WOODWORK | TURNING | TOOL TESTS | FEATURES

Summer 2020

The Woodworker

& Good woodworking

THE ORIGINAL & BEST SINCE 1901

THE PERFECT BLEND

MARC FISH'S '**Ethereal**' series pushes the limits of 21st century design

PLUS...

- DISAPPEARING PENNY BOX REMAKE FROM THE ARCHIVES
- **ON TEST:** FESTOOL MOBILE SAW TABLE & WORKBENCH STM 1800
- ZAC MATCHETT-SMITH'S PIXELLATED LIVE-EDGE COFFEE TABLE BUILD

www.getwoodworking.com

mytimemedia WOODWORKING GROUP

07

9 772632 337014

£4.99

PICK YOUR Project

It's as easy as 1, 2, 3

Over 18,000 products **IN STOCK.** Order today, **GET IT TOMORROW!**

1 KITCHEN

Cup Handles

product code: 793619

Cabinet Lighting

product code: 111522

Cabinet Hinges

product code: 571554

2 BEDROOM

Wardrobe Storage Solutions

product code: 919772

Cabinet & Wardrobe Sliding Door Kits

product code: 191765

Bedroom Storage Solutions

product code: 675804

3 BATHROOM

Toilet Roll Holder

product code: 394457

Glass Door Glazing Channel

product code: 717136

Bathroom Accessories

product code: 859335

Get **£20 OFF*** your first order with code **WW20** when you spend over £100 + VAT **SHOP ONLINE TODAY!**

FAMILY MEMBER OF Manutan

CALL: 7am-8pm 7 days a week
0808 168 28 28

ONLINE: Shop 24/7
IronmongeryDirect.co.uk

IronmongeryDirect
MASTERS OF OUR TRADE

Terms and Conditions apply. *Valid against orders when you spend over £100 ex VAT. This offer cannot be used with any other discount or promotional offer. Max 5 units per item. Offer valid until 23:59 GMT 30th August 2020.

Photographs courtesy of **James Lovett**

Welcome

Summer is now upon us, and in this special summer issue we hope to bring you some exciting, entertaining and inspirational content to ease you through these strange times that we still find ourselves in. Luckily the lockdown has eased to some extent and we're now able to socialise more freely, visit the shops (with a few exceptions) as well as basking in the sun and making the most of the great outdoors. This has certainly been a saving grace for me over the last few weeks, and I'm sure I'm not alone in very much relishing being out in the fresh air, feeling the sun on my skin and marvelling at some beautiful views. I've been doing that a lot lately, and exploring areas in and around Brighton, where I live, has become my new favourite hobby.

The Chattri

I'm not sure how many of you know about the history of Brighton and Hove, but regular readers will be familiar with my monthly doses of sights I've seen as well as the historical significance of landmarks on my doorstep, which have hopefully proved of interest. Last month saw me exploring woods and discovering willow fencing, but this month I have been out and about on the South Downs and decided to pay a visit to the Chattri Memorial, which is situated just a few miles outside of the city. I wasn't fully aware of the significance behind this beautiful stone structure, but upon carrying out some research before my trip, I learned that it actually marks the cremation site of the many Hindu and Sikh soldiers who died during World War I. During this time, injured Indian soldiers were hospitalised in Brighton's Royal Pavilion, Dome and Corn Exchange, and the Royal Pavilion was actually the first Indian hospital to open in Brighton. Those who died were cremated on the Downs, and in 1921, the Chattri Memorial was constructed on the cremation site. Meaning 'umbrella' in Punjabi, the Chattri is certainly a thing of beauty and the panoramic views surrounding it are simply stunning. On one side you can see all over Brighton and Hove, then behind it the rolling hills of the South Downs and a beautiful poppy field. It's a perfect spot for some quiet contemplation and I very much enjoyed reading the plaque and learning all about the soldiers who fought in the war, their names and positions, who sadly lost their lives. The black and white photo above shows the unveiling of the war memorial back in February 1921, which was attended by H.R.H. the Prince of Wales.

Words of encouragement

During the last few months, we have also really appreciated receiving your emails and words of encouragement, which really do mean a great deal – thank you. So many of you have told us how much you love receiving the magazine and how important it is for publications such as this one to survive during these tough times, as they promote and encourage woodworking, which is more important now than ever before. We're also thrilled to see what you've been making during lockdown, so please do keep sending in your photos and emails and, most importantly, keep having fun making projects in your workshops.

We hope you enjoy this summer edition and as always, please share your views and opinions with us. Also, don't forget to follow us on Instagram (**@woodworker_mag**) if you don't already do so, to ensure you stay up-to-date with all the latest news from the world of woodworking.

Enjoy!

Email tegan.foley@mytimemedia.com

Tegan Foley
Group Editor

Phil Davy
Technical & Consultant Editor

76 MULTI-LEVEL DISPLAY

Phil Davy builds a planter sturdy enough for nine heavy plants and foldable for storage

The Woodworker & Good Woodworking
SUMMER 2020

PROJECTS & TURNING

TECHNICAL

REGULARS

ON TEST

FEATURES

FOLLOW US! www.facebook.com/GetWoodworking @woodworker_mag

www.getwoodworking.com
Published by MyTimeMedia Ltd.
Suite 25, Eden House Enterprise Way,
Edenbridge, Kent TN8 6HF
UK and Overseas Tel: +44 (0) 1689 869 840

SUBSCRIPTIONS
UK – New, Renewals & Enquiries
Tel: 0344 243 9023
Email: mytimemedia@subscription.co.uk
USA & Canada - New, Renewals & Enquiries
Tel: (001) 866 647 9191
Rest of World – New, Renewals & Enquiries
Tel: +44 (0) 1604 828 748
Email: help@tww.secureorder.co.uk

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

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

CONTRIBUTORS
Jamie Smith, Shaun Newman, Andrew Hall, Peter Bishop, Kelly Wakeley, Paul Greer, Jeremy Brown, Marc Fish, Tom Fraser, Tim Molderez, Peter Dunsmore, Phil Davy, Les Thorne, Zac Matchett-Smith, Alan Turner

PRODUCTION
Designer: Nik Harber
Retouching Manager: Brian Vickers

ADVERTISING
Group Advertising Manager: Rhona Bolger
Email: rhona.bolger@mytimemedia.com
Tel: 01689 869 891

SUBSCRIPTIONS
Subscriptions Manager: Kate Hall

MANAGEMENT
Group Advertising Manager: Rhona Bolger
Email: rhona.bolger@mytimemedia.com
Chief Executive: Owen Davies

mytimemedia
print & digital media publishers

D&M TOOLS

THE TOOL SUPERSTORE

HAND, POWER TOOLS & MACHINERY SPECIALIST

DM-TOOLS.CO.UK

When you demand Quality Tools, Trusted Service & Expert Advice...

D&M Tools has been family owned and managed since 1978, and **in 2018 we celebrated our 40th Anniversary!** During that time we have earned a reputation with our customers as a trusted partner. Whether you are a trade professional or a DIY enthusiast, our mission is a simple one - **to supply top quality tools at the best value for money, backed up by a service you can trust.**

LOW TRADE PRICES!

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

OVER 10,000 LINES IN STOCK!

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

SHOP ON-LINE 24HRS A DAY

Visit our easy-to-use website to see what we mean about range and value. Browse and buy with confidence 24hrs a day from the biggest brands in the business, all at prices you'll find hard to beat, you will also find all our **latest offers and deals.**

Why not **subscribe to our regular emails** to keep up with our latest deals and offers or join our **D&M Loyalty Scheme** and earn valuable loyalty points every time you shop on-line.

More details on our website.
Scan this QR code

MASSIVE CHOICE FROM THE BIGGEST BRANDS!

ARROW · armorgard · BAHCO · BESSEY · BOSCH · BOSTITCH · CamVac · Connell of Sheffield · DEWALT · Dickies · DRAPER Tools · DREMEL BIG ON DETAIL · Empire · Estwing · EVO-STIK · FAITHFULL QUALITY TOOLS · FEIN · FESTOOL · FISCO · freud · IRWIN · KÄRCHER · KNIPEX · Kreg · Kuny's · Laserliner · LEATHERMAN · LEDLENSER · Leica Geosystems · LYTE LADDERS · TOWERS · mafell · makita · IRWIN Marples · MARSHALLTOWN · metabo · Milwaukee · MONUMENT TOOLS LTD · Nilfisk · NOBEX · nws MADE IN GERMANY · PREMIER DIAMOND PRODUCTS · Powerbor · PROXXON · RECORD POWER ESTABLISHED 1909 · REISSER · ROCKLER · ROUGHNECK · RST HAND TOOLS · SANKYO DIAMOND TOOLS · SCAN · scheppach · SCRIBE-MASTER · SJÖBERGS OF SWEDEN · SMART · Snickers WORKWEAR · STABILA · STANLEY · Starrett · Titebond · TORMEK Sharpening Innovation · TOUGHBUILT · trend tool technology · triton Precision Power Tools · veritas · VETO PRO PAC TOOL BAGS THAT WORK · Vitrex · Wera · AND MORE!

IMPORTANT COVID -19 UPDATE:

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

In light of the current Government restrictions on social distancing and for the safety of visitors and staff we have have now taken the decision to **POSTPONE our show until October 2021.**

VISIT OUR EXTENSIVE TWICKENHAM SUPERSTORE
73-81 HEATH ROAD • TWICKENHAM • TW1 4AW
020 8892 3813 • SALES@DM-TOOLS.CO.UK

FREE DELIVERY

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

020 8892 3813
MON-SAT 8.30am-5.30pm
(CLOSED BANK HOLIDAYS)

D&M TOOLS

OUR CUSTOMERS LOVE US!

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

★★★★★
"Not just great prices but excellent customer service. Whenever I've contacted to sort out deliveries, warrant work etc they have always gone the extra mile! One very satisfied customer"

★★★★★
"Great service. Great service, great advice, competitive pricing and amazingly quick delivery. For tools I go straight to D & M Tools"

★★★★★
"Fantastic store well stocked. I have bought thousands of pounds worth of tools from D&m tools either in store or online and have never had any reason to shop elsewhere, their prices are very competitive."

★★★★★
"**Best prices.** I have bought thousands of pounds worth of tools from D&m tools either in store or online and have never had any reason to shop elsewhere, their prices are very competitive."

★★★★★
"**Good website.** Well arranged. Simple setup for payment. Goods delivered on time by courier with full information about progress and likely timing - which was accurate. No problems."

★★★★★
"**Great company to deal with**. Prompt delivery and excellent price. Would not not hesitate to use D&M tools again. Thankyou.

Trustpilot ★★★★★
www.trustpilot.co.uk/review/www.dm-tools.co.uk

@DM_Tools DandMTools dm_tools DMTools1

The **W EXHIBITION** announces new September 2021 dates

Following weeks of complex negotiations with the NEC, and as a direct reflection of the ever changing global impact of COVID-19, The W Exhibition organisers have announced the decision to postpone the event until September 2021.

The UK's flagship event for the furniture manufacturing and joinery industries, The W Exhibition, will return to the NEC from 26–29 September 2021, occupying halls 18, 19 and 20. Organisers describe 'leaving no stone unturned' in their bid to reach a satisfactory new dateline for the event, with 'the safety of its stakeholders, exhibitors and visitors' at the forefront of negotiations with the NEC.

The W Exhibition Managing Director, Nickie West, said: "The current and short term climate, combined with our complete determination to deliver the best possible exhibition, have created the critical path for us in negotiating a move for the event into, what we deem to be, a more assured and safer timeline next Autumn.

"We have explored numerous alternatives, including moving the show to later in 2020 and earlier in 2021. Due to the length of our tenancy, the complexities of our build requirements, the ever changing global calendar of events and ongoing uncertainties in the UK, we have concluded that a September 2021 timeline offers a more secure prospect for both the future of the show and our stakeholders."

The announcement follows months of global uncertainty. The W Exhibition in September 2021 will now fall after Hannover's Ligna in May, around which many industry brands plan their new product development cycles. After the September 2021 event, The W Exhibition will continue to follow a biennial frequency, returning to the NEC in 2023.

