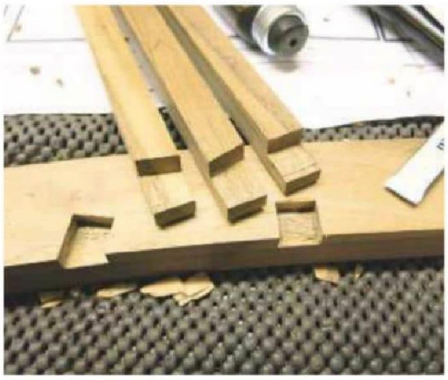
away from both the stretcher joints as well as the spot on the rear where I planned to add the catch. Next, follow the spokeshave with either hand or power sanding. I found that a soft pad on a random orbit sander is a big help with smoothing the tapers.

The pivots

Before gluing anything together, we need to finalise the mechanism to let the stand pivot. I wanted the middle leg to swivel on a brass rod in the back, then catch a hook on the shelf when deployed. We'll first work on the middle leg.

Mark out a 'T' shape in the back of the rest, about 50mm wide that will fit a tab the same width as the leg. Cap it with 20 × 20mm extrusions where we can mount two small, square blocks. Bore a 6.7mm hole through the blocks as well as the leg, which will allow a 6mm rod to spin freely. Pre-drill a pair of screw holes from the bottom and attach the system in place. The rear leg should now pivot without resistance.

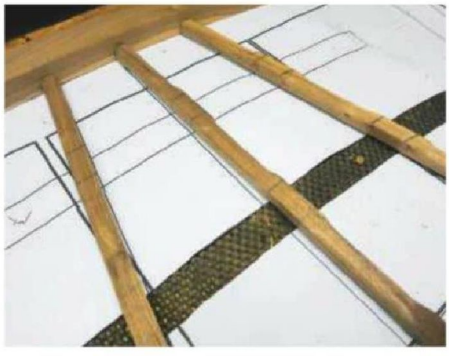
For the front legs, the stretcher needed to be thick enough to accept a Domino but also allow for rotation of the shelf. To solve this, cut a sheer notch a few inches in, essentially turning it into a 20mm dowel. We'll make some shackles to fit over these when we construct the shelf.



36 Matching angled lap joints on the music supports

37 Test-fitting the supports

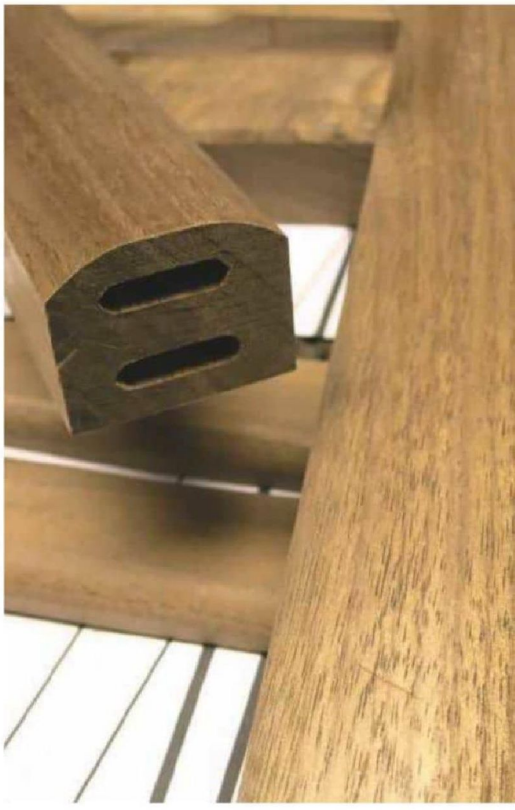
38 Rounding supports on the router table. I kept the joining areas square to aid in alignment later on. We will shape those by hand later



39 Fitting the rounded supports

40 One last inspection before assembly

41 Assembling the top half of the music rest



42 Close-up joint for the outside of the frame. Profile is the top half of a large roundover bit. Two small Dominos increase strength and improve alignment

NEXT MONTH

In part 2, in the Autumn issue, Matthew completes the music stand build by adding the upper music rest, tusk assembly and shelf, before putting it all together

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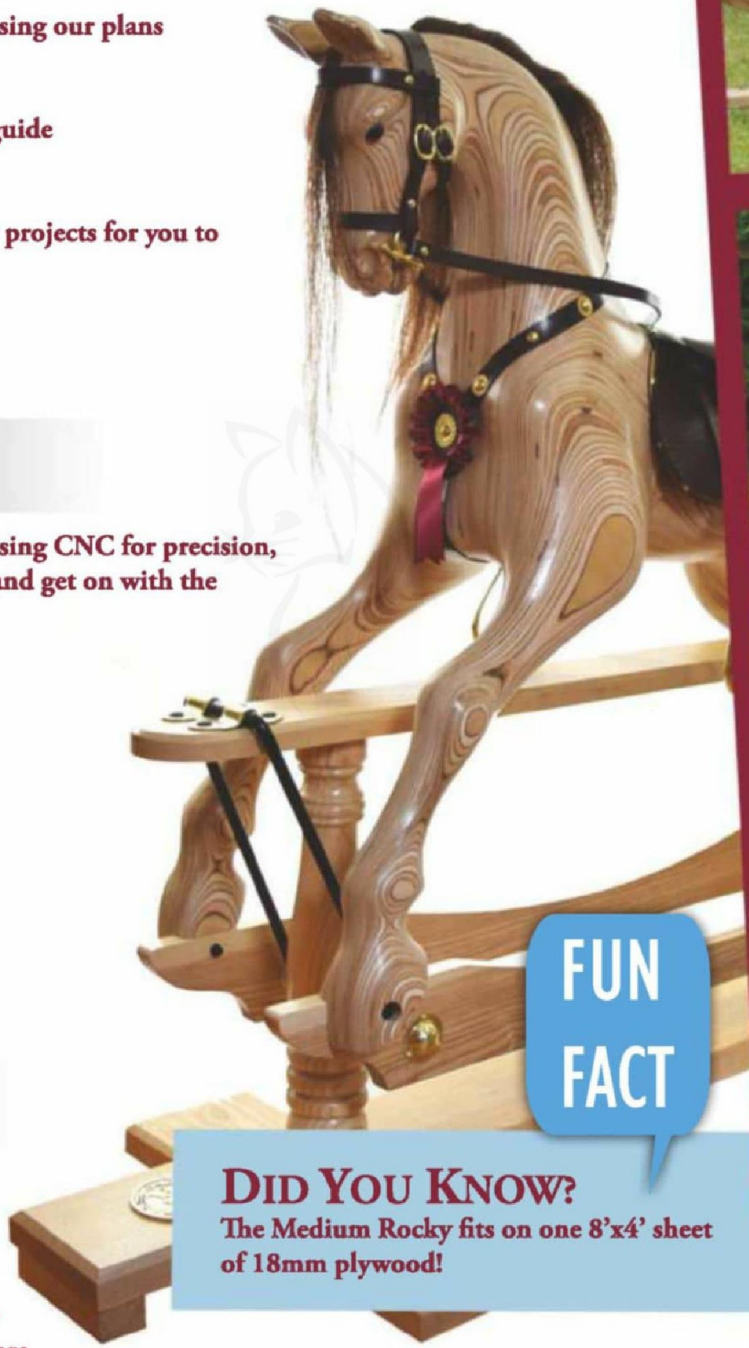

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LETTERS

LETTER OF THE MONTH

ADIRONDACK SETTEE

Hi Tegan,
Being a hoarder of woodworking magazines, I came across a copy of a plan for an Adirondack settee. During lockdown, I decided now was the time to tackle this project.

Being unable to go out and source wood, I have made it out of pieces of an old bed and odd bits I have in my workshop. The only purchase I made was online for the bolts!

I am enclosing a copy of a photograph of the said settee as I was sure you would be interested in seeing what can be achieved.
Regards, **Bob Gibbs**

Hi Bob, what a great job you've done recreating this project – it looks fantastic and perfect for a spot of relaxation in the garden during the summer months! I love the accents of green and the whole piece looks like it is expertly put together. Keep up the good work and it's great to see that old magazines are still coming in handy after all these years!
Best wishes, **Tegan**

Bob's Adirondack settee was made using pieces of an old bed – how inventive!

FROM WINDOW TO MIRROR FRAME

Dear Tegan,
Your useful article in a recent copy of *The Woodworker* on window repairs (*WW* June), reminded me that there is another use for old wooden windows. I tend to hang around demolition sites searching for window frames before they hit the skip, then I strip them down, polish and fit mirror glass. As you can see from the attached photo, they finish up as very smart wall mirrors!
Best regards, **Don Brown**

One of Don's upcycled mirror frames

Hi Don, I love how you've turned these old window frames into a lovely looking mirror – what a great way of making use of materials that are simply going to be thrown out – this is upcycling at its very best! Keep searching those demolition sites and hopefully you'll continue to find some more gems! Best wishes, **Tegan**

ROLLS-ROYCE SILVER GHOST

Dear Tegan,
I am just wondering whether any of your team members could put me on the right track. I have read of a project to make a 2.5m long wooden version of the Silver Ghost (although parts need to be steel). I reckon I can do that but do have a problem: the wheels are 6in diameters and they have spokes. There is also a need for a spare tyre without spokes. Being an old car, the wheels were pretty thin!

Can anyone suggest a source for these, please? I did look online but was unable to find the specialist I am after.
Many thanks, **Austin Reeves**

Hi Austin, as you've discovered, sourcing spoked wheels this size seems to be virtually impossible. You don't say whether spokes need to be metal or wood, so I'm assuming the latter. Having checked online the best solution would seem to be making these wheels yourself. Several YouTube clips explain how to do this (try 'The Wood Toy Bloke'), one using 3mm bamboo rods for the spokes (available via Amazon). You could try stronger hardwood dowelling, though minimum diameter is likely to be 6mm (www.toolsandtimber.co.uk). You may have to replicate the tyres from wood if you're unable to find rubber versions. Sorry I've not been able to help further, but hopefully you'll soon have the model completed, and we'd love to see it!
Best wishes, **Phil Davy**

Colin's plane with blade and chipbreaker in position alongside the shorter 'bought' version

HOMEMADE JAPANESE PLANE

Hi Tegan,
Following on from my Damascus moment with regard to Japanese saws – which have replaced all my 'western' saws for everything except large basic stock cutting – I have now discovered Japanese planes, which again are a revelation.

Like Japanese saws, Japanese planes operate on a 'pull' basis, rather than the western 'push'. Unlike western planes where it seems more effort and design goes into the plane body and the blade is just a blade, Japanese planes have a basic wooden body and the skill and effort goes into the forged blade and chipbreaker where incredibly sharp but fragile 'paper' steel is forge laminated between softer but stronger steel layers.

I bought a small Japanese plane from a supplier in Japan just to see what all the fuss was about. Being thoroughly impressed with it, I wanted a longer version. The wooden bodies are usually made from a single piece of white or red oak – in Japan, stock wood for these bodies are often stored for 40 years before being used. I don't think I have that amount of time left, and I'm pretty impatient anyway, so an old piece of mahogany sapele door surround would have to do. Rather than chisel out the body for the blade, etc. it was easier to cut the blade aperture (with my Japanese saws), using the 'bought' body as a pattern and then laminate each side with chiselled channels. The result is shown in the attached photo with blade and chipbreaker in position alongside the shorter 'bought' version.
With best regards, **Dr Colin R. Lloyd**

Hi Colin, I'm glad you're still finding 'aha' moments with your woodworking, and as you say, Japanese planes are highly prized and revered, and for good reason. The plane you've made looks fantastic and I'm sure you'll be able to put it to good use on many a project. It's great to have a variety of sizes in the workshop, and even better if you can make one yourself! Great job!
Best wishes, **Tegan**

READERS' HINTS & TIPS

For the next four issues, in conjunction with Veritas and BriMarc Tools & Machinery, 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@mytimemedia.com**, along with a photo(s) illustrating your tip in action. To find out more about Veritas tools, see **www.brimarc.com**

KEEPING YOUR PENCILS SHARP

Here's a tip for a novel way of keeping pencils beautifully sharpened in seconds, a job some people find tricky. I know I did in the days when I trained apprentices, and it was one job I always delegated to them, especially when the pencils in use were of timber with twisted grain or unusually brittle lead.

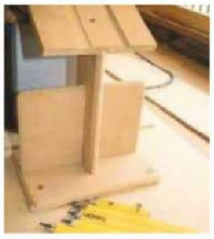
Soon after we obtained a new belt sander, and I was surprised to see one of the lads trying to use it to sharpen his quota of pencils. He was obviously onto something, and we decided to refine this tricky and potentially harmful procedure by making a crude jig to hold the pencil in position and allowing the sander to remove the waste. We never looked back on this one!

In passing this tip on to *Woodworker* readers, I attach some photos of this jig in use. I have not given dimensions because obviously these will depend on the sander and the pencils in use, but I hope I have conveyed the general idea for those who, like me, find this a fiddly job to do with chisel or craft knife. By all means try this job freehand, but you will be surprised how tricky it can be unless the pencil is well steadied as it is in the jig.

Find the angle that suits you best by trial and error, and having done so, get everything screwed up firm on a board on which sander and jig both stand, with positioning cleats for the sander so that the optimum relationship with the jig can be repeated.

As with all new and unfamiliar procedures, a little practice is needed before a perfect finish is achieved, but I commend this idea as a safe and speedy solution to an old problem, an added advantage being the ease of being able to sharpen either to a point, or to a spade shape, as required, just by simple manual adjustment.

Gareth Jones



A general view of the jig with pencils. It also shows the shallow grooves in the jig in which the pencil slides as the work proceeds

A joinery pencil presented to a sanding wheel, which will rapidly remove the wood and show a black stain as soon as the lead is reached. At this point, gently flip the pencil and repeat the sanding procedure

The sides are cleaned up with the pencil sliding in a shallow groove in the jig, called for by the rectangular section of a joinery pencil. This refinement can be skipped by using a craft knife

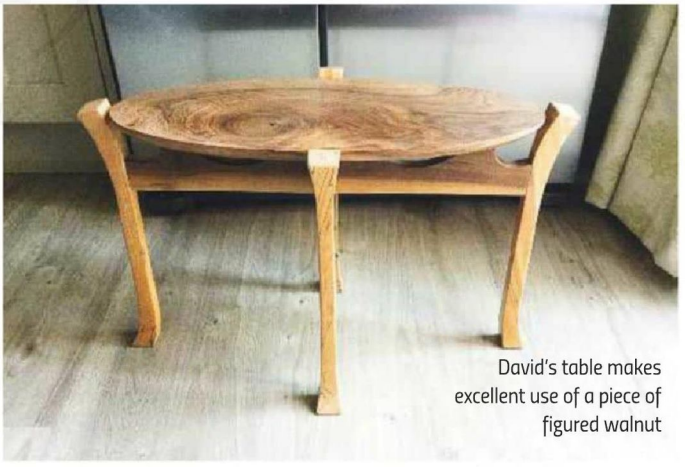
LIGHTENING LOCKDOWN

Hi Tegan,

I know you're interested in how your readers pass their time during lockdown, so thought I would get in touch. I've had this lovely piece of figured walnut for some time and have been wondering how best to use it. The design of the legs is borrowed from David Barron's circular lamp tables, which I saw a few years ago, but the rest of the table is my own modification to suit the oval-shaped top.

The legs are in spalted beech attached by loose tenons (tanseli wafers) to the beech subframe. At this point the leg thickness is only about 20 × 23mm in section, so it is important to achieve a really strong mortise & tenon joint as nothing else holds the leg. I tried to lighten the subframe by cutting out two large semicircles of the wood. As I am now in my 80s the project took me rather longer than it should have done, but at least it kept me out of trouble!

Kind regards, **David Hull**

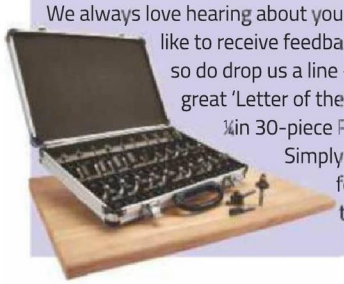


David's table makes excellent use of a piece of figured walnut

Hi David, thanks so much for sharing the photo and details of the project you've made – it really is fantastic! You've done an amazing job of creating this table and it's great to know that you've been kept busy with your woodworking during lockdown. Keep up the good work and hopefully this project has inspired you to go on to make many other lovely pieces!

Best wishes, **Tegan**

WRITE & WIN!



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

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The Peter Sefton Furniture School is set in three acres of grounds on a 17th century farmstead, situated just over one mile from the historic riverside town of Upton upon Severn

How I made it with The Peter Sefton Furniture School

We take a look at some past graduates from the **Furniture Design and Makers Long Course** who have gone on to win many highly acclaimed awards

Over the past 10 years, many students have passed through the workshops of the Peter Sefton Furniture School. The school is proud to have supported and guided them, providing the skill, experience and environment for the students to attain the level of craftsmanship and confidence to further their careers in furniture making.

Here we take a look at some past graduates from the Furniture Design and Makers Long Course who have gone on to win many highly acclaimed awards, including The Young Furniture Makers Awards, The Alan Peters' Award, The Worshipful Company of Furniture Makers Design Awards, and the Tormek Scholarship Award – we'll also find out where they are now.

About the school

The award-winning school is the only private purpose-built furniture establishment of its kind in the UK. Set within three acres of grounds on a 17th century farmstead, it is situated at the foot of the Malvern Hills. The school is an inspiring and idyllic place to learn, with excellent transport links via the M5 and M50.

The Peter Sefton Furniture School was founded in 2009 by Peter Sefton, an award-winning Master Craftsman and Furniture Maker with over 35 years' experience. Peter has devoted more than 20 years of his professional career to teaching and mentoring as a qualified lecturer and assessor.

The school provides furniture making courses ranging from two-day to a full-time 35-week long course. Short courses include subjects such as wood machining, routing and French polishing. They also run a beginner's course where you can learn essential woodworking skills. On every course you will have your own bench and personal workspace in the dedicated hand tool workshop, as well as full access to the latest woodworking equipment in the machine workshop.

Furniture Design & Makers Long Course

The Long Course is aimed at students aspiring to design and make fine furniture to professional standards – either for their own enjoyment or to develop a career as a professional furniture designer or maker.

For students training or re-training for a new career, they offer a vocational course, which is an alternative to university. Students aged 18 and upwards are enrolled and taught not only how to design and make fine, hand-crafted furniture, but also the business and marketing skills needed to start their own workshop. For students looking to work as an Improver or Designer in another workshop when they graduate, they will develop the practical skills to gain the speed and confidence to get them to the professional level required for a position in a workshop. All students have a 100% success rate of going on to find employment, and many graduates are now running their own businesses.

No previous woodworking experience is required to join the course; the school has a variety of students ranging from school-leavers looking to start their career, through to more mature students looking for a change of direction. There is a great mix of ages and backgrounds within the group, all sharing a common aim in designing and making beautiful furniture.

Student profiles

DAVE TAYLOR

Awards received

- **'Best Use of Solid Timber'**
  – *sponsored by Whitmores Timber*
- **'Highly Commended' design award**
  – *Worshipful Company of Furniture Makers*

Dave joined the school in 2017 having previously worked as a carpenter, wanting to gain the accuracy and finesse to take his career to the next level of fine woodworking. Knowing that the course concentrated on much more than hand work, there was also accuracy with machine use and heavy emphasis on design, which made the Peter Sefton Furniture School the standout choice.