Nickie added: "We really have left no stone unturned in our efforts to secure the long term health of our industry's key platform, as well as each of our stakeholders. This includes close consultation with our partners at the WMSA, whose continued guidance and support is greatly appreciated.

"In many ways, the impact of recent world events has allowed us to reposition The W Exhibition to reflect the European market. Products launched at Ligna will be showcased for the first time in the UK at The W Exhibition, rather than preceding the event, which will suit NPD cycles and create excitement for our visitors.

"There are some really exciting changes which are being developed behind the scenes as we strive to return with our best showcase yet. The campaign for The W Exhibition 2021 will represent our biggest investment to-date, which is why we have been so determined to move the event over to the right timeline to do all of this work justice. We want to deliver the best possible ROI for our exhibitors and visitors.

"We are looking forward to continuing our work with the industry and hope that they will share in our excitement as we look ahead to a showstopping W Exhibition in September 2021."

The W Exhibition has over 40 years of heritage, and continues to grow. It will return to the NEC for its biennial four-day showcase from September 26–29, 2021. The show brings together some of the world's leading suppliers of woodworking machinery, materials and tooling. To find out more, see **www.wexhibition.co.uk**.

The **'HARROGATE' SHOW** postponed until 2021

Regrettably, due to the Coronavirus outbreak, the decision has been taken to reschedule this year's North of England Woodworking & Power Tool Show, or the 'Harrogate' Show as it is otherwise known, until 12–14 November 2021. Additional information will be provided over the coming months on **www.mytimemedia.co.uk/northofenglandshow** and via our social media channels. In the meantime, keep safe, keep well and we look forward to seeing you next year!

NIWAKI adjustable tripod ladders

Professionals working on uneven, sloping or stepped surfaces will now be able to work safely and securely thanks to Niwaki's new adjustable tripod ladders.

Available in 7ft, 9ft and 11ft models, the new tripod ladders can be adjusted using a fully integrated spring pin in 10 steps giving each leg a total adjustment of 40cm for use on the most uneven or stepped surfaces.

The new Niwaki adjustable tripod ladder makes working at height safe and stable, thanks to the three-legged adjustment for ultimate flexibility, double rungs for comfortable and prolonged standing and optional rubber feet for safe working on hard surfaces. For more information and pricing, see **www.niwaki.com**.

The Woodworker Timber Suppliers Directory – Summer 2020

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

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

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

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

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

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

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

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

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

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

English Woodlands Timber (West Sussex)
Tel: 01730 816 941
Web: www.englishwoodlandstimber.co.uk

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

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

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

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

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

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

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

The Hardwood off cut shop (Essex)
The Wood Yard, Canterbury Tye Farm, Doddinghurst road, Brentwood, Essex, CM15 0SD
Tel: 01277 205990
Web: www.hardwoodoffcuts.co.uk
sales@hardwoodoffcuts.co.uk

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Timberman (Carmarthenshire)
Tel: 01267 232 621
Web: www.timberman.co.uk

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

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

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

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

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

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

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

Bespoke oak table finished with **OSMO POLYX®-OIL**

When keen woodworking expert and YouTube vlogger, Peter Parfitt, moved into a new home, he was looking for a finish to help complete his latest project, a large solid oak dining table with a pair of matching benches. Peter chose Polyx®-Oil from Osmo UK to enhance the wooden surface of the French oak and to provide a professional finish that would create a visual statement in his new home and documented it in a video on the New Brit Workshop YouTube channel.

Peter manufactured the new oak table in his woodworking studio. The large piece of furniture was set to be used as a focal point and needed to stand out. "We bought the wood especially for the new home," comments Peter. "After using Osmo UK products without complaint for a number of years, I knew that Polyx®-Oil would be the right product for the job. One of my favourite parts in projects like this is that when applying the finish, you can really see the wood start to come alive."

Peter chose to use the shade 3011, clear gloss for the table. Developed from natural oils and waxes, the finish provides durable protection and the water- and dirt-resistant formula makes it an ideal choice for a dining room table where spills are inevitable. One of the benefits of using Polyx®-Oil is the way in which it accentuates the natural characteristics of the wood. The clear gloss finish creates a warm and rich effect that places emphasis on the wood's natural grain.

As no product had been applied prior to Polyx®-Oil, the application process was simple. All Peter needed to do was make sure that any dust or debris – accumulated during the sanding process – had been wiped away by cloth. He then proceeded to use a paintbrush to apply the finish, allowing him to gradually build up coverage and to achieve the desired result. Osmo UK recommend leaving 8-10 hours drying time after the initial coat and advise that in the event of a spillage, to carefully remove excess product with a cloth.

To document the project, Peter created a YouTube video – **www.youtube.com/watch?v=YdH6vdu1YDo** – to guide viewers through the process of creating the beautiful wooden table and matching benches. He starts by talking viewers through the complex sanding process, before demonstrating how he recommends applying Osmo Polyx-Oil.

For more information on the complete range of Osmo eco-friendly finishes, see **www.osmouk.com**.

PONY JORGENSEN introduces three new heavy-duty clamps

The Jorgensen heavy-duty E-Z HOLD expandable bar clamp line boasts a clamping force of up to 600lbs, doubling the force of medium-duty Jorgensen E-Z HOLD expandable bar clamps. With an ergonomic grip lever handle and a maximum reach of 3⅝in from the edge of the bar, the clamp line includes Pony Jorgensen's exclusive patented feature that allows for two E-Z HOLD expandable bar clamps to be joined together to make a single clamp with greater opening capacity. Similar to the other E-Z HOLD clamps, this new series can be converted to a spreader clamp.

With the introduction of the heavy-duty collection to the Jorgensen E-Z HOLD expandable bar clamp product line, Pony Jorgensen, operated by Arrow Fastener Company, now offers a complete suite of expandable bar clamps for DIY and woodworking projects of all sizes. The full product line includes Jorgensen E-Z HOLD hobby bar clamps for hobby and craft projects, with maximum clamp openings of 4 and 8in; 6 and 12in light-duty Jorgensen E-Z HOLD expandable bar clamps; and medium-duty Jorgensen E-Z HOLD expandable bar clamps, with maximum clamp openings ranging from 6-36in. "As Pony Jorgensen continues its reintroduction to the North American market under the guidance of Arrow Fastener, we're committed to expanding and solidifying our product offering with quality woodworking tools," said Gregg Malanga, Product and Business Development Manager for Pony Jorgensen. "We're excited to offer a heavy-duty version of our popular E-Z HOLD expandable bar clamps, giving our customers and retail partners the ability to offer a full suite of trigger-style bar clamps, and ensuring woodworkers will never have to compromise on performance when reaching for a Pony Jorgensen clamp."

A historic American brand founded in 1903, Pony Jorgensen makes woodworking clamps of uncompromising quality for professional woodworkers and craftspeople alike, including a range of bar clamps, pipe clamp fixtures, C-clamps, hand and spring clamps, band clamps, corner and framing clamps and speciality clamps, as well as a collection of light- and heavy-duty bench and drill press vices.

More information about the Jorgensen heavy-duty E-Z HOLD expandable bar clamp and other Pony Jorgensen tools is available at **www.ponyjorgensen.com**.

MAKITA launches new DMR115 job site radio

Makita has launched the latest addition to its radio range, with the DMR115 job site radio. With Bluetooth functionality and a light weight of 4.8-5.5kg, it is the perfect companion for construction workers.

The new DMR115 job site radio is a robust and simple to use DAB/DAB+ radio. IP65 rated, it has a highly durable design with elastomer bumpers to protect against tough job site conditions. The radio has a powerful Bluetooth sensor to connect wirelessly for audio streaming from mobile devices up to a range of 10m away, and includes two stereo speakers and an additional subwoofer to produce high quality sound. In addition, the Multi-Amplifier provides clear hi-fi sound reproduction without decreasing sound quality even when the volume is high.

Matt Chilton, Product Manager at Makita, says: "Workers often spend long hours onsite, from taking on heavy-duty construction work to fixing snagging, so it's only right they have high quality, reliable entertainment available to help make even the most laborious of tasks more enjoyable. "We've designed our latest DMR115 job site radio to provide not only the best in sound quality, but the best in convenience. The radio is equipped with a dual power source for AC or Makita LXT and CXT batteries, providing flexibility regardless of the power sources available onsite. In addition, the USB slot will allow for mobile charging onsite, so you never need to worry about draining the source phone's battery. This, in combination with a high quality sound woofer to provide deeper and richer bass sounds, a My Equaliser (MY EQ) mode to adjust treble and bass and six selectable sound modes to suit various music genres, makes the radio the ultimate onsite companion."

For more information on the site radios available from Makita, see **www.makitauk.com**.

Hammer®

HNC 47.82
CNC CREATIVITY

THE NEW HAMMER CNC-MOULDER, COMPACT AND PRECISE

The new Hammer CNC-moulder makes the world of CNC machining affordable for everyone. Ideal for demanding do-it-yourselfers, ambitious model makers, quality-conscious small-series manufacturers as well as training facilities and schools. The HNC 47.82 removes the limits of manufacturing possibilities and impresses with its Austrian mechanical engineering quality.

Due to unexpectedly high demand – delivery by September 2020
Pre-order now and secure delivery date!

NEW
2020

4 Variations to suit your needs
Prices from £3,495

FELDER GROUP UK Ltd.
Unit 2, Sovereign Business ParkJoplin Court, Crown Hill GB-MK8 0JP
MILTON KEYNES | **Tel. 01908 635000** | **www.felder-group.com**

IRONMONGERYDIRECT recognised as one of the UK's best workplaces

IronmongeryDirect has been named as one of the UK's Best Workplaces™ 2020, in a report compiled by Great Place to Work®. IronmongeryDirect was listed among 162 companies shortlisted for this award – a decision based on positive employee experience and HR and leadership practices that the company upholds.

The Best Workplaces Award celebrates the companies that promote a healthy workplace culture through a combination of factors including employee trust, pride and camaraderie. Overall, 162 small, medium, large and super large companies were shortlisted, and IronmongeryDirect ranked 59th out of all of the medium companies. To achieve the award, the assessors examined IronmongeryDirect's HR and leadership practices, policies and culture as well as responses to a Trust Index© survey shared with all its employees, completed anonymously to encourage honest responses. Overall, 86% of IronmongeryDirect employees said that the company "is a great place to work."

The Trust Index© survey covers aspects including the credibility and fairness of management, whether employees feel that they are respected and if employees report a sense of pride in their work. Results from the survey account for three-quarters of the final result.

IronmongeryDirect also provided detail of its policies that contribute towards the employee experience. This includes factors such as numerous employee benefits, how it inspires those that work for the company and transparent internal communications practices. This was part of The Culture Index©, accounting for the remaining quarter of the final result.

Marco Verdonkschot, Managing Director at IronmongeryDirect, said: "We are delighted to rank among a list of esteemed brands. To be recognised as one of the UK's Best Workplaces is a huge achievement and is testament to our dedication to create a healthy workplace culture where our employees feel trusted, valued and loyal to achieving organisational goals. We are committed to driving our business performance through our biggest asset, our people, and I believe that the value and pride our employees place on working at IronmongeryDirect will ultimately be reflected in the customer experience."

IronmongeryDirect is the UK's largest specialist ironmongery supplier, with over 18,000 products, all with a minimum five-year guarantee so customers can be sure of quality. The monitoring of competitor prices means customers always get the best deal. If customers need any advice or technical support, IronmongeryDirect's skilled and highly knowledgeable team of GAI (Guild of Architectural Ironmongers) qualified specialists are available seven days a week.

To find out more about IronmongeryDirect, see **www.ironmongerydirect.co.uk**.

MICROJIG introduces MATCHFIT Dovetail Clamp AP

When MICROJIG, the leader in table saw accessories, introduced its MATCHFIT Dovetail Clamps, the company created an entirely new category of tool that eliminated the need for T-track and gave makers infinite hold-down placement options using sliding dovetail tracks.