During the course he expanded his knowledge on materials from wood technology through to wood finishes, along with a proper design approach from timber selection to draughtsmanship, fine tool use and accurate material manipulation.

In 2019 he displayed his masterpiece 'Toro' chairs at the Cheltenham Celebration of Craftsmanship and Design (CCD) and won a 'Highly Commended' design award from the Worshipful Company of Furniture Makers. Dave now has his own workshops in Oxfordshire producing his designs for discerning clients. To find out more about Dave and his work, see **www.leathamcreativewoodwork.co.uk**

Dave Taylor's award-winning 'Toro' hallway chairs

ADAM BURTENSHAW

Adam has been interested in fine furniture making since he was young but had no previous experience; he chose to study at the Peter Sefton Furniture School in preparation for becoming a self-employed designer-maker.

Adam went on to open his company Chiselworks in 2016, a bespoke design and manufacturing service in Cirencester, producing a wide range of premium hardwood products, including bespoke furniture, solid replacement doors and windows, staircases, architectural joinery, and bespoke hardwood gates, where he employs a small team of makers. To find out more about Adam and his work, see **www.chiselworks.co.uk**

Adam Burtenshaw's 'Campaign of Curves' console table, 1,200 × 400mm. The legs and carcass are made from American black walnut with African blackwood, and the top and drawers are walnut burr veneer with American black walnut lippings and ebony inlays

TOM BRADLEY

Awards received

- 'Visitor's Choice Favourite Piece' – *sponsored by Wood Workers Workshop*
- 'Trainee of the Year' and 'Peoples' Choice' – *New Forest Trust Show*

After finishing his A-levels in July 2017, Tom knew that he wanted to continue with design and woodwork. However, he was struggling to find a course which was not all about mass production. Once he found Peter's course, he thought it was perfect and applied immediately. Before he started, he had never used any wood machines or many hand tools; however, he learned to use them with confidence.

For his final masterpiece, Tom made a square table for everyday use with a top that cleverly opened and expanded from a six-seat to a 10-seat dining table, which he was invited to exhibit at Young Furniture Makers 2018. Tom's table also won the Peoples' Choice Award at the New Forest Trust Show 2018 and Tom himself won Trainee of the Year at the same event. After graduating, he went on to take up a five-year cabinetmaking apprenticeship with Matthew Burt's Splinter Group in Salisbury. To find out more about Tom and his work, see **www.matthewburt.com**

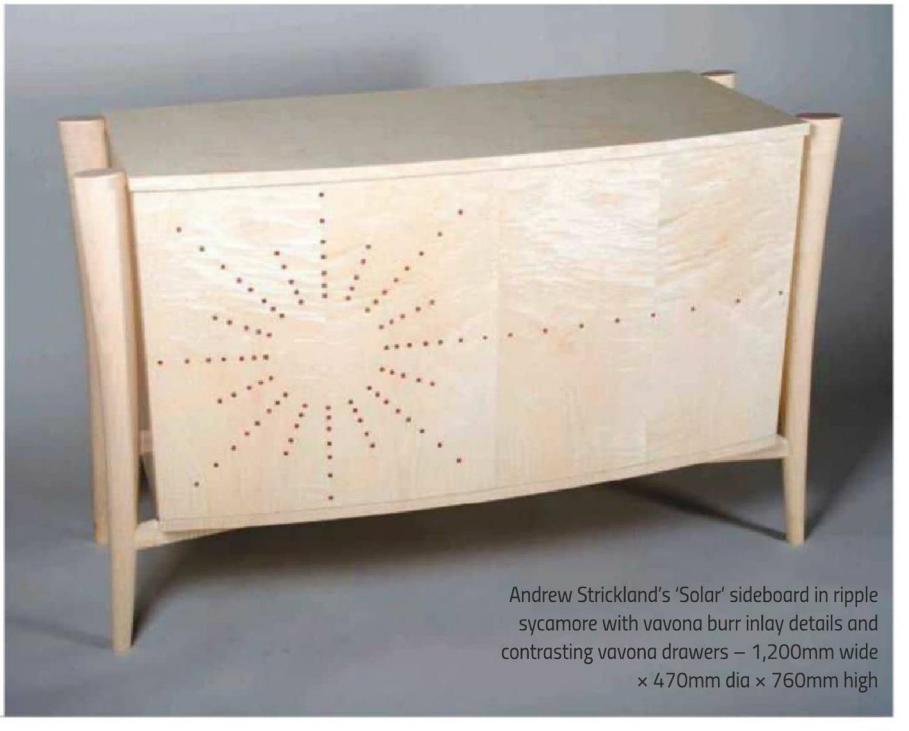
Tom Bradley's 'Envelope' dining table

ANDREW STRICKLAND

After working in various creative design roles for over 25 years, Andrew felt the need to change tack and create something more permanent. After completing various short courses at the school he signed up to Peter Sefton's Long Course in 2015.

The inspiration for his 'Solar' sideboard came from his love of Art Deco and contemporary furniture. "I remember some of the pieces my Granddad had in his house when I was growing up," he explains. "I have tried to capture this in my 'Solar' sideboard with a contemporary twist."

Andrew says that training at the Peter Sefton Furniture School gave him the confidence, knowledge and skills to kick-start his new career as a furniture designer-maker. Andrew has his own workshops in Cambridgeshire designing and making and is a regular exhibitor at national design exhibitions. To find out more about Andrew and his work, see **www.andrewstricklandfurniture.co.uk**



Andrew Strickland's 'Solar' sideboard in ripple sycamore with vavona burr inlay details and contrasting vavona drawers – 1,200mm wide × 470mm dia × 760mm high

SAM CARTER

18-year-old graduate Sam Carter came to the school straight from Sixth Form in 2014, with no previous experience and went on to win the 2015 Alan Peters' Award for Young Designer/ Maker at the Celebration of Craftsmanship and Design Exhibition, Cheltenham.

Sam comments that he has been entranced by the arts since he was very young: "My Grandfather ran a cabinetmaker's company for many years; however, I took inspiration from my Grandmother who had owned a craft business and taught me various crafts from a young age."

Sam is now a fine furniture maker working at a high skill level in various mediums such as wood and leather to produce high-quality pieces of furniture and boxes. He has been a self-employed cabinetmaker for nearly five years and has worked on many different commissions. He specialises in Anime marquetry and jewellery boxmaking. To find out more about Sam and his work, see **www.samcarterfurniture.co.uk**

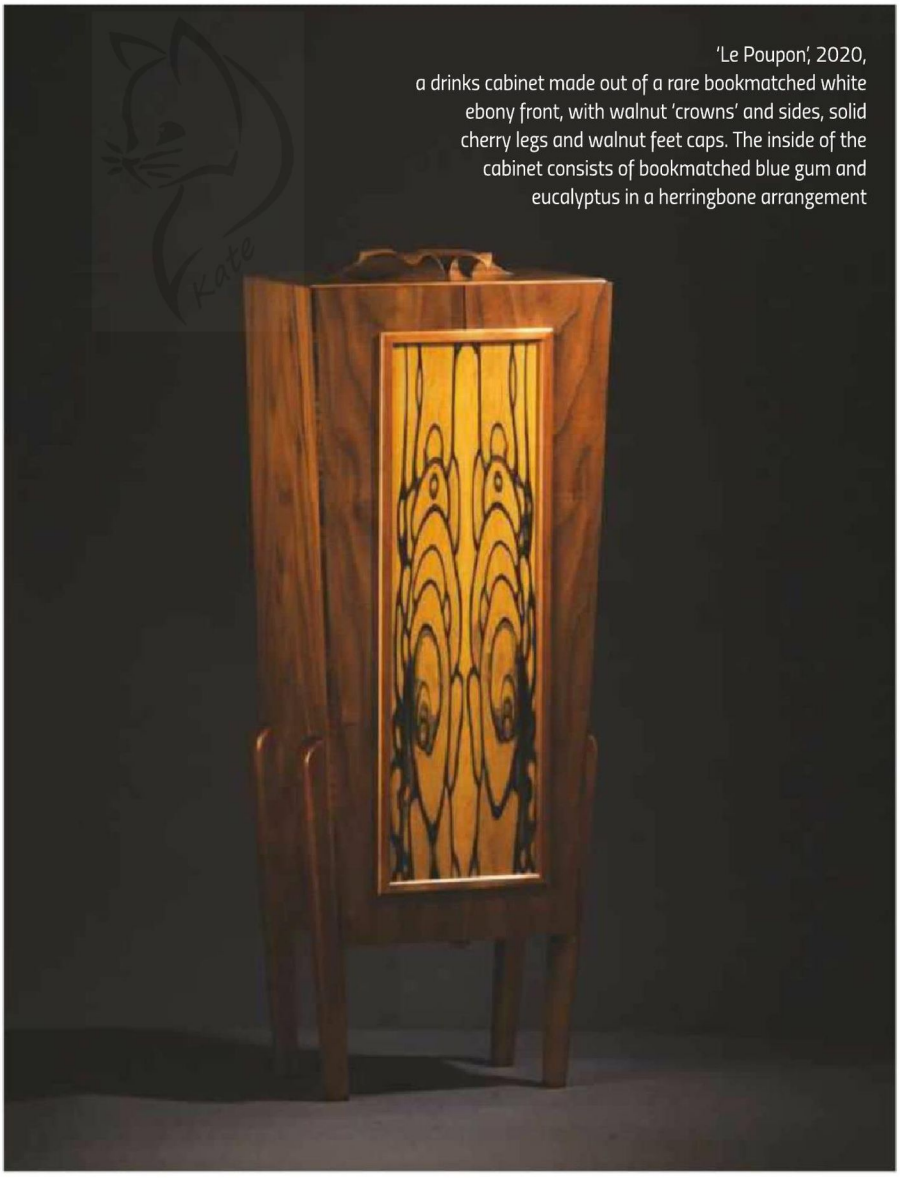
Sam Carter's 'Overarching II' console table in American walnut and sycamore with a walnut burr top

LOUIS KWOK

It started out as a hobby, but with a deep love for wood as a material, woodworking quickly became Louis Kwok's passion and calling. Although he pursued a career as a photographer in his native Singapore for 12 years, woodworking was never far from his mind. It was under the tutelage of a Japanese teacher that Louis realised his journey to becoming a skilful woodworker would be a long one. During his three days with the teacher at Tokorozawa, in Japan's Saitama Prefecture, all Louis learnt was how to sharpen chisels and make basic joints, but this helped to open up his interest in Japanese tools and traditional joinery.

In 2013, he enrolled in a six-month course at the Peter Sefton Furniture School where master furniture makers Peter Sefton and Sean Feeney encouraged Louis to push the envelope further; to take a simple idea and develop it into a sophisticated piece of work. Studio sessions with fine boxmaker, Andrew Crawford further enhanced his knowledge in the UK.

Louis now runs his own business, Kjung Woodwork, in Singapore where he continues to work on commissions and his own private work. His most recent training was during an internship in Paris with Eric Lehuédé and Martin Delépine, where he learnt traditional marquetry techinques and explored straw marquetry. In his own words: "Woodworking allows me to express creatively in a three-dimensional way," says Louis, "and challenges me to literally think out of the box when designing and creating pieces. To find out more about Louis and his pieces, see **www.kjungwoodwork.com**



'Le Poupon', 2020, a drinks cabinet made out of a rare bookmatched white ebony front, with walnut 'crowns' and sides, solid cherry legs and walnut feet caps. The inside of the cabinet consists of bookmatched blue gum and eucalyptus in a herringbone arrangement

CHARLES COLBOURNE

Awards received

- Gordon Russell Prize for Innovation and Design – *Gordon Russell Museum*

After having spent probably too long in the banking sector, Charles was looking to explore new paths. He had always enjoyed design and had, in his own words, some "probably dangerous" previous experience of carpentry, so furniture making seemed like a good direction. He chose to join the Professional Course in 2018 as he saw it as a good way of seriously upping his skill levels in a relatively short space of time.

Charles gained an appreciation of all aspects of furniture making; from design, timber selection, tool use, the making, through to finishing, and now feels confident to design and make furniture on his own.

Charles has set up his own workshop so that he can start designing and finally begin "cranking out my own stuff!".

His masterpiece 'Paraobola' table earned him the prestigious Gordon Russell Prize for Innovation and Design and went on to be displayed at the Gordon Russell Design Museum. He was also invited to exhibit at the Young Furniture Makers Exhibition 2019 as well as at the Cheltenham Celebration of Craftsmanship and Design (CCD)

Charles Colbourne's 'Parabola' side table, made in pear wood and sycamore, 1,700 × 510 × 1,000mm

NOAH MORRIS

Awards received

- Gordon Russell Prize for Innovation and Design – *Gordon Russell Museum*

Noah was initially captivated by woodwork in his Grandfather's workshop, which encouraged him to take A-level Design Technology. Having really enjoyed the practical design process for each piece he decided he wanted to take this further, which led him to the Peter Sefton Furniture School in 2016. The course allowed Noah to develop his practical making skills in the workshop with both hand tools and larger machinery. His knowledge of materials and how they work improved as well as furniture design skills, but most importantly for the future, he learnt the business side of things.

Noah's 'Ellipse' tables were displayed in the Gordon Russell Design Museum after winning the Gordon Russell Prize for Innovation and Design. He was also invited to exhibit at Young Furniture Makers 2017. Noah is currently working at Shaker of Malvern, specialising in his passion for veneering and cabinetmaking

Noah Morris' award-winning 'Ellipse' tables

FURTHER INFORMATION

To find out more about courses offered at the Peter Sefton Furniture School, see **www.petersefftonfurnitureschool.com**

FREESTYLE EVENT

Phil Edwards gets inside the imaginative head of the late great James Krenov to recreate his signature cabinet on stand

Anyone who's made a cabinet before will know that it isn't the easiest piece of furniture to design. For cabinets call for a range of different techniques and are made up of many components, so require careful planning…

… At least that's generally the case, but not when following the freestyle approach of James Krenov, which I first discovered while drawing with my daughter on a chalkboard. Basically, I sketched out a cabinet and its proportions caught my eye. I quickly took a photo of the sketch along with some dimensions. Further sketches reinforced the basic design. Then, instead of starting the project with complete plans and a cutting list, as I normally would, I built a mock-up out of pine. By making the horizontal members extra long, I was able to change the width and depth of the mock-up to arrive at the final dimensions. I was surprised how different the design looked when built full-size. Some dimensions were tweaked, and then I made a basic cutting list and chose suitable timbers for the cabinet itself.

Once the main framework of components had been roughly cut to size, I cut the joints, but left major design decisions until I started to put the parts together. Even though I had built a life-size mock-up, the different colours and textures of the timbers influenced the size of the cabinet. I let each step of the build influence the next, arriving (hopefully) at a sympathetic, organic design.

The result is a graceful freestanding cabinet on four slender ovangkol legs kicking out gently at the bottom. Contrasting sycamore side panels were set in grooves between the legs, while the doors – the centrepiece of the design – were simply constructed from a pair of book-matched boards of superbly figured, spalted sycamore. As with most of Krenov's cabinets, these hang on cranked scissor hinges let into the top and bottom of the doors for a more elegant effect, allowing the doors to be inset without binding on the carcass as they open. A further Krenovian touch is the back panel. Rather than a single board this is built up in a frame and panel construction before being rebated into the back of the carcass as a snug fit.

I was very excited at how the cabinet grew. It took longer to build than if I had complete plans to work from, but I was surprised how much the grain and colour of the wood influenced the design.

Timber thoughts

The timbers I used on the cabinet were two boards that I had been hoarding for a year or two. Both came from Yandles of Martock in Somerset – **www.yandles.co.uk**. The lighter timber is sycamore, which has some wonderful figuring and is also spalted – a fungal infection or disease, which has discoloured the wood. Instead of the sycamore's normal creamy-white colour it has gone a darker shade with black

Though it won't be seen much, I didn't neglect the back of the cabinet

and grey streaks running randomly through it – these unique colours and patterns really caught my eye at the time. The timber was air-dried, which added to the easy workability of the wood; it was a real pleasure to plane and work.

The darker timber is ovangkol, by the way, an African hardwood. My plank had been quartersawn to show off its stripy grain to best effect. Kiln-drying had made this tough timber even more brittle. It was very difficult to plane as the grain was constantly alternating every few millimetres. I ground a back bevel on my plane iron, giving me an effective 60° pitch, which allowed me to finish-plane the timber without tear-out.

The timbers work well together, the darker ovangkol providing a nice border around the varying lighter shades of the sycamore. The sycamore was 50mm thick, 508mm wide and 2,134mm tall. The ovangkol was 50mm thick, 336mm wide and 1,829mm tall. This required

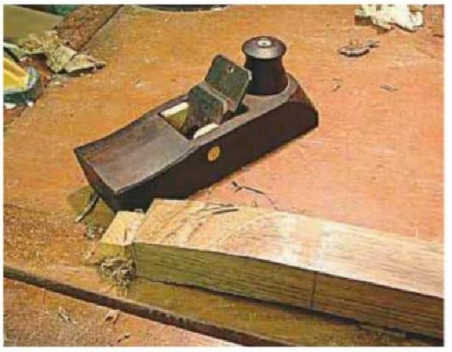
The drawers

The cabinet's rebate

Hinges in place


WW
PROJECT

1 Instead of using plans, I worked from a simple sketch and leapt straight into a pine mock-up



2 The legs and all rails were cut from ovangkol. Even with a low-angle smoother, the timber tore-out

3 The tenons were cut on a table saw with a sliding carriage and an overhead guard

some resawing to be economical – more on that later. I still have about 20% of the timber left for other projects.

The carcass

The legs and all the rails were cut from the ovangkol. In order to gently shape the legs at the bottom, I first cut 50 × 38mm blanks, then marked out the curve of the feet from a template and reduced the outside edges by 12mm on the bandsaw, being careful not to run into the foot. I cleaned up the saw marks using a jack plane and shaped the feet using a block plane and spokeshaves.

A final shaving was taken using my 60° HNT Gordon smoother to create a polished finish. Even with this low-angle plane, however, it was impossible to remove all evidence of any tear-out with this difficult wood. Luckily, what is left there is pretty minimal and not in any obviously visible places.

I chose to cut the legs from a single piece instead of gluing on 'horns' for the feet, as I wanted the grain to be continuous. Also, as the curve exposes the end-grain, I find that glue lines stand out more than with a long-grain joint. I cut the carcass mortises using my Delta bench-top mortiser – a simple, straightforward job. Ovangkol is tough so multiple plunges prevented the bit stalling or burning. I originally intended to cut all the joints with my Trend mortise & tenon router jig, but while setting up a practice cut I accidentally cut through a badly placed clamp, destroying the router bit. I didn't have a suitable replacement so decided to use another method.

The tenons were shouldered on all four sides for a neat appearance so this must be kept in mind when laying out the mortises. I cut the tenons on the table saw, using a mitre gauge and dado set. I know it's not the most safety conscious method, but some time ago I bought a Delta Unisaw clone (10in Xcaliber table saw from Woodford – **www.woodfordtools.co.uk**) and wanted to try this method after watching Norm use it on New Yankee Workshop. Like him I have an Osborne mitre gauge, and using the stop on this allowed simple repeat cuts, giving tight clean shoulders and cheeks. I could have used the same procedure more safely with an ordinary fine crosscut blade to cut the shoulders, then either bandsawed the cheeks or wasted them with repeat cuts on the table saw. Anything to avoid that dado!