Now, they are looking to build on that with another innovation to streamline the workshop: the MATCHFIT Dovetail Clamp AP. The new clamp allows woodworkers to clamp in two directions at once, doing the work of two clamps in one with the new X-Pad accessory, which comes as standard.

You simply rout a standard ½in, 14° dovetail groove and slide the clamp to the intended position. The green X-Pad slides over the clamp pad. Woodworkers can position the notch to the edge of the piece and clamp down, and the X-Pad pivots around the edge of the piece to apply both hold-down and inline pressure at the same time. Because the pressure comes from the top down, the product virtually eliminates the board lifting up, which is common with traditional inline clamps.

This opens up a variety of uses for woodworkers, including gluing long parts without long clamps, creating a tall fence or straight-line jig for the table saw, or securing material for use on the drill press or mitre table.

The MATCHFIT Dovetail Clamp AP adds height to the Dovetail Clamps, with an 8½in capacity. The X-Pad also features an internal bevel that allows makers to hold down round stock.

Finally, the new clamp features an anti-pivot coil spring. This coil allows the craftsperson to set the height of the arm, and for it to stay put. The arm will not swing around or slide down, even without support from material. That means makers can complete repeatable processes like cuts, even when switching out material.

"The Anti-Pivot technology was designed to make it easier to switch out large projects that required multiple clamps," said Henry Wang, founder of MICROJIG. "The X-Pad helped us maintain flat contact with the workbench and solved a problem with regular inline clamps lifting the material when side pressure is applied." The MATCHFIT Dovetail Clamp AP is available now on MICROJIG's website – **www.microjig.com** – and through select retailers globally. Like other MICROJIG products, it is backed by an extended three-year warranty.

Tradespeople ready for **DIY fixes**

According to a survey by global workwear brand Dickies, over the coming months nearly three-quarters of tradespeople expect to be fixing botched DIY jobs carried out by people at home during the lockdown imposed in response to the Coronavirus outbreak.

The poll, carried out through Dickies Workwear's Twitter feed, revealed that 72.9% of respondents anticipated spending some of their time fixing DIY disasters over the next few months.

"If the queues outside B&Qs recently reopened stores were anything to go by, many people will have been using their time during the lockdown to attempt home improvements – including the kind of jobs they'd usually rely on a tradesperson to complete for them," said James Whitaker, Marketing Director for Dickies.

"It's very likely that tradespeople will be busy over the coming months

MIRKA celebrates 20 years of dust-free sanding

For two decades, Mirka has been at the forefront of dust-free sanding, thanks to an invention that revolutionised workplaces all around the world. By developing an abrasive that features a net structure instead of a conventional paper backing, Mirka was able to introduce extremely efficient on-tool dust removal that improves both the work quality and working environment. Mirka simply called the new abrasive Abranet.

Manufactured with Mirka's patented technology, the net structure of the Abranet abrasive ensures a sanding particle is never more than 0.5mm from a dust extraction hole. This means that sanding grains are able to retain their cutting power and the resulting dust is safely removed. Abranet is highly resistant to dust pills and clogging, and is easily cleared to ensure optimal use out of every abrasive. With every coarseness grade providing excellent results, the original Abranet and its many versions are best combined with Mirka's efficient and ergonomic power tools and dust extractors. New versions of the Abranet continue to be developed and patented.

"The Mirka Abranet net abrasive is a product of true Finnish ingenuity and ability to think outside the box. What started out as a laboratory experiment quickly proved its worth, and it's a perfect example of the Mirka way of doing things," says Hans Hede, Development Engineer and one of the 'fathers' of Abranet.

Today, 20 years later, dust-free sanding is widely accepted as an industry standard, with many competitors having seen the advantages of the Abranet approach. Original Mirka Abranet abrasives and their patented technology come from the Mirka factory in Jeppo, Finland, where it all started.

Mirka is looking forward to many more decades of dust-free and safe working environments, made better every day by the products and solutions it continues to develop and manufacture. To find out more, see **www.mirka.com/uk**.

putting right the efforts of those who haven't been able to match the skill that's often required to do those jobs well. While our poll has been a fun way of looking at this, it does serve as a reminder of how much we rely on the expertise of trained and experienced tradespeople in our day to day lives."

Are you a tradesperson who is spending some of your time fixing DIY disasters? Tell Dickies about it on social media, using the hashtag **#DickiesDIYfix** and tagging them using the following details:

- Twitter: **@DickiesEurope**
- Instagram: **@dickiesworkwearofficial**
- Facebook: **@DickiesWorkwear**

For more information, see **www.dickiesworkwear.com**.

What's new from

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

D&M TOOLS

NEW BRITISH-MADE TURNING TOOLS FROM RECORD POWER

MANUFACTURER: Record Power
D&M GUIDE PRICES: See our website

Record Power's turning tool manufacturing roots stretch back to the 1980s, when they were made in Record's Meadow Street factory in Sheffield. They are proud to now be manufacturing them again at their ever-expanding production facility close to their Sheffield roots.

These tools are made using modern CNC machining, laser-cutting and automated polishing, then ground and assembled by hand. A salt-bath heat treatment ensures the ideal level of hardness, giving the perfect balance between flexibility and retention of the cutting edge. This combination of techniques ensures that each tool is subject to accurate manufacturing tolerances and careful, rigorous inspection, to ensure their high quality finish and performance.

These tools are manufactured to a standard that makes them perfect for use by demanding professionals, but also at a cost that makes them ideal for the novice turner. Designed in consultation with and tested rigorously by professional woodturners, they represent a new standard in quality and value.

The blades are made of high speed steel to keep their cutting edge longer and the handles of close-grained, stable and heavy beech. The shape of the handles has been specially designed, based on the requirements of experienced woodturners, to provide a strong and comfortable grip, leaving you free to concentrate on turning.

These new tools are available individually, as a bowl turning set or spindle set of three tools. When you buy a Record Power turning tool you are investing in many years of manufacturing expertise and knowledge from a brand with a rich heritage of woodturning specialisation.

METABO TS254M TABLE SAW

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

New from Metabo, the TS254M is their most compact and mobile table saw with a 254mm saw blade weighing only 24kg and providing a cutting height of 80mm. It is equipped with a powerful 1,500W motor with soft start, restart protection, fast blade brake, plus rear and side extendable tables to support the workpiece while also offering a cutting width of 520mm.

It also benefits from a precisely adjustable parallel guide/rip fence with double clamping and quick fastening. Accurate saw blade inclination is given via a gear guide that provides precise cutting angles from -1.5-46.5°.

The anti-twist tubular frame construction meets the highest demands on the building site and strength during installations. All cables and add-on components for transport can be stored on the casing. A folding stand is available as a separate accessory.

metabo
PROFESSIONAL POWER TOOL SOLUTIONS

THE UK's PREMIER BRANDED HAND, POWER TOOLS & MACHINERY EVENT

D&M TOOLS

'THE' TOOL SHOW

THETOOLSHOW.COM

20 ANNIVERSARY

2020 SHOW CANCELLED

Dear Tool Fan,

After very careful consideration we have taken the decision to cancel The Tool Show 2020 in October.

In view of the current situation with COVID-19 we felt that in order to protect the safety and wellbeing of customers, our colleagues and suppliers, that this is the best course of action.

After lengthy discussions with the venue and the current restrictions in place it would be impossible to host an interactive Tool Show that requires personal and close demonstrations along with a large attendance of both exhibitors and visitors to work.

The D&M Tool Show offers a unique family experience, for all those who attend year after year, there is a very passionate relationship with the tools, suppliers and D&M Tools, along with the feeling you get at a show that has been running for 20 years, the current and expected restrictions in place would not offer the experience we all want to offer.

We wanted to hang on for as long as possible to see if anything tangible would change before making the decision, and unfortunately it hasn't, and time is against us with regards to planning and preparing for the show.

We know how disappointed many of you will feel, because we feel the same, but we will return with our 20th show next year!

The good news is we have already agreed new dates for 2021 as follows: October 8th to 10th.

We plan to make this show the best yet and after a year away I'm sure all the top leading brands will feel the same, in the meantime do keep an eye on our website for many of the new products and deals we had planned to bring you this autumn.

Stay safe and take care tool lovers.

Kind Regards

Paul Dowding,
Show Organiser & Managing Director @ D&M Tools

We'll be back for 2021 - Put the date in your diary

8th-10th OCTOBER 2021

FRI-SAT 10am – 5pm • SUN 10am – 4pm

KEMPTON PARK RACECOURSE • SUNBURY-ON-THAMES • TW16 5AQ

D&M TOOLS, TWICKENHAM • 020 8892 3813 • DM-TOOLS.CO.UK

HOW TO AVOID FAILURES WHEN SANDING

For tips on improving your sanding skills while ensuring a smooth finish on your workpiece, look no further than this handy guide from **Dremel**

STEP 1 **Consider ventilation & protection while sanding**

While you may think of it as little more than a bit of dirt, sawdust is harmful if inhaled. Ventilation is especially important when it comes to sanding surfaces that have been painted, as paint particles are toxic. Harmful particles are also released when sanding metal and fibreglass. Do your sanding outside, or in an area with large windows. If neither option is available, using a vacuum cleaner to suck up the sawdust and wood chips will also work. And most importantly: to avoid breathing in dust or getting it in your eyes, always wear a dust mask and safety goggles. Be sure to wear gloves to protect your hands too.

STEP 2 **Test your sanding skills first**

To avoid damaging the surface or removing too much material of, say, a beloved toy, always complete a test first. Every sanding tool, or Dremel sanding accessory, is different – some are harsher than others, and in cases such as this, less is definitely more as you can't put back what you've sanded off! Also, experiment with different rpms and note the different effects they have on the surface you're working on. Get a few scrap pieces of the material you'll be sanding and see what a low rpm does compared to that of a high rpm. The same goes for pressure, but it's definitely advisable to err on the side of caution.

FURTHER INFORMATION

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

STEP 4 Let the tool do the work

Avoid creating dents or gauges in your work by maintaining a light and even pressure. For flat surfaces, use long, consistent strokes. Go over the surface more times rather than attempting to do it all in one go. Holding the sanding tool with two hands, just as you would hold a golf club, and taking your cues from the sanding equipment itself, will result in the best finish. If letting the tool do the work doesn't feel natural, it could be that the grit of your accessory is worn down. In that case, replace it. When you have the correct accessory in good condition, you should be able to let the tool guide you.

STEP 5 Choose the correct abrasive grit for each job

Expect to use a number of different accessories with every sanding project. It's rare that a project will require just one. If you're sanding an old window, use an accessory with low grit, such as a sanding band, to remove old paint, then move onto a sanding disc to smooth the surface. A higher-grit abrasive buff is perfect for giving a final smoothing to detailed projects, such as the legs of a baroque chair.

STEP 6 Go with the grain when sanding wood

The naturally occurring lines and rings you can see when you look at a piece of cut wood are known as the grain. When you start sanding, it's important to move the tool in the same direction as the grain. If you sand against it – especially with a coarse abrasive – you may cause splinters or chips. Even if you don't cause larger cross-grain tears, sanding against the grain can still create scratches, and these scratches become more obvious after painting or varnishing. When sanding wood, ensure you get the smoothest result by keeping in line with the grain.

STEP 3 Choose the right rpm for your Dremel Multi-Tool

Every Dremel Multi-Tool has a setting for rpm. With a high rpm, you might remove too much material or even create burn marks on the surface you're sanding. To avoid any potential mishaps, always begin with a lower rpm and test on a piece of scrap material first. Take notice of the material composition too: harder materials can handle a faster speed, while softer materials might require a lower one. Plastic could even melt when the rpm is set too high and if the material gets hot. It's a good idea to get into the habit of turning the sanding tool on first to check the rpm you're using is correct, before touching it to the surface.

STEP 7 Keep your sanding equipment fresh

If you've ever sanded wood by hand with abrasive, you'll know that it eventually wears out. The same applies to the accessories of a rotary tool, such as the Dremel Multi-Tool. To ensure you achieve the best results, it's advisable to replace the Dremel sanding accessories before they wear out completely. If you're planning on doing a lot of sanding, try the Dremel EZ SpeedClic system. The sanding mandrel is a handy accessory that allows you to switch sanding bands easily. Always place the sanding band over the rubber part of the mandrel. If it shifts back a little, the rubber can melt, thus rendering the mandrel unusable.