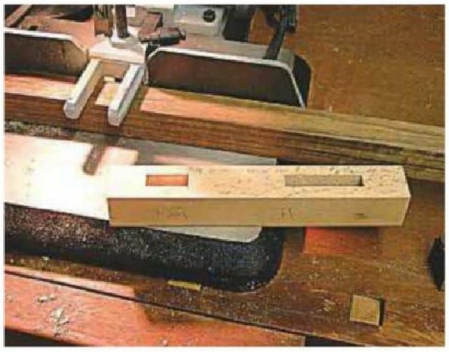
Back panel

To add interest to the cabinet interior, the back panel has a framed and panelled construction rather than being a single piece of veneered ply. This is a common feature of James Krenov's work, and indeed most fine cabinet work. Because the panel takes no load, and the edges are not seen, the main corner joints are simply bridle joints rather than mortise and tenons.

Stub tenons fitting into the routed 6mm panel grooves are enough to hold the muntins in place. If you want, there's no reason why you shouldn't be able to use the groove and stub tenon throughout. When finished, all components are oiled before final assembly to allow for any subsequent shrinkage in the panels – just make sure you don't oil the joint faces!

Side panels

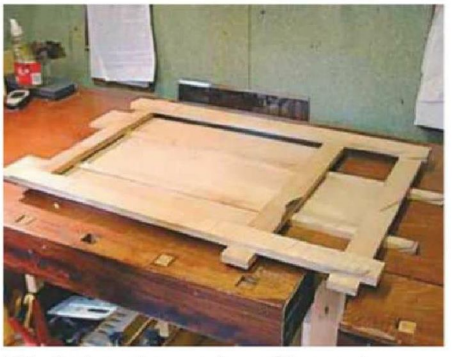
The side panels are 203mm wide, which is the maximum depth of cut on my bandsaw. This allowed me to deep rip (resaw) the panels from 51mm stock, giving a pair of bookmatched panels. I intended to rout a tongue all around the outer edge of the panel to sit in a groove routed inside the frame. Unfortunately, the frame has an opening of 8in between the front and back legs, so the depth of cut on my bandsaw meant that the panels wouldn't be quite wide enough for integral tongues.



4 The mortises were cut with a mortiser, but can also be cut with a router or by hand

5 A spokeshave was used to cut the top rail from both ends, thus keeping tear-out to a minimum

6 Grooves were routed into the legs and rails for the 6mm-thick side panels

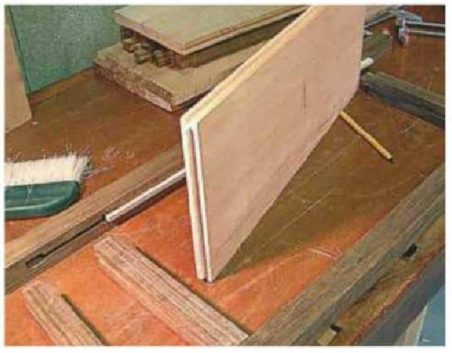


7 The back panel was made up of four panels, two stiles, three rails and two muntins

8 The panel components were laid out to find the best match of grain and colour

9 I cut the stub tenons on the back panel components, again using the sliding tenon carriage

10 I used bridle joints to connect the rails and stiles, but you could just as easily use tenons



11 Because the side panels needed to be 200mm wide, and my bandsaw can only cut that width, I had to cut grooves in the sides of the panels to take loose tongues that fit in the legs

12 Oil the panels before assembly – it's a lot more difficult to get into every cranny afterwards

Instead I routed central tongues along the top and bottom panel edges to fit in matching grooves in the frame rails, using a straight cutter in the router table. I then routed grooves in the panel sides to take loose ply tenons, which sit in matching grooves in the legs. The top and bottom panels were made and fitted in a similar fashion, though these have a bare-faced tongue rather than a central one. The lower one forms the bottom of the main cabinet interior and the frame was grooved out so as to bring the top surface flush with the top edge of the carcass frame. The top panel was set slightly lower than the top frame edges.

Making doors

The solid sycamore doors were too big to rip on my bandsaw so the chosen pieces of timber were ripped in two, deep ripped on the bandsaw, then edge-jointed and glued back together, giving two bookmatched panels. The timber is quartersawn, which is the most stable way to cut timber if you don't want it to warp. I allowed plenty of time for the timber to settle, gently planing it down to its final thickness of 19mm. The doors have stayed straight, so hopefully the preparation was worth it.

The doors overlap at the centre, a rebate being cut on the router table. This has to be taken into consideration when cutting the timber to size, to make sure the join line is central when viewed from the front. Brusso offset pin hinges (aka cranked scissor hinges) were chosen to hang the doors. These were a favourite of James Krenov and set the piece off right, and being offset, they allow the doors to open wide.

I had never used these before so was expecting a hard time but they turned out to be relatively easy to fit. I first mortised half of the hinge into the frame rails – this has to be done before gluing up the frame. Allow 1mm clearance in from the side of the frame and position the hinge so that the pivot pin is slightly forward of the outside face of the frame. Mortise the hinge flush – the washer on the pin allows the door to swing freely. After gluing up the frame, cut the doors so you can just ease them vertically into the carcass.

Position them where you want them to be and then mark the position for the second half of the hinge. Mortise as before and you are ready to hang the doors. Remove the screw from the top hinge to allow you to slide the door onto the bottom hinge and then slide into position.

When both doors are hung, mark out for the rebate and final fitting. It sounds harder than it is, although there is little room for error!

TIP

When book-matching timbers, it's useful to use a large piece of mirror to view what the two pieces will look like before you actually resaw the board. Place it up against one edge and at 90° to the surface to see the bookmatched effect you'll get

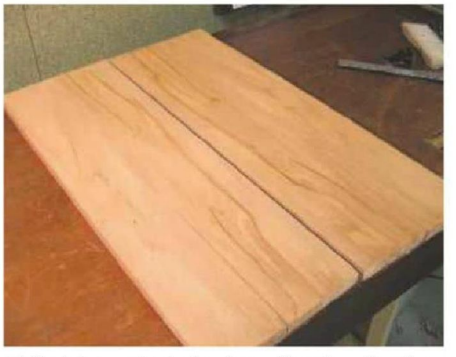
The drawers

Making the pair of drawers was straightforward, with through-dovetails at the rear and lapped ones at the front between the sycamore fronts and sides.

I first fitted a single piece into the aperture then cut this centrally to form the two fronts to preserve the run of the timber's figure from one to the next. To allow for the 10mm central runner between them, the inner lap on each drawer front was cut 5mm deeper than the outer. When assembled, this left a 10mm gap between the drawer boxes.

Runners and kickers were glued to the inner drawer rail faces. Extra slips were glued onto these drawer rails to fill the space between the side panels and the inside face of the leg. This aligns the drawer in use. This is an essential feature of panelled carcass construction,

13 It's a good idea to do a few dry runs before assembly



14 Next, I moved onto the doors. Choosing attractive, matching boards for these was very important

15 Make sure you take into account the overlapping rebates on the doors

16 For the scissor hinge being used, you need to cut out the recesses early on

17 Now I could assemble it all – the carcass had to be assembled with the doors in place

18 The dovetails on the drawer front were lapped, but watch out for the overlapping

19 When cutting the tails, angle the workpiece so that you are cutting vertically

where there is often nothing to restrain lateral movement of the drawers as they are pulled.

The catches

I fitted a home-made wooden ball catch to the right door, which rebates over the left one. To make this, drill a hole in the frame member under the centre of the door, 10mm in. Turn a small amount of ovangkol dowel on the lathe to a 6mm diameter and round over the top edge. Cut a small piece of a rubber band and drop into the bottom of the hole, then, through trial and error, remove a little from the dowel to give the right resistance on shutting the door.

A small groove on the underside of the door takes the head of the dowel, closing the door snugly.

Finishing

I didn't want a high-gloss finish for this cabinet, as it would clash with the delicate figuring on the doors. I've found that a combination of oil and wax leaves a piece with a classy satin finish that feels soft and natural to the touch. All the individual components were finished before they were glued up. There are three reasons for this: firstly, it allows you to apply an even coat to each part without a thicker build-up of finish in the corners; secondly, any glue squeeze-out on assembly can easily be removed without staining the wood; and thirdly, due to the many nooks and crannies in this piece it makes for an easy life! All parts were given two coats of Chestnut Finishing Oil. This product builds quickly for an oil and also dries very hard – some oil finishes never really cure and damage easily.

When dry, internal faces were then given three coats of blonde shellac, which seals the wood and prevents any nasty smells when you open the doors or drawers. I find that pretty much all finishes except shellac tend to 'off-gas' for quite some time after they have been applied. This keeps the cabinet sweet – a simple solution.

All exterior surfaces were then given another coat of oil, this time wet sanded with 400 grit wet-and-dry abrasive paper to leave the surface feeling like silk. A coat of paste wax, a good buffing and the cabinet was finished.

FURTHER INFORMATION

TIMBER: Ovangkol, a dark African timber resembling black walnut, for the carcass components, and spalted sycamore for the panels and drawer and door fronts. All timber sourced from Yandles – **www.yandles.co.uk**

HINGES: Two pairs of Brusso offset pin hinges (available from Classic Hand Tools – **www.classichandtools.com**)

FINISHES: Chestnut Finishing Oil, applied with a brush, and blonde shellac Briwax clear paste wax

SECOND THOUGHTS

This cabinet was a great project to build and I have fond memories of its construction. It was the first time I had built a project without a finished plan, letting the grain pattern of the wood define the size and shape of the cabinet. It was a little scary at first, but quite liberating, especially as the piece came together. And working in this way meant I gained a better understanding of Jim Krenov's approach.

The cabinet stands in the entrance hall of our home – it still gets admiring glances from visitors – and every time I walk past it I find myself looking at the figuring of the doors, enjoying the natural beauty of the timber. We're very lucky to work with such a wonderful material

20 The rear dovetails were cut through but the front ones were lapped

21 Note the grooves for the cabinet floor. The panel under the drawers was fitted from below

22 As the drawer fronts were cut from a single piece of sycamore, the grain runs true

23 The ball catches were made from ovangkol, using a rubber band for an improvised spring!

Hole in one

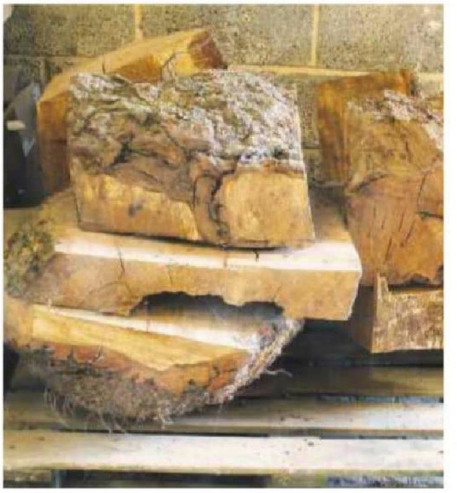
Les Thorne had reason not to like this tree very much – until it fell down in a gale. He gives himself a handicap by turning it wet

The wet ground and the high winds over the winter claimed many trees and few areas escaped some sort of damage. The majority of phone calls I received were for timber of no real value to me as a woodturner. I even went to see a mature walnut that turned into a poplar tree when I got there. These people were particularly upset, especially as someone had told them that it was going to be worth a fortune!

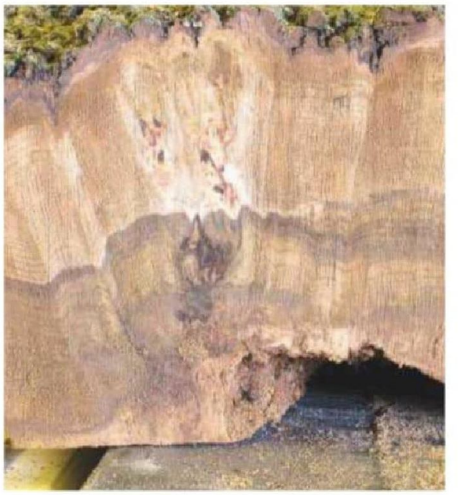
Steve the green keeper called me one morning after a stormy night and told me they had lost one of their signature trees on the 8th hole at Alresford Golf Club; this is a real shame as it was a great oak tree even though I had probably sworn after hitting it or being behind it on more than one occasion. Luckily for me the oak was a rich dark brown colour. Brown oak is technically not a distinct species of oak, but rather refers to oak – almost always English oak or another European species – that has been infected with a fungus.

The fungus (*Fistulina hepatica*), or beef steak fungus as it is better known, has the effect of turning the wood a deep brown colour. The majority of the centre of the tree had rotted away but there was enough usable timber and burrs to make some nice work. My normal way of working timber like this is to part turn bowls and pots then come back to them in the future when they are dry, but I thought I would turn a piece wet and see what happened. As with any wet woodturning, I would need thin walls to stop it cracking.

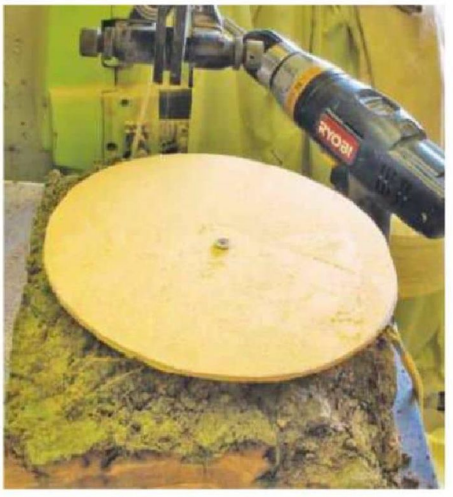
1 If you look on the left-hand side of the fairway you can see a short oak tree; I'm always amazed that the larger trees around it are undamaged while the middle one is uprooted



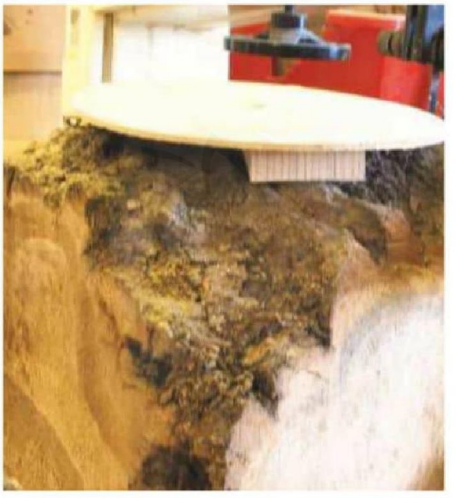
2 There wasn't a huge amount of interesting wood to be had from the trunk as most of the heart had rotted away, but I'd already thought of another project from it in the future



3 Wow! My slice into a section of the wood has revealed a beautiful sap and heartwood contrast with burr and the ripple effect



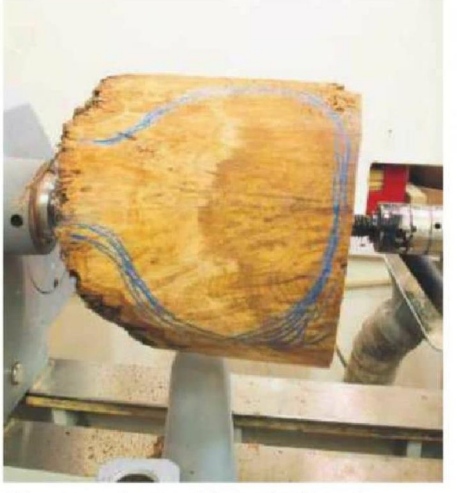
4 You cannot draw a circle with a compass on such an uneven piece of wood so I screw a piece of hardboard and cut round it



5 Before cutting around the disc on the bandsaw, I level the hardboard by putting some wooden spacers underneath to stop the board being forced down if it is touched with the blade

6 Because it's home time now, I protect the wood from splitting overnight by wrapping it in cling film/pallet wrap to stop the timber drying out

7 When working on an uneven project like this I like to mount the wood between centres, but first must clear the area away from the centre to achieve a positive drive off the wood, not the softer bark

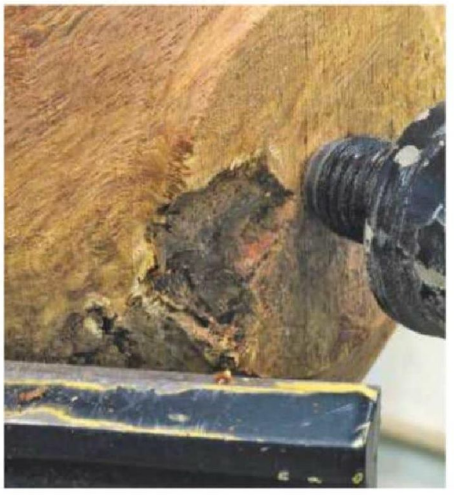


8 You can see the sort of design that I intend to turn; I've always liked the gourd-type shape and it perfectly suits a natural-top pot like this one

9 Start truing up the outside with the bowl gouge; I start by getting rid of some of the weight, especially as the lathe is being jumped about by the fact that the wood is so out of balance

10 The close-up of the cutting edge shows the flute position; this optimum cutting angle will quickly remove wood, so be careful not to take stock away that you'll need

11 To counteract the forces being put on the gouge I've locked the handle into my hip; wherever possible I adopt this stance for greater control on the business end



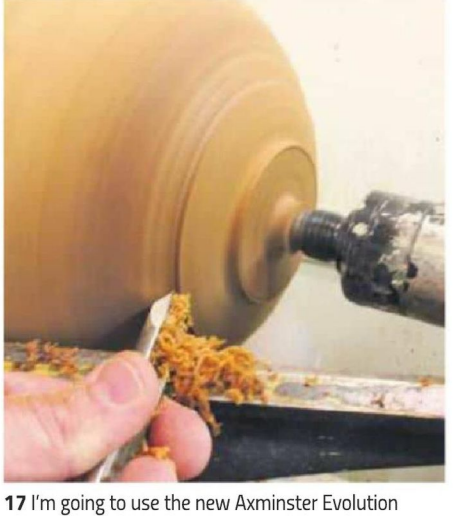
12 Typical! Just where I want to put a chucking point there's a void; to be on the safe side I remove another 5mm off the bottom – it's a shame to turn lovely timber into shavings

13 Use a pair of dividers set on the diameter of the required spigot, touching the wood with the left-hand point; the scratch mark lines up with the right point when the diameter is correct

14 I've concentrated more on the lower shape at this time; the bottom half is all burr with the top sapwood having a bit of everything

15 I like to get as much of the shape completed before mounting up on the chuck; even though this is technically against the grain, it's OK for the initial shaping of the piece

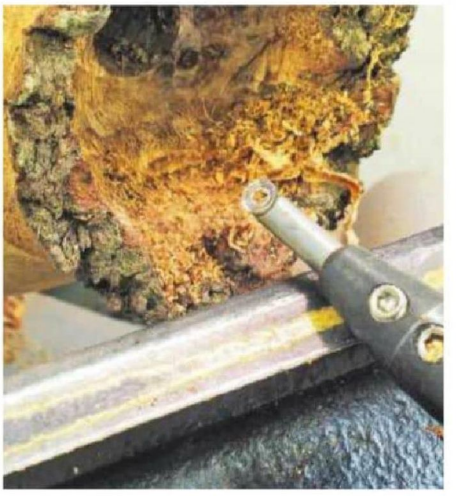
16 This bark inclusion has made me ponder whether to leave it in or try and remove it; I've opted to leave it even though the rest of the bark is removed around the proposed rim