Against the graining

For **Robin Gates** the August 1950 issue of *The Woodworker* opens some old doors better left closed

My only encounter with the mysterious art of graining occurred some 30 years ago when I moved into a pre-war terraced house on the south coast. The property had survived pretty much as built, despite the best efforts of the Luftwaffe to demolish it. I found a photograph in the town library showing it immediately after a bombing raid on nearby docks, with roof missing and all the windows blown out. The war damage must have been made good soon after 1945, the only remaining evidence being blackened bricks in the attic firewalls speaking of an actual fire. Magically, and unfortunately, it appeared the house had escaped the post-war boom in home improvements, to the extent of retaining its toxic lead water pipes, metal window frames corroded by salt air to the texture of cornflakes, and wiring sleeved by a mere crumble of decayed rubber.

Getting my priorities firmly backwards, I overlooked the essential domestic systems in favour of beginning work on the overlying wood. Long days of precious youth (as my 30s seem to me now) were wasted on restoring miles of moulded skirting boards, architraves and picture rails, thence to fight a losing battle with distempered ceilings, and ruining my knees on cupped and nailsick floorboards, which, in retrospect, were obviously knackered. By the time I opened the Pandora's box of artificially grained doors, I was in need of a quick and easy solution.


EXAMPLE OF GRAINING APPLIED TO A FRONT GATE

FIG. 1. IMITATING THE FINE GRAIN
The brush is drawn through the wet graining colour

FIG. 2 HOW STEEL COMB IS USED
This reproduces the plainer parts of the wood

FIG. 3. THE GATE PARTLY COMPLETED
Only the stiles remain to be done. Note the disposition of the figuring on the more prominent parts of the work, and the interest gained on the lower panels by alternating plain and figured work

FIG. 4. METHOD OF WIPING OUT FIGURE
A piece of rag is used over the graining horn

WOODWORKER 157 AUGUST, 1950

Imitation is the best form of flattery

Graining is the craft of painting ordinary or featureless wood so as to imitate an expensive or attractively figured one. Under the hand of an expert grainer plain yet honest deal, for example, can fool even the eye of an expert antiquarian into thinking it's showy Brazilian rosewood or flame mahogany. In Victorian times it was all the rage, facilitated by a bewildering array of mottler, flogger and overgrainer brushes, steel and leather combs, and recipes for colour-matching stains using raw and burnt umber, sienna, Vandyke brown, venetian red, orange chrome, mahogany lake and drop black pigments, known only to the experienced practitioner.

In my house, however, the graining seemed to have been done by one who'd had a *Teach Yourself* book on the subject for their 11th birthday, and gone berserk. The entrance and exit to every room was marred by a door recalling the disturbed sediment of a cess pit. By the low wattage light of the 1930s the work doubtless appeared warm and cosy, but in the unforgiving glare of modern illumination its sombre look of decomposition skinned by flaking yellowed varnish was too depressing.

As luck would have it, the quick and easy solution I sought was proffered by the lads then undertaking to repoint the sandy ravines of my front and back walls. A mate of a mate could get the doors 'dipped', taking them back to their proper timber, which I could wax over, and they'd glow like honey.

Readers wiser than me will not be surprised that below that deathly shroud of faked grain lay low-grade plywood panels, which delaminated in the dipper's caustic brew like sheets of pasta. The notion of a waxed finish was a complete non-starter. For, I think, £12 per door I'd generated days of filling, sanding and fairing for myself, even before the priming, undercoating and topcoating of the onerous paint job I endured in those days. You live and learn, but then again some lessons are better skipped.

The door to this sorry tale was opened when I found an excellent series on graining in *The Woodworker* of 1950. This page taken from the third article, published in August, shows a master of the art making a fine job of graining a front gate to imitate light oak. Graining is, I suggest, a job best left to the expert.

TORMEK®

SHARPEN MORE WITH TORMEK

THE TORMEK T-4 is a high quality and compact sharpening machine which sharpens all your common edge tools with the highest precision. Ideal for home and hobby work as well as professional use!

MADE IN SWEDEN

For more information on the Tormek Case and new kits visit **www.tormek.com** or UK Importer BriMarc **www.brimarc.com/tormek**

FESTOOL MOBILE SAW TABLE & WORKBENCH STM 1800

FURTHER INFORMATION
To find out more about Atelier Cabinet Makers, see their website:
www.ateliercabinetmakers.com

A new addition to the Festool workplace organisation range, **Jamie Smith** of **Atelier Cabinet Makers** looks at this handy mobile saw table and workbench, which presents a professional solution for machining large panels

The new Festool STM 1800 is a new portable, foldable work/cutting table. Festool wanted to design a worktable that allowed a single person to be able to comfortably and safely manoeuvre and lift full-size sheet material up to a board size of 3,100 × 2,150mm. This is what sets this cutting table apart from other worktables or trestles. The STM 1800's tilting feature allows a single user to tilt the table up against sheet material that is leant against a wall, hooking the sheet onto the STM 1800 and then lowering the table back down with the sheet fully supported into the horizontal position, ready for the user to transfer to a panel saw in a workshop, or cut with a plunge saw and guide rail directly onto the STM 1800.

All of the timber components on the STM 1800 are fully replaceable

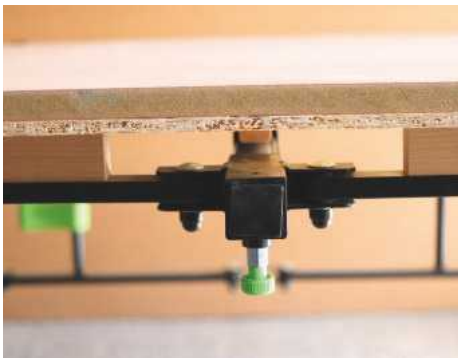
Table construction

On receiving the new Festool table, there is a small amount of assembly required. Firstly, attaching the wheels with a Hex key and spanner followed by fixing the replaceable solid beech support blocks onto the appropriate locations on the frame and removable additional supports. Other than that, the table is supplied fully assembled and ready to go. When uprighting the table after fitting the wheels, it was locked in its folded away position by the large green plastic easy snap clasps. This is when I experienced my first frustration, as the table is on four wheels

One of the large wooden sacrificial extension support coverings

Easy manoeuvrability in the workshop on the four castor wheels

Festool green quick-release lock clasps hold the worktable shut



The STM 1800 loaded with a sheet of MDF for cutting and a sacrificial sheet underneath

Quick-release auto-locating leg height adjustment is possible

Returning to the horizontal position with a sheet of material loaded

The worktable set up ready for sheet cutting or using as a workstation/assembly table

and when it's folded away it becomes very narrow and naturally the wheels will all direct themselves together when the table is moved. In this folded away configuration I found the STM 1800 to be very unstable and it could easily fall over unless you direct the swivel wheels out away from the table rather than two going in underneath, thus causing the instability.

Speed, ease of use & efficiency

As with all Festool products the table has been designed for speed, ease of use and efficiency. All green coloured parts are the function components, such as the sprung quick-release leg height adjustment knobs and the friction snap clasps that hold the table in the folded position. All of the functions and set-up of this table are tool-free and simple to execute. It takes less than a minute to open up and have ready to use for the cutting of 8× 4ft sheet material. The top surface is fitted with replaceable beech wood blocks for safe material cutting and full support without risking damaging the metal frame. Smaller snap on and off sacrificial timber blocks as well as deeper blocks are fitted to the further extension removable sections, which store and lock under the table when not in use.

Sheet loading

All parts can be stored on the table at all times. On the underside of the top frame extrusion you will see Festool green quick-release knobs, which pull out to allow extension of the top support, including the swivel hooks for the sheet material lifting process, which are situated on the locking wheel side. I mostly cut 8×4ft sheets in my workshop and work alone, so I was very interested to see how the process of sheet loading would go. By extending the sheet hook bracket supports and rotating the hooks up vertically, ensuring the two wheels are locked, you can then tilt the table up to hook your sheet material ready for loading. The table is well supported and allows you to hook the sheet on at each end, then lower the table with the sheet loaded back to its ground position. This process works fine but I did find it a little awkward tilting on the locked wheels as they need to be in the correct position otherwise they have a tendency to jump around while the tilting operation is in progress. I can see this method being incredibly useful for those working with sheet material in a large workshop, however, and especially for those who work alone and need to lift 25mm+ thick sheets, which are incredibly heavy to manoeuvre with only one person.

The Festool STM 1800 basically does the lifting for you, while you support the table and sheet material throughout the process.

The table has height adjustable legs with fast easy adjustment giving a working table height range from 700-900mm. This can allow easy transfer of sheet material to a workshop panel saw or to set at a comfortable working height for use with a plunge saw and guide rail. Festool have also released their own guide rail angle square, the FS-WA/90°, which is designed to work in partnership with the STM 1800 table for fast and efficient cutting of sheet material with

Setting the STM 1800 in its initial configuration

The STM 1800 tilts on its two locking wheels

Using the STM 1800 as a cutting station when fitted with a Festool TS55 plunge saw and guide rail

In its compact, folded configuration the table takes up very little floor space

square cuts, although I've been using the table with my own MFT cutting top and bench dog set up for breakdown of sheet material components in and out of the workshop. Transportation of the table is easy with its folded away size of 1,150 × 250 × 700mm and weight of 34kg – I simply lift and strap it in the back of my van.

Conclusion

Overall, I have found the Festool STM 1800 to be a great addition in the workshop, allowing for fast set up as an additional workbench space/assembly table, and also for the lifting and cutting of sheet materials. I did find that one of the wheel brackets, if fully tightened into the frame, didn't want to swivel, but then, when I backed the Hex nut off, it would then slowly unscrew itself. I can't help but feel that a slight design alteration to the tilting method, such as a drop-down foot to tilt on rather than the wheel, could perhaps be better. I don't have full confidence in the longevity of the wheel brackets being tilted under heavy loads, but this is something that only time will tell.

The last point to mention is the RRP of £1,296, which does seem fairly steep, but then all Festool products do sit at the higher end of the market. I can see this table being incredibly useful in a large workshop with perfectly level floors, for someone who cuts a lot of large sheet material, but if you have horizontal sheet storage, that takes away the purpose of this table. It has been useful to have in the workshop, but, sadly, I don't feel it's an item that will be particularly missed.

The table when positioned in the tilted sheet loading configuration

THE VERDICT

PROS

- Really takes the strain out of lifting large sheet material from floor-standing to horizontal workbench height; compact foldable, portable design; allows for ease of cutting when it comes to large sheet material; height adjustable

CONS

- Awkward to use if the ground is uneven; top heavy and has a tendency to fall over in the folded away position; requires flat, level ground; slightly awkward when tilting on swivel wheels; substantial price tag

RATING: 4 out of **5**

SPECIFICATION

Dimensions when folded (L×W×H): 1,150 × 250 × 700mm
Min contact surface: 1,100 × 1,050mm
Max contact surface: 1,800 × 2,100mm
Height adjustable: 700-900mm
Max load: 150kg
Max workpiece dimensions (with tilt function): 3,100 × 2,150mm
Weight: 34kg

Functions

- Regardless of size, sheet material can be held and machined by a single person
- Tilting function and height adjustment for ergonomic work that minimises stress on your back
- Wooden coverings securely support the workpiece/sheet material at all times and the sections securely remain on the table
- Can be constructed small or large as required
- Equipped with robust rollers and brake
- Light and compact to transport thanks to a special folding system
- All parts are fitted to the product
- In conjunction with the portable circular saw, guide rail and 90° angle stop, the STM 1800 is able to turn into a mobile panel saw
- Supplied with fitted wooden coverings and four extension pipes with wooden coverings

Typical price: £1,296
Web: www.festool.co.uk

triton

MASTERS OF WOOD

A CUT ABOVE

TJS 001

PENDULUM ACTION JIGSAW 750W

Irregular shape, extraordinary cut

4 cutting modes with 3-stage pendulum action and irregular barrel-body design means...