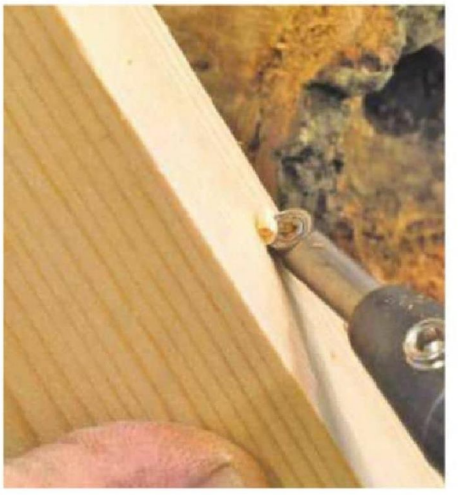
17 I'm going to use the new Axminster Evolution chuck so need a dovetail spigot; the bottom curve can be refined and the spigot turned with the Signature gouge

18 Whenever I hollow a pot like this one I drill the hole to the finished depth using a twist-type drill rather than a brad point or sawtooth bit to avoid a centre point

19 I'm lucky enough to have every hollowing tool on the market, so students can compare each one before they part with their hard-earned cash

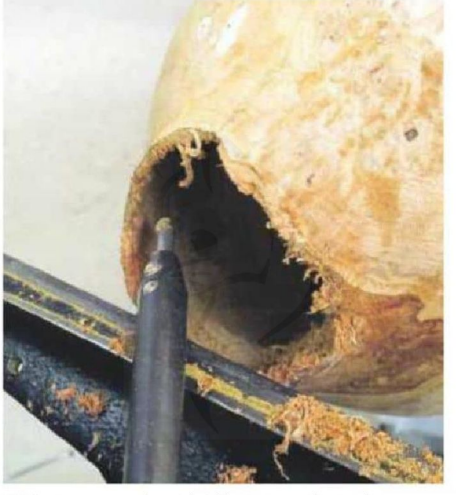


20 Here I'm using the Simon Hope hollowing tool; a small cutter on a big shaft always seems to be the best combination

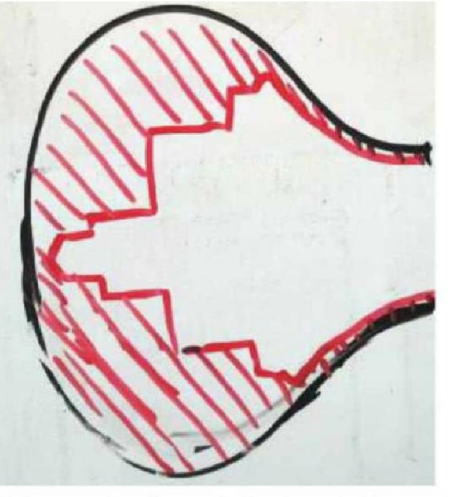


21 The cut on this piece of pine gives a better idea of the cutting action; as with a gouge the shaving is cut and then rolled around the inside of the cutter before exiting on the opposite side

22 I like to make a series of steps in the piece when I'm hollowing, so that if I cannot see what I'm doing inside, I can feel my way with the tool

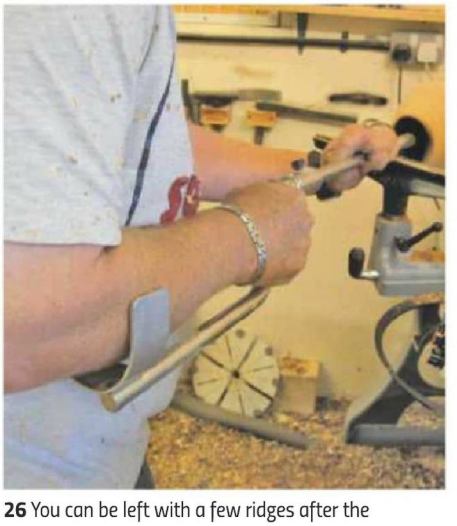


23 As I come up the side I like to turn the tool over to lessen the cut; this is particularly important when the piece gets thin – this pot will be about 4mm when finished

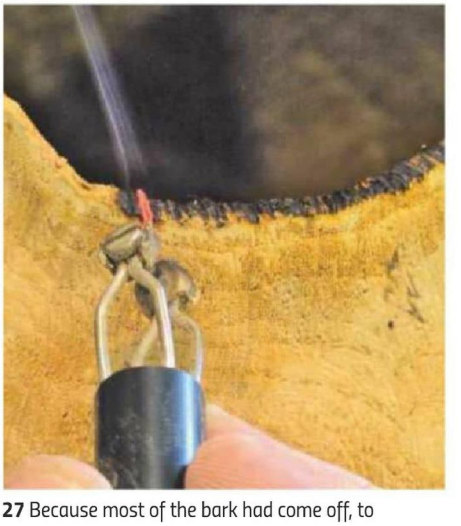


24 As you can't really see what's going on inside, I've drawn a diagram of my method of working, showing the steps used to feel where I am

25 I once heard another turner say that hollowing a vase through a small hole was like groping about in the dark without a compass, so callipers are essential here

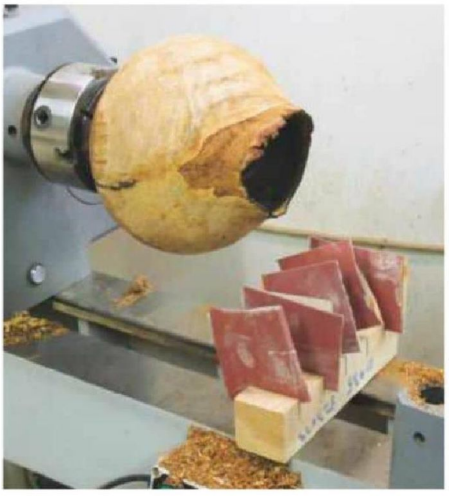


26 You can be left with a few ridges after the hollowing, but a light cut with a dedicated hollow form scraper, such as the Stewart system, is all that's needed

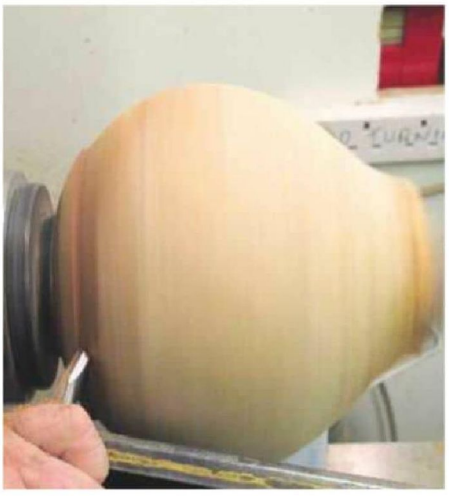


27 Because most of the bark had come off, to frame the hole I'm using a pyrography pen to burn the top; this will look more natural than paint or ink

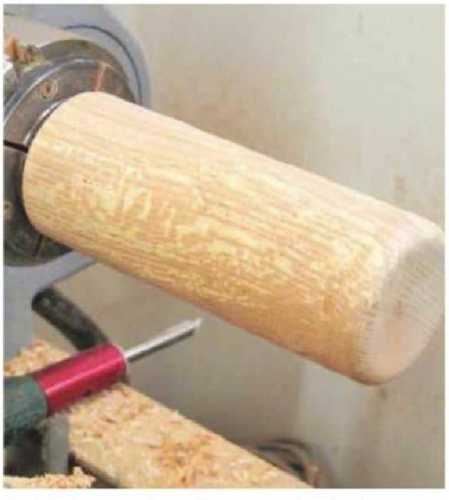
28 The piece is too wet to sand at the moment so I'm wrapping it in newspaper to draw the moisture from the surface of the pot and allow sanding



29 The next morning I put the piece back on the lathe; it hasn't moved much so the surface can easily be sanded, working through the grits until a good surface is achieved



30 While sanding I realised the shape wasn't as good as it could be so went back on the tool; luckily I'd left the base a little thicker than the top of the work

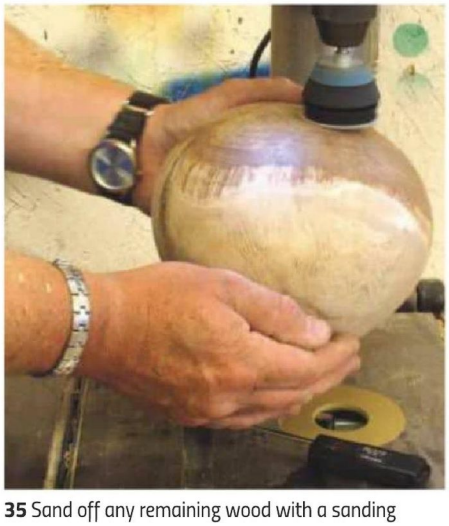


31 It's always awkward to remove the chucking point on a hollow pot like this, the natural-edge making it impossible to drive it off the rim, so I've turned a piece to locate in the bottom

32 You can see how the work is now held between centres; give the piece a 'wiggle' to make sure it's held firmly – you don't want to ruin the work at this stage

33 When other beginners ask me why I remove the chucking points off my work, I show them oak where moisture has blackened due to contact with metal

34 As always, be really careful with your tooling; little bevel rubbing cuts with a small gouge will give the best results; finish with a chisel before sanding