More pivot angle • More blade control • Cleaner cutting

Find your nearest stockist TRITONTOOLS.COM

3YR GUARANTEE

18+

WHAT IS AVAXHOME?

AVAXHOME-

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

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site

AVXLIVE.ICU

AvaxHome - Your End Place

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

DEWALT DPN1850PP, DPN1664PP & DPN1564APP NAILGUNS

These three nailguns from **DeWalt** all benefit from exceptional ease of alignment as well as positioning and firing, helping to deliver high accuracy each and every time you use them

The freedom battery tools offer us is not always a necessity, especially in the workshop where power is normally readily available. In such situations a corded tool can often bump through work more readily under load, but when it comes to nailers, because of the way they work, I've always found electric models come up incredibly short for power and capacity, so in the workshop it's ideally a gas- or battery-powered gun or an air-powered option, and the air-powered option is ultimately a very efficient way of getting consistent results.

For me, DeWalt certainly hold the aces in the gas and battery nailer market, but the freedom they offer comes at the cost of physical size and weight; therefore it makes sense to fall back on a smaller and lightweight option if you don't need that freedom, and if you own a compressor, or are looking towards that area, that's where these air nailers really make their mark.

Trade-rated & 'Precision Point'

DeWalt are aiming for the trade end of the spectrum with these guns, and the three options available cover three different nail gauges: the DPN1850PP, which fires finer 18 gauge in 15-50mm lengths; the DPN1664PP, which shoots 16 gauge with lengths in the range of 25-64mm; and the biggest gun, the DPN1564APP, which knocks in 15 gauge in lengths of 32-64mm.

These capacities and gauges are consistent in the industry so there's no need to hunt specialised fixings, but there are of course specialist nails available, such as stainless steel for external work, for example. But it's the guns themselves that stand out against current opposition,

Nails are easy to load; the yellow tab to the right of the nail track indicates if the gun is empty

Each gun has a front access area for dealing with nail jams

Spare soft-nose tips are supplied and stored on board with each gun

and it's the 'PP' suffix in each gun that holds the clue to the main difference. This relates to the 'Precision Point' nose feature common across all three guns; each one has a very fine profile when compared to guns of similar stature. It means that not only can you get the guns into tighter spots if needed, but more importantly, the nose can be positioned very accurately.

For setting fixings when securing components such as beads, or pinning thinner pieces to one another such as box sides, it means the fixings can be positioned with more precision and consistency to prevent splitting or the fixings breaking though the face of the work. I tried this with the DPN1850PP fixing into the edge of 6mm MDF; although too thin to really expect a nailgun to fire without breakout, I managed to fire consistently with 30mm fixings, and with the ability to set the position so accurately, I was able to get them set perfectly.

On 9mm material the gun allows accuracy and consistency, making thinner stock far easier to fix to an edge; the 'Precision Point' could quite easily be interchanged for 'Perfect Placement', such is the ease in doing so. I can see this working very well not only for fixing thinner stock, but also edge trim, and it would definitely find a niche for box making with sheet materials to be veneered once assembled.

The DeWalt nose (right) is minuscule in comparison to a standard-nosed gun

Great alignment

If you've used standard air-powered guns, there's a different approach to setting these guns on the workpiece. Where you normally press the gun to the work to depress the nose, thus allowing it to fire, on the DeWalts, each gun has a nose that senses it is in contact with the work, allowing the trigger to be pulled. This minimises any chance of recoil damage where the gun bounces and the nose makes secondary contact, which can dent and mar the surface.

It works superbly in this area making it very easy to move the tool around the work to set the position accurately and then fire the fixing rather than having to depress the gun down.

Aligning components is an area where this function makes a massive difference as it's always tricky to hold pieces in position while the nose on the DeWalt guns allows the work to be held far easier when you need to fire a fixing.

Pulling the trigger fully without addressing the work extends the nose and holds it there so that it cannot be pressed against the surface and accidentally fired; it needs to be pulled again to release it so that it can be fired – a neat safety feature as well as aiding more positive placement.

This is in its sequential setting where each fixing needs to be completed as a cycle of position on the work: pull the trigger, release and repeat.

Bump and sequential firing is set with this dial

The DPN1564APP gun also has a blower function, which can be operated by pressing this button

Each gun has its own built-in pencil sharpener!

The Precision Point makes it very easy to align on thinner stock

Put the gun into bump mode by simply rotating the dial – common on all three – and the fun starts. Now, you simply keep the trigger depressed and as soon as it makes contact with the work, it fires. I couldn't make any of the guns fail here: as fast as I could bump them, they fired.

I was setting at least three per second, each one driving consistently and if you need a more rough and ready approach rather than a precise position on some work, this mode will speed things up and then some! There is also adjustment for depth of drive, set with a dial tucked under the body by the trigger, so you can set each fixing to suit the materials being fixed.

Nifty additions

Each gun comes ready to go, complete with a pre-fitted hose connector, which is overlooked on some guns, and each model also comes with a small box of fixings.

The only thing lacking is a set of eye wear protection, which you sometimes see supplied with some nailguns, so don't forget to get a pair if you don't have any.

Common traits prevalent across the range of guns also includes fast toggle release noses for quick access to jammed fixings, as well as built-in pencil sharpeners – a useful and nifty addition if you happen to be doing a lot of fixings and snap your pencil.

Conclusion

It's always the case that setting fixings into an edge is where many nailguns slip up as the noses are so big, and this is where DeWalt should pick up a big fan base. Their ability to set consistently and with exceptional ease of alignment – whether working finer beads or heavier applications, being able to position and fire with high accuracy every time and with top build quality alongside – makes these nailers well worth the money. Oh, and don't forget the added extra of being able to keep your pencil sharp at all times too!

THE VERDICT

PROS

- Super-fine nose for precise setting; no need to push the gun to fire

CONS

- No goggles supplied

RATING: 5 out of **5**

SPECIFICATION

DPN1850PP

Weight: 1.24kg
Nail diameter: 15 gauge
Nail length: 15-50mm
Magazine capacity: 100 nails
Trigger type: Sequential & bump
Operating pressure: 4.8-8.3 Bar

DPN1664PP

Weight: 1.7kg
Nail diameter: 16 gauge
Nail length: 25-64mm
Magazine capacity: 110 nails
Trigger type: Sequential & bump
Operating pressure: 4.8-8.3 Bar

DPN1564APP

Weight: 1.8kg
Nail diameter: 15 gauge
Nail length: 32-64mm
Magazine capacity: 129 nails
Trigger type: Sequential & bump
Operating pressure: 4.8-8.3 Bar

Typical prices: DPN1850PP – £160; DPN1664PP – £205; DPN1564APP – £234
Web: www.dewalt.co.uk

Organised by

JEREMY BROUN

In collaboration with

The Woodworker & Good Woodworking

AXMINSTER Tools & Machinery

triton

THE WILSON CHELTENHAM ART GALLERY & MUSEUM

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.

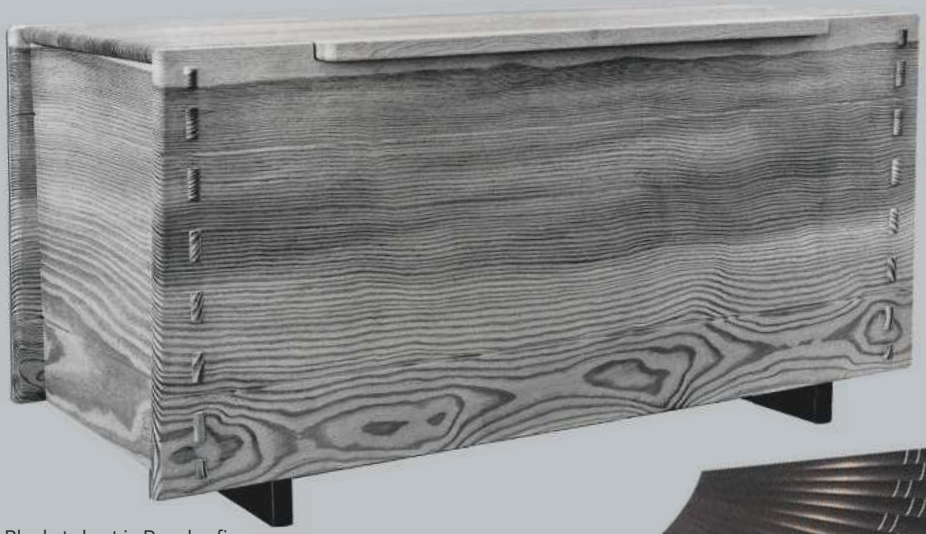
Applicants should be familiar with the work of Alan Peters prior to applying and are encouraged to read Jeremy Broun's 64-page video-integrated online e-book, which is offered free-of-charge (via the website link opposite).

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

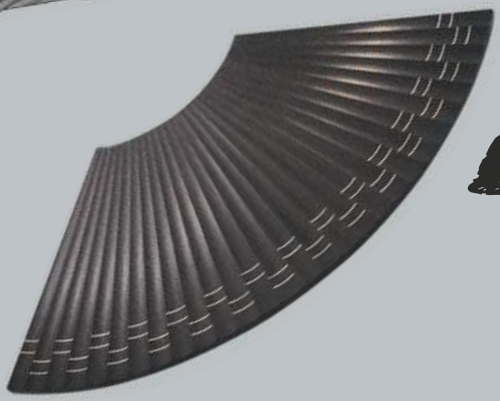
Alan Peters chest with silver inlay



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

BAROQUE BEAUTY PART 2

In the May issue, **Shaun Newman** introduced us to the history of the Baroque guitar and took us through the first part of the build. Here he goes on to describe how the delicate inner 'parchment rose' is made and put into place

In part one a little of the history of the Baroque guitar was explained as well as materials needed and a build method using a mould. Here, I'll move on to describe the construction and fitting of the soundboard with its outer rosette, and then how the delicate inner 'parchment rose' is made and put into place.

The soundboard

The soundboard is widely recognised among luthiers as perhaps the most important part of the whole instrument. However ornate or well finished the instrument is, the sound must be as good as possible. The instrument described here is smaller than a concert classical guitar of today, so the volume of sound and its projection will inevitably be relatively diminished. It is therefore vital to choose the very best spruce available for the soundboard. I chose top grade Engelmann spruce (see supplier list) which is fine, straight-grained timber that has grown slowly over centuries.

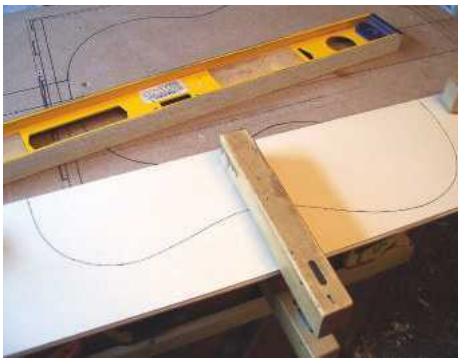
A guitar soundboard comes from the supplier typically as a 'book-matched' set of two pieces around 5mm thick (**photo 36**). Cut from the same log, the two halves appear as butterfly wings when opened like a book. The inside edge of the two boards must be trued to an exact right angle before they can be joined, and along the entire length both sides must meet exactly in the middle. Initially the two boards are held in the vice and planed roughly to form. The boards are then placed on a flat surface with a thin spacer underneath, cramped down firmly and trued to the exact requirement using an old spirit level with abrasive attached to the edges with double-sided tape (**photo 37**). I normally put some pencil lines on the edges to be trued, and when they have all disappeared you know the job is done.

The boards must be joined then, so once again the wedge and lace jig is used. Only a fine bead of Titebond or similar is needed. (**photo 38**).

The outer rosette

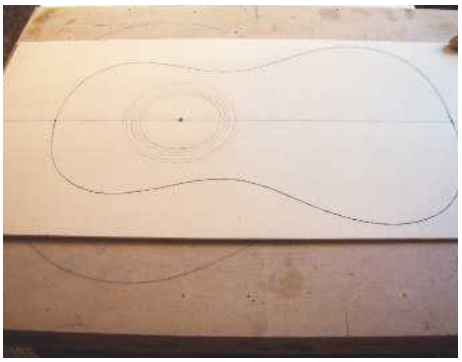
Despite having a complex inner 'parchment rose', almost all Baroque guitars also have an outer rosette. This can be made from just a few simple hoops of purfling, or can be very decorative. I chose something in between, opting to inlay two hoops, but to add 16 mother-of-pearl dots. The reason for choosing to inlay eight pairs of dots has to do with the structure of the parchment rose, which I designed and

36 A bookmatched soundboard of fine grade Engelmann spruce

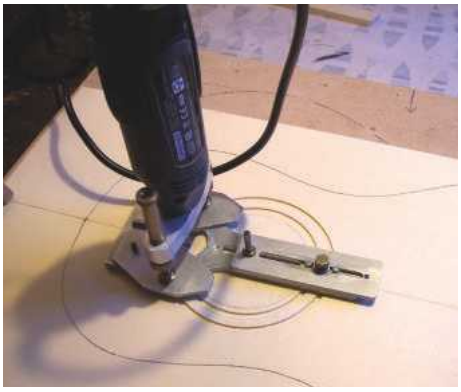


37 Truing the edges of the soundboard

38 The soundboard in the wedge and lace jig



39 The channels for the external rosette marked out



40 The Dremel does the job

will be explained later. The hoops require channels into which they will sit. The channel positions are marked out in pencil using a school compass (**photo 39**). A small Dremel router with a trammelling base is the ideal tool to cut the channels out (**photo 40**). If you do not own such a thing, a small hand-held router (such as the Proxxon) with a trammelling base will do the trick, as long as the cutter has a small diameter. Some makers still go with the traditional method, which is to scribe two circles with a compass cutter and then to chisel out the channel by hand. This is tricky to say the least as it is very easy to damage the edges of the channel showing up badly when the purflings are inlaid. The channel is cut into what will become the front of the instrument after it has been planed smooth. The soundboard will still be around 5mm thick, and it is best to set the depth of the cutter to no more than 1.5mm so that when the soundboard is brought to its final thickness from the underside to around 3mm, the hoops will still have some spruce at the bottom of the channel to support them (**photo 41**).

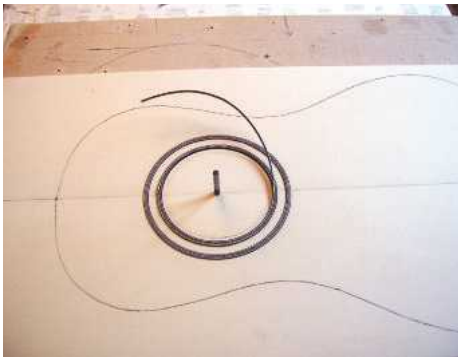
When the hoops are in place I normally steep them with CA adhesive before levelling them with a small thumb plane (**photo 42**). The glue has two purposes: the first being to hold the hoops firmly in position, and the second is to bring out the colours.

The mother-of-pearl dots are each 4mm in diameter and 1.25mm thick. They are spaced along the hoops starting at the top, exactly at the centreline of the soundboard, and then at every 45° (**photo 43**). At this point the soundboard is reduced to 3mm thick and can be cut to shape.

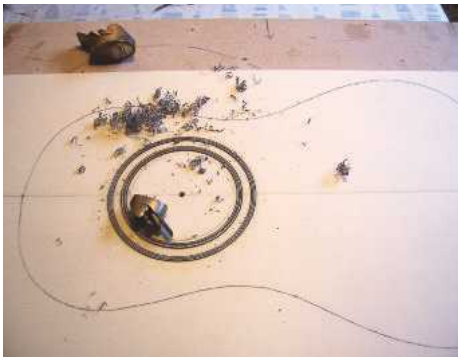
The overall outline is cut out at around 5mm oversize. This will give an overlap when the soundboard is fitted to the ribs, which is later removed with a bearing-guided flush cutter and router. An optional feature seen on many Baroque guitars is the way in which the soundboard extends up into the lower part of the fingerboard. This tradition continues to appear as late as the 19th century with guitars made, for example, by René Lacôte. It is worth bearing in mind that if this feature is included, the fingerboard will eventually have to lie in exactly the same plane as the uppermost part of the soundboard to avoid the strings buzzing on the frets. It is also necessary to be mindful of the fact that the spruce is much softer than the ebony of the fingerboard so reduces more rapidly while being levelled with abrasive.

Bracing & shaping the soundboard

The modern classical guitar can have many bracing struts to help strengthen the front of the instrument and distribute the sound. Jose Romanillos, for example, uses up to 16 struts with three or four additional strengthening cleats.

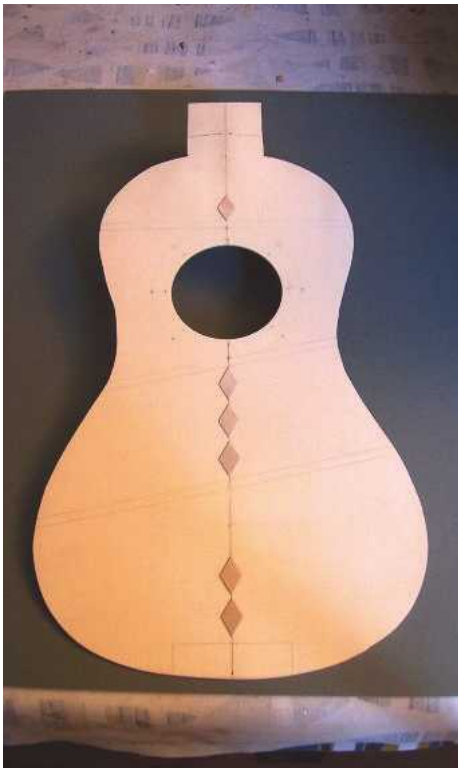


41 Hoops of purfling are tapped in



42 A thumb plane helps to level the hoops

43 The mother-of-pearl dots are in place



44 Cleats on the inside help to hold the soundboard together

45 The harmonic bars are clamped into place

46 The bars are scalloped at either end

47 They are then 'gabled'

The guitar featured here has a minimal number of struts – just three – and one mahogany patch under the position of the bridge. The central join to the two spruce boards is helped by half a dozen small spruce cleats (**photo 44**). The three braces (known with this type of instrument as 'ladder braces') are also made of spruce. The bridge patch is mahogany to help protect the soft soundboard when the bridge pins are reamed in. This process will be clarified later.

Each bracing strut is 15mm high and 6mm wide. The mahogany patch is 3mm thick. The cleats are just 1.5mm thick and have cross-banded grain. The purpose of the slope on the two lower braces is to shorten the grain length on the treble side to give sharper upper notes (**photo 45**).

Once cramped into position the end of each strut is scalloped down to a thickness of around 3mm and the ends are left to overlap the soundboard by 3mm or so (**photo 46**). The braces are then gabled with a small block plane. The veneer strips in the illustration are not glued in, they are there to protect the soft spruce from the edges of the block plane (**photo 47**). The finished soundboard is very light but strong (**photo 48**).

Fitting the soundboard

The first stage of fitting requires the brace ends to be trimmed off so that they sit neatly inside the ribs. The mould is opened on one side and the soundboard is placed face down in such a way that the line of the shoulders of the guitar (which is where fret 12 will sit) is exactly in the location of the expected position of fret 12 on the fingerboard. The tongue of spruce that will meet the fingerboard must be cut exactly to the centreline of where fret 9 will sit. This may all seem very complicated, but a decent drawing will show exactly where each component fits.

So, the ribs and neck, which by now are all in one piece, are lowered onto the braces and where the inside edges meet the scalloped ends, a pencil line is drawn (**photo 49**). Once the structure has been lifted back out it can be clearly seen from the marks how much of the brace ends need to be cut off. Care is needed during this operation as it is easy to slice into the underside of the soundboard and weaken it. I find both a veneer saw with a curved blade and no set, and a sharp paring chisel, work well.

When the ribs/neck assembly are in place and back in the mould, work can begin on attaching it to the soundboard. To achieve this I have always used the time-honoured Spanish method of 'tentellones'. These are small triangular pieces of spruce each 15mm high, 6.5mm wide and having a base 6mm deep. From the base the tentellones taper to 1mm. These are glued into the join between the ribs and the soundboard with a space of around 1.5mm between each. Some makers have no gaps, effectively producing a single strip of spruce from the tiny pieces. However, there is a view that the gaps aid the soundboard to move more freely helping to improve the sound. They are put into place with a pair of tweezers and a spot of glue on the base and back (**photo 50**). I usually press them firmly home with the end of a pencil, which has a small rubber attached. There is no need for cramps of any kind if Titebond or similar is used.

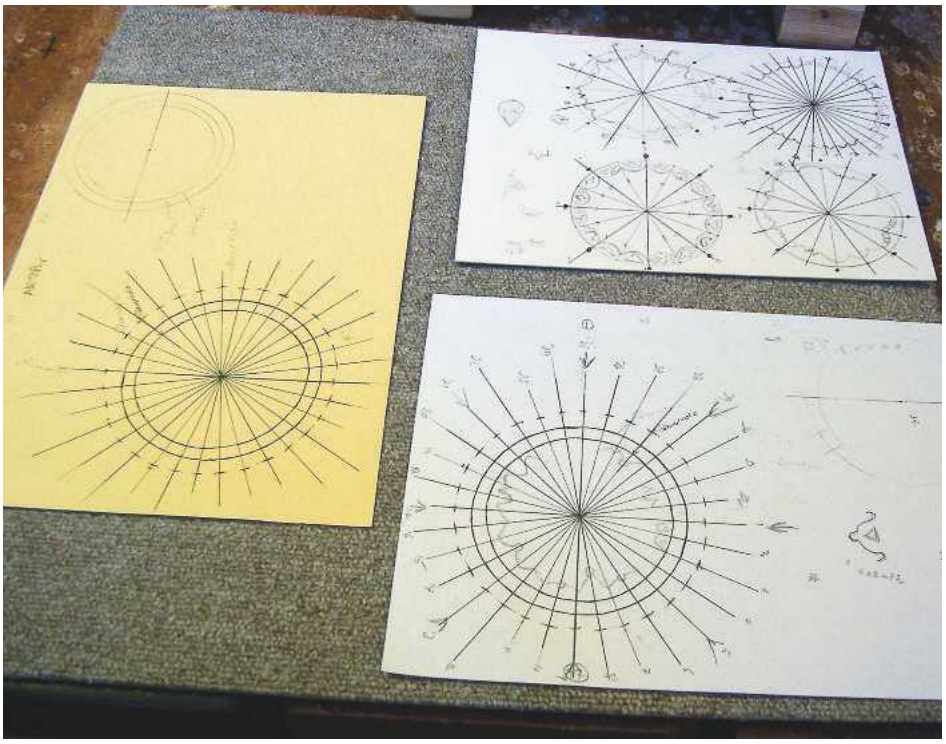
The parchment rose

At first sight this part of the build looks nigh on impossible, but there are many different patterns that can be used, and some are much simpler than others. For a first attempt at a

48 The finished soundboard seen from the inside

49 The brace ends are marked with a fine pencil line

50 Tentellones are put into place with tweezers



51 It's fun to experiment with patterns

rose I would suggest just using punches and chisels to cut the designs, unless you have a lot of experience in using a scalpel. The rose itself is made entirely from sheets of calfskin vellum, of the type used by Parliament to record the nation's laws. It is expensive but adds so much to the appearance of the guitar that it is really worth it. There are just a handful of suppliers of genuine calfskin, and I find William Cowley the best (see supplier list). For a rose with say just three levels, one sheet around A4 size will fit the bill. For this rose, which has five levels, I used two sheets.

Before starting to make the rose it is fun to experiment with a few symmetrical designs. As I used eight pairs of mother-of-pearl dots on the outer rosette, my designs involved patterns with 4, 8,16 and 32 spaces drawn across the centre point of a circle, somewhat like the spokes of a bicycle wheel (**photo 51**). Some rose makers will first draw their designs onto paper, place this over the vellum, and punch and chisel the design out through both. I normally draw directly onto the vellum and carefully rub out any pencil marks after the design has been cut out.