35 Sand off any remaining wood with a sanding pad mounted up in your pillar drill or lathe; the piece just needs oiling up and left somewhere to dry slowly

36 The completed brown oak burr pot should look something like this

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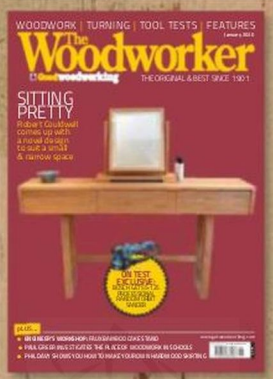

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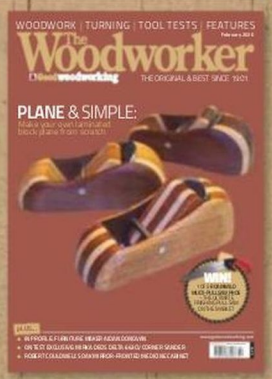

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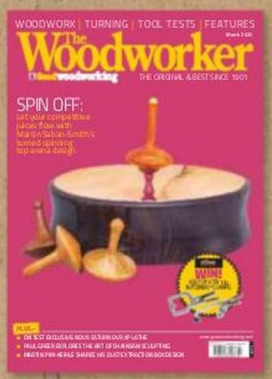

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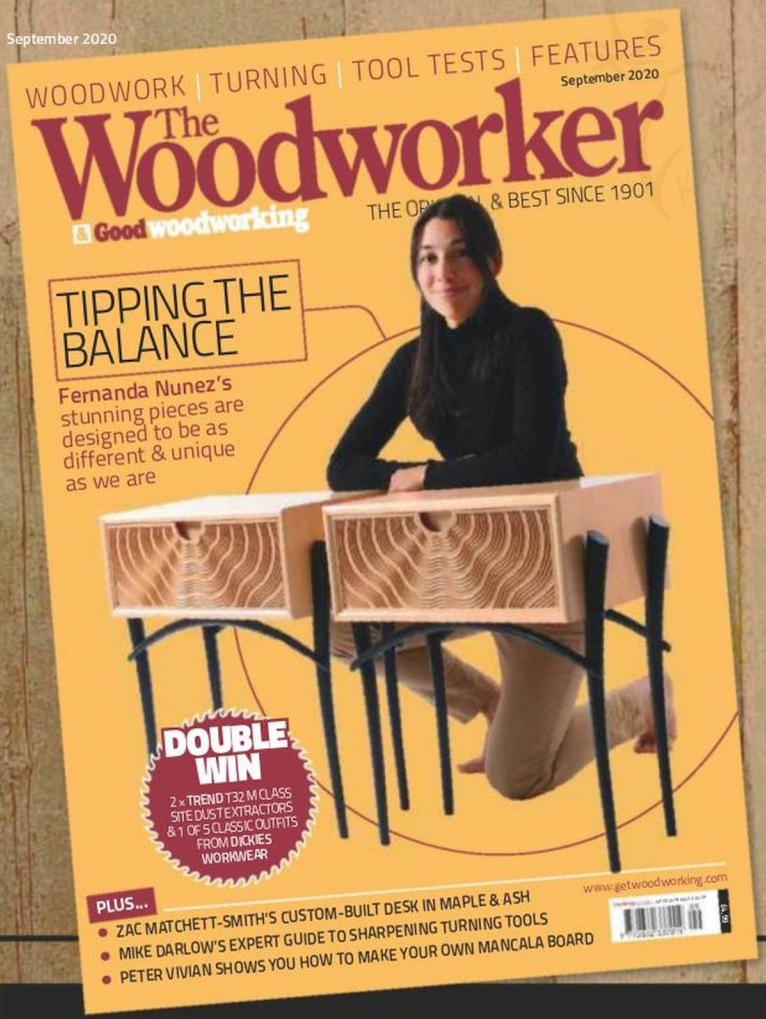

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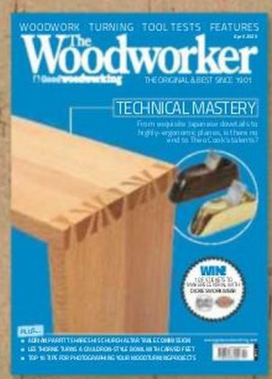

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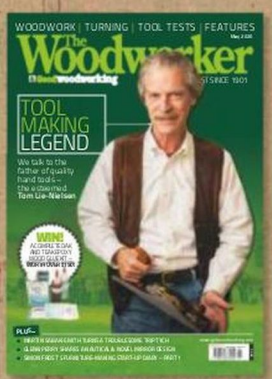

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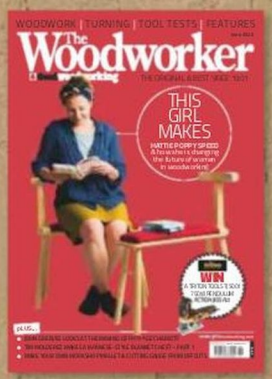

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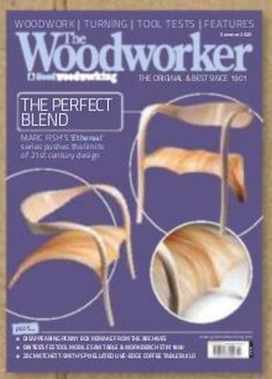

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Coming up in the next issue...

The Woodworker & Good Woodworking
November issue – on sale 23 October

THE CHOP: BRITAIN'S TOP WOODWORKER

Sky HISTORY will crown Britain's best craftsman this autumn in a brand-new UK series – *The Chop: Britain's Top Woodworker*. We bring you the full rundown of episodes and introduce you to the contestants ahead of the airing of the first episode on Thursday 15 October

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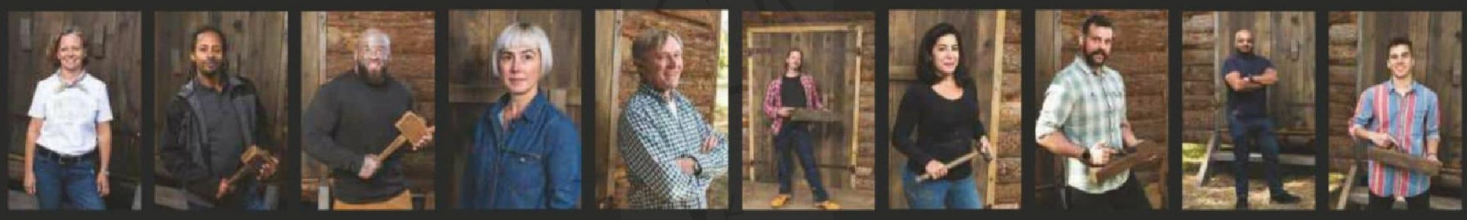

RESTORING THE MAYFLOWER II AHEAD OF ITS 400TH ANNIVERSARY
John Greeves reports on the recent restoration of the magnificent *Mayflower II*, to mark its upcoming 400th anniversary

FROM DARK TO LIGHT
Zac Matchett-Smith makes two matching beside tables using pieces of laminated walnut and ash to create a wonderful mosaic effect that fades from dark to light

PLUS ▪ Adam's desk ▪ Esherick music stand – part 2 ▪ Child's stool ▪ Art Deco clock
Generation Weil chair ▪ Simon Frost's start-up diary ▪ A tribute to Shoreditch College & John Penfold

Wharfedale Workshop

We run 1 and 2 day weekend hand tool beginners woodwork courses in our Yorkshire workshop. We cover sharpening, planing and plane set-up, chisel work, sawing and marking out along with tool selection and purchase advice (both new and second hand). Both 1 and 2 day courses are very 'hands-on' with practical projects built in and are a great start to your hobby or perfect refresher if you've been away for a 'few' years! Maximum 4 students per course

Oct, Nov, Dec 2020 and all 2021 courses are now open for enrolment

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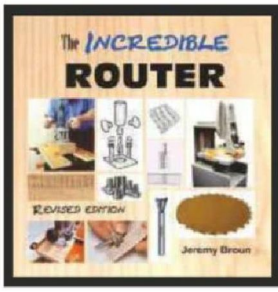

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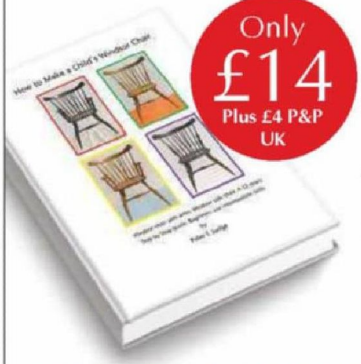

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WANTED

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TAKE 5

From cabinetmaking to woodcarving and woodturning, we have five more stunning pieces to capture your imagination, specially selected from Instagram

1 Miniature spoon pendants made from various materials, finished with beeswax, by **@holdenwoodcrafts**

2 'Vincent' plant & wine holder – a mixture of a work of art and a vessel, by **@pbpallets_woodworking**

3 Marquetry wine cabinet in mahogany and birdseye maple, with inlay bandings in wenge and maple – approximately 350 hours of work, by **@ronnie_rozenga**

4 Exquisite set of shelves in babacar wood – a local kind of Sengalese ebony, made by furniture maker Babacar MBodj Niang, posted by **@naya__studio**

5 Vessel/urn in hard maple with a 12-layer dyed turquoise veneer threaded collar, walnut threaded finial cap with a driftwood accent – the inlay is New Mexico turquoise, by **@thebarkingtree**

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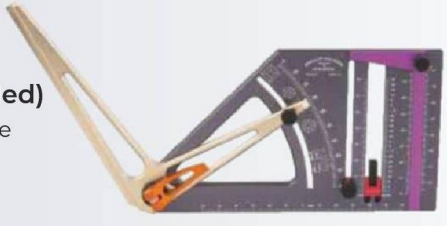

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Woodturning 317

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