It is possible to make a set of 'micro' chisels from watchmakers' screwdrivers sharpened to a razor edge. It is also possible to make your own punches, but there are many available commercially and they need not be expensive. If small leatherworking punches are bought, they usually need sharpening before they are suitable for this job (**photo 52**).

52 Punches, chisels and scalpels... joy!

To begin with, two pieces of vellum are cut around 20mm larger than the diameter of the sound hole. I usually start off by making them square, which aids the geometry to my eye. The back of one of these two pieces is then painted with a solution of hide glue and water mixed 50:50. If left, the vellum pieces will curl and be difficult to work on, so it is best to tape them to a flat surface where they will stay overnight. I found an old glass shelf out of the bathroom did a good job. When the hide glue is dry, the pieces of vellum are removed from the glass and the pattern is drawn onto one of the sides, which is clear of glue. That face has a couple of circles and 'spokes' (**photo 53**) marked onto it to act as guides for the punched and chiselled pattern. It is then essential that every chisel cut and punch piercing is done over the end-grain of a hardwood block. This ensures a clean edge to every cut.

As soon as the first pattern has been cut out (**photo 54**), the glue side of that piece of vellum is dampened with a fine-haired paintbrush dipped in water and it is pressed onto a second sheet, placed between two slabs of MDF. These have been coated with parcel tape to avoid gluing the calfskin to the board. Both slabs are then cramped together, and once again left overnight. Once removed from the slabs work can begin on the under layer of the top of the rose. This is where the imagination can kick in, as from this point you can take the design in any direction, using the first cuts as a guide. The pattern just appears over time, and the fact that each one is going to be unique is very satisfying.

Next comes the wall that will separate the first layer of the rose from the second giving it a three dimensional effect. It is made from a strip of vellum around 18mm wide and has a symmetrical pattern chiselled and punched into it. When bent into a circle and the ends are glued (**photo 55**) it is kept to a circular shape with a softwood caul, which is slightly tapered to keep the wall tight (**photo 56**). The wall is then placed on the underside of the front of the rose, held down with the circular caul (the wooden block that was made to fit exactly into the hoop) and is glued into place either with hot hide glue or CA adhesive (**photo**

53 Spokes help to guide the pattern

54 The first cut into the vellum

55 The first 'wall' is made and the ends are glued

56 A softwood caul keeps the wall in shape

57 The first layer is glued up

58 The second layer being made

57). CA adhesive is very effective – after all, vellum is skin….

While the first level of the rose is left to dry the process is repeated, using different patterns with the second sheet of vellum that had been painted on the back with hide glue and water. This time the concentric circles are made smaller than the first time as the rose has to give a slightly conical appearance as it is seen from above (**photo 58**) and a second layer is prepared. As the levels are built up and a fresh wall is created for each layer (**photo 59**), each must be held in place with a light wooden weight just to keep it from moving as the CA adhesive dries (**photo 60**). After the desired number of layers have been glued together the base sheet can be made.

When all is complete and the edges of each level are trimmed neatly, the rose can be fitted. It has to be exactly central to the sound hole (**photo 61**), and can be held in place with Titebond or similar and pinned down with small weights as the adhesive cures.

NEXT TIME

In a future issue, and the final part of the build, Shaun constructs the back of the instrument, bridge and 'mustachios', fits the frets, strings up and tunes, before making a custom carrying case

59 Each layer is made up from a wall and a double sheet flat bottom

60 The rose layers slowly build

61 The completed rose is fitted

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** **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

NEEDS MUST

Faced with the dilemma of having to change his woodturning business model due to the Coronavirus outbreak, **Andrew Hall** decides to go digital and start streaming his own paid-for demonstrations

Myself and Janet brainstorming ideas and coming up with a plan of action for delivering paid-for woodturning content

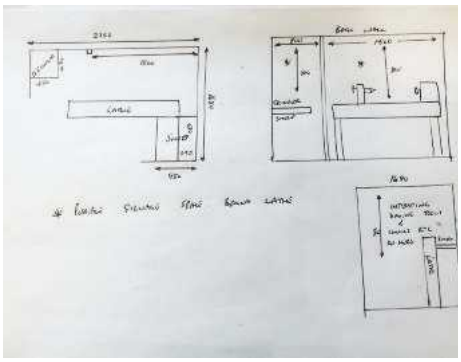
I named my summer article 'needs must' as a direct result of the Coronavirus epidemic, which has greatly impacted our business. I have never tried to sell my turnings in the past, as I have always concentrated my efforts on selling myself either by teaching, demonstrating, writing and product testing, and over the last 15 years, the diary has been healthy. In fact, the schedule for 2020/2021 included a multitude of demos and courses and I've even taken several bookings for 2022 – that's if we ever get back to any semblance of normality.

Two days before lockdown began, which seems an age ago now, I spoke to my insurance company and they instructed me to stop training as I could not conform to social distancing. As a result, shows had to be cancelled, as well as all woodturning club demonstrations, for the foreseeable future. I went from having a very healthy and full diary, to work completely ceasing – worrying times lay ahead.

After a great deal of thought, my wife Janet and I decided it was time to get the flip chart out and start to reevaluate our business model, something we have done over the years on several occasions – it's a great way of being able to assess what's working and what isn't.

Market research

The first step was to study our current business strategy and come up with a plan, which was to go remote and produce a series of instructional videos for YouTube. I carried out some market research and the first website I looked at was that of my original woodturning tutor, Jimmy Clewes. Jimmy has a paid subscription-based YouTube site, so I decided to take out a year's membership to see how he delivered the content. We then made a plan of projects that we could deliver, based on a similar theme.



Sketch of the workshop area I'd need to build for filming

Positive feedback

At this point, I hadn't heard of Zoom or interactive remote demonstrations (IRD). We now had a plan to develop a way of creating some income when that which we'd previously relied on had stopped. I've always been a believer in having to speculate to accumulate and we did that 15 years ago when I first embarked on the demonstration circuit. I noticed that some clubs had camera equipment but a lot hadn't, so we invested in two camcorders and two LCD screens to ensure that whatever demo or show I went to, I was self sufficient by supplying my own visual equipment. This worked well and the bookings were coming in thick and fast, plus the feedback I was receiving from club members was really encouraging.

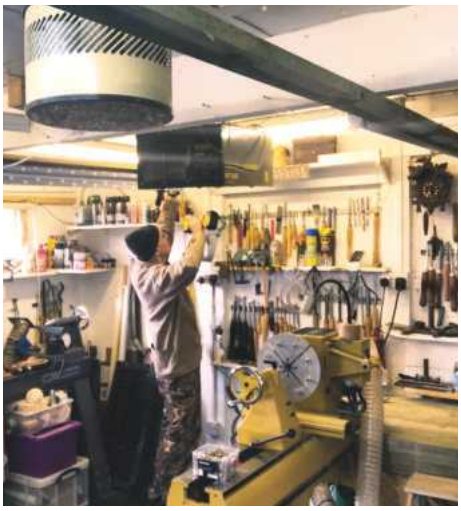
One evening while demonstrating at Doncaster woodturning Club, I had the cameras and TV screens on display and a gentleman came up to me when I'd finished and told me that he'd really enjoyed the demo. He said he thought it was brilliant to be able to see the piece I was working on close-up, thanks to this being delivered via the cameras and then shown on the screens, the only problem being that he couldn't hear very well.

I listened to the customer's feedback and that weekend, we invested in a PA system. Again, the feedback we received as a result of using this new equipment was great. The camcorders were only being used for demos and, at the time, videos were popular and DVDs were just coming in. To have a DVD made professionally was really expensive and they also cost a lot to buy.

All building materials required were delivered just in the nick of time

In my new recording studio with the Coronet Regent lathe

The workshop needed a good clean before the build could commence



Fixing some of the materials in place

Producing DVDs

Another idea at the time was to produce our own training and demonstration DVDs – we had the cameras so we recorded demos and then made them available to buy at a very reasonable cost. We invested in a Mac for the iMovie software and have never looked back.

In the early days, I made several DVDs and sold quite a few, then clubs decided to have libraries, which allowed members to hire DVDs for a small fee. As a result of this, we discovered that sales started to stop as people were hiring and copying them. We couldn't really put a copyright on our DVDs due to the added expense, so as a demonstrator, this was just something you had to accept would happen.

As this stage, YouTube was in its infancy as far as woodturning videos were concerned and there were no professional turners uploading their work. Nowadays there are loads of turning examples online, some of which are good, some great, and others downright frightening, but you can be the judge of that.

Creating a YouTube subscription channel

Taking all this into account, our new plan was to diversify and look into the world of streaming, which is probably the most effective way of demonstrating and delivering training at this moment in time. We would upload some introductory videos for beginners and then hope that they would want to progress, pay for some online tuition and also purchase the pay-per-view demonstrations. This would allow us to develop a subscription channel modelled on Jimmy's.

Building the filming area

Full of ideas, I drew up a sketch of the filming area I'd need, then made a cutting list for the materials and proceeded to order everything required. We were lucky as we were able to get these delivered from our local builders' merchants, just before the lockdown came into force.

Inspired and raring to go, I gave the workshop a good clean and began the build. By the end of the first day, I had the supporting beams erected and started production of the panels. Janet was a great help and held the materials while I fixed them to the beams.

Day two commenced with constructing the panels – my idea was to make them 2,200mm high × 300mm wide with a 50mm × 25mm bearer to hang them from the main beam, joining them together with turn buttons. I wanted it to be both quick to erect and dismantle for storage, when it came to reverting back for training students in the workshop. At the time, I focused the build around the mustard-coloured Powermatic lathe, which would be the workhorse for the filming. Materials used were fencing rails and boards, as I wanted the studio to look rustic while matching the rest of the cupboards in the workshop. Each section had a 50 × 25mm timber bearer at the top and a piece of 150mm fencing board at the bottom. The materials were 16mm thick and screwed together with 30mm × 4 Spax screws.

I was working on my own, so decided to make a jig (dead man) to support the boards when I was cross-cutting them using my DeWalt cross-cut saw.

By lunchtime of day two, I had three pairs of panels erected on each side and the area was starting to take shape. When it came to close of play on day three, I'd built the recording studio and fitted two shelves: one for the grinder and the other for displaying pieces.

The weather was excellent, so we decided to get on with outside jobs, such as painting the exterior of the workshop, which turned out to be a good idea as during that time, the boards on the recording studio had dried and a gap had appeared between each of them. As I wanted it to be a demountable structure rather than putting a cover lath on each board, I decided to cut strips of cardboard and staple them on the back, which would help to hide the daylight coming through the gaps.

The next part of the project was to fit the grinder and build a couple of cupboards to hang

The dead man jig offered support while I was cutting the boards

Constructing one of the filming area panels

The DeWalt cross-cut saw in action

The filming area was really starting to take shape

on the structure; these would facilitate the storage of tools and finishes. At this time I had been speaking to Craig at Record Power, as I should have been going to Nuremberg to demonstrate for them. He suggested speaking to the Managing Director and owner of the company to see if we could work together and produce some short 15 minute videos directed towards new turners. I was commissioned to deliver six 15 minute programmes in series 1, which by the time you're reading this article, will be available on Record Power's YouTube channel.

Shortly afterwards, it was agreed that Record would send me one of their new Coronet lathes – the Regent – which is the largest of the three. The first series of videos to be filmed focused on the construction of the studio and building the lathe, followed by stocking the cupboard with chucks and tools, including the new range of Record HSS bowl and spindle turning gouges.

I made the cupboards using some leftover ply as by this time the builders' merchants were all closed as were the DIY stores and timber merchants. I had some fencing boards leftover from another project, which I'd painted forest green, and these just happened to be the same colour as the green used for the Record Power logo – what a stroke of luck.

Record Power had also sent signage to me, which had been made for the Nuremberg show, so I cut up the panels and fixed them onto the walls of the recording studio.

I then had a conversation with Terry Smart of Chestnut Finishes who also agreed to support me by sending finishes to be used in the tutorial videos, on both the Record Power YouTube channel and my own. One cupboard was designated to my sponsor, Record Power, and the other to Chestnut Finishes, who would be supporting me in this exciting and, at times, daunting adventure.

I discovered that once the boards on the recording studio had dried, a gap had appeared between each of them

To combat this, I cut strips of cardboard and stapled them on the back, which helped to hide the daylight coming through the gaps. You can also see the turn buttons, which hold the panels together

Planning for the future

It was at this time that I'd been talking to my local council and an officer had told me of a scheme to help small businesses with technology, and they were offering a grant of up to 40% towards the cost of digital equipment in business diversification. With this in mind, I contacted Durham Digital Drive, filled in the application, which, much to my relief, was successful. Janet and I had already decided we needed to invest in the equipment, so we chose to use the grant to invest in better quality equipment as well as two additional cameras, which would therefore allow four different views to be shown. We were planning for the future and this would allow us to deliver online streaming for training and demonstration purposes.

We also have a very good friend, Carl Burn, who looks after our website and he advised us regarding which equipment to buy. I'd also carried out some further market research after watching other paid-for demonstrations from the likes of Glenn Lucas, Pat Carroll, Trent Bosch and Cindy Drozda, all of whom are situated in different parts of the world.

The new cameras and streaming deck arrived and the recording studio was now ready for live streaming worldwide. When you read this article, I will be practising my demonstrations and learning all about the new technology. We, that is chief camera lady Janet and I, plan to go live with the demonstrations in mid September, but if you'd like to see some pre-recordings, these are available on the Record Power YouTube channel as well as my Andrew Hall channel (search on **www.youtube.com**). It's free to subscribe – just press the alert button and you will be kept up-to-date with all the latest as well as current videos.

Constructing one of the cupboards for the filming area

Cutting up one of the forest green fencing boards

Visit my YouTube channel and see some of my demonstrations for yourself

Signage advertising Record Power as well as finishing supplies from Chestnut Products

The recording studio, all set up and ready for action

The Rocking Horse Shop

FANGFOSS, YORK, YO41 5JH Tel: 01759 368737

Finished Horses | Carving Courses | Restorations
Accessories & Hair

INTRODUCING...

MEDIUM ROCKY (PLAN 129)

An easy to complete home project using our plans which include:

- > Actual size colour drawings
- > Step-by-Step colour illustrated guide
- > Comprehensive instructions

We also have a wide variety of other projects for you to choose from!

TIMBER KITS

Our Plywood timber kits are cut using CNC for precision, perfect to just assemble the horse and get on with the carving, the interesting bit!

ACCESSORIES

We have everything you will need to finish your Rocking Horse. All our products are handmade in our own Yorkshire based workshops. We're confident you will find it easier than you might think, remember we are always here to help!

FUN FACT

DID YOU KNOW?

The Medium Rocky fits on one 8'x4' sheet of 18mm plywood!

www.rockinghorse.co.uk

Designers, Makers & Restorers Since 1976

WOODWORKER'S ENCYCLOPAEDIA A-Z PART 18

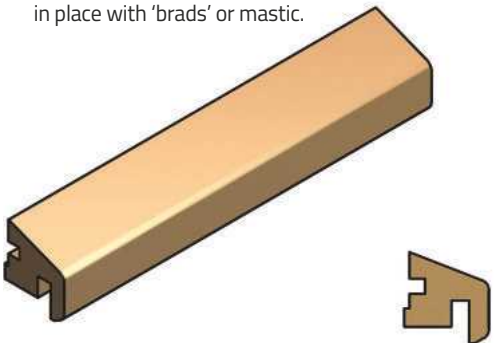
Peter Bishop's odyssey continues – we can check your girt, see how sticky it is, go upstairs and decide which might be the best grain for you to use

Girt or girth

Girt is just another name for girth, the outside measurement of a tree trunk – its circumference. There are various ways in which volume can be calculated using the girth measurement combined with other factors, including length.

Glazing bead

Glazing or 'glass' beads are used to fix glass into rebates be they in a door, window or cupboard, etc. Usually made from small section timber, they might be plain or moulded, and fixed in place with 'brads' or mastic.



3m long glazing bead from Quest Hardware

Glass paper

This particular title, for an abrasive, seems to be used much less than it once was. In essence, glass paper is actually made from small particles of finely ground glass. This compound, graded for different sizes, is fixed onto a tough paper backing. It tends to be at the finer grade end for finishing, rather than for quick surface or waste removal.

Glazing bar

Glazing bars are the central framing components that make up a multi-paned window or glazed opening. They'll be rebated to take the glass pane, which is then fixed in place with a glazing bead.

Qwood ovolo glazing bar (3m) – 22 × 12.5mm

Glue

We covered a bit about this earlier on under the adhesives heading. When I hear the word glue, I tend to think of the older types rather than the modern versions. It's actually amazing what can be used as glue: egg whites, flour and water, as well as animal waste, such as skin and hooves. The animal glues are a favourite when fixing veneers because you have time to position each piece before the glue grabs it. As these glues are heated before application they can also be manipulated after the veneer has been fixed. What that means is that if you put a piece of veneer in the wrong place you can heat it up, gently, with an iron and some brown paper and it can then be moved. On the other hand, if you're restoring a piece, heat can help to soften the old glue, thus making it easier to take apart.

Glued & blocked

This is a simple technique for strengthening right angle joints. Used on the inside or underside, where they can't be seen, small blocks are glued in place to provide extra support. You'll often see them on the underside of drawer bottoms, on cornices at the top of furniture, etc. They can be any shape or size providing they fit at right angles into the corners, or at any other angle if the design of the piece so dictates. Usually made from gash wood, plastic versions are also available.

Vintage cast-iron 5/16 pint glue pot

Glue kettle or pot

These are the two-piece kettles or pots, if you wish, that you heat your animal glues in ready for use. They are designed with an outer pot into which the inner one fits. There is a gap between the two pots for the water that will heat the glue in the central pot. I think it's a bit like a bain-marie in cooking; the water can boil but not the inner contents. The prepared kettle is placed on the heat, a hob, stove or gas burner possibly, and the glue can then be prepared and held ready for use.

Going

In the manufacture of stairs the 'going' is the distance from the front nose of a step to its back; the height is the rising. The going is also the total distance the stairs will cover from front to back. Designing a staircase, and its treads, so that they are comfortable to use is not straightforward. I won't go into the science here, but stairs should be taken in full steps. One step up and one step on, or one step up and two steps on without having to pause in your tread. Of course the steps forward are also linked to the height covered as well. I bet every one of us has gone up some steps, or stairs, and had to miss a beat so to speak. That's simply bad design.

Gouge

Gouges come in all shapes and sizes. This is a chisel with a curved cutting edge, from side to side. The two main uses for gouges are in woodcarving and woodturning. Buy good tools and keep a sharp edge for best performance.

A spindle roughing gouge is used in woodturning

A vintage Addis woodcarving gouge

Grading

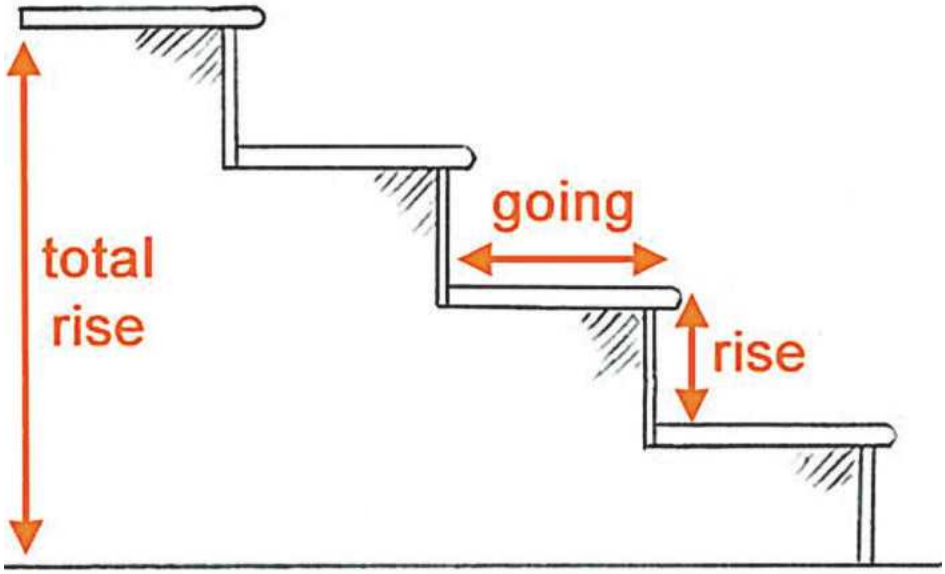
Hardwood and softwood lumber can, and mostly is, graded for use by the producer. Once you are familiar with the range of grades available, you should be able to buy the correct material for the job in hand. Some softwood will be machine stress grade and stamped for use. Hardwoods may be graded visually and marked accordingly. Things like knots, splits and other inclusions are key factors. Their regularity and closeness will include or exclude them from one grade or another. Bone up on the different grades of timber before you buy or ask your supplier to recommend the most appropriate for your project.

Mountain ash flooring, showing fiddleback figuring

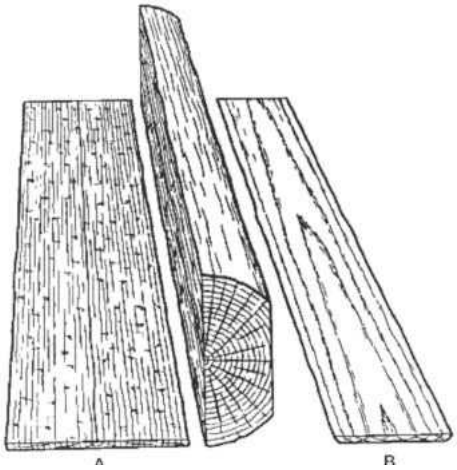
Grain

To us workers of wood, and others who appreciate it, 'grain' is the surface, visual element created by the alignment of the fibres. A 'nice grain' may mean different things to each of us. It might be the figure, as in oak, the uniformity of grain, as in beech, say, or the stripe in sapele. Here are a few that are in everyday use:

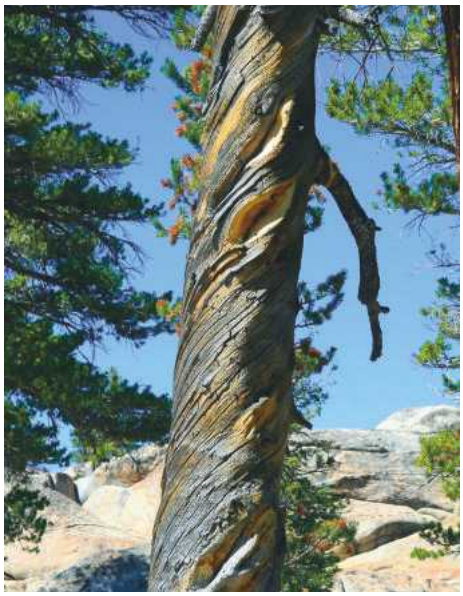
- **Carroty** – short-grained
- **Close** – wood with narrow growth rings, dense stuff. Provides a good surface finish when planed. Could also be called fine- or hard-grained
- **Cross** – grain that slopes across or through the plank. It might also be found as the grain diverts around a knot. Cross-grained stuff is likely to not be as strong as straight-grained wood. In extreme cases it might be called diagonal grain
- **Figured** – anything that has a patterned face: oak's 'flower', sycamore's 'fiddleback' and 'birds eye' maple to name just a few
- **Interlocked** – where successive layers of fibres run in different directions to one and other. Interlocking grain is often difficult to finish smoothly
- **Open** – coarse, with wide growth rings
- **Spiral** – the fibres of the wood appear to run in a clockwise, or anti-clockwise direction. This type of grain can be structurally suspect
- **Straight** – here the fibres run in parallel to the direction of the length of the plank. Provides the best structural boards
- **Uneven** – timbers that have irregular width growth rings
- **Wavy** – prized for its appearance, especially for veneers. Fiddleback is one example. Can also be called 'curly' grain.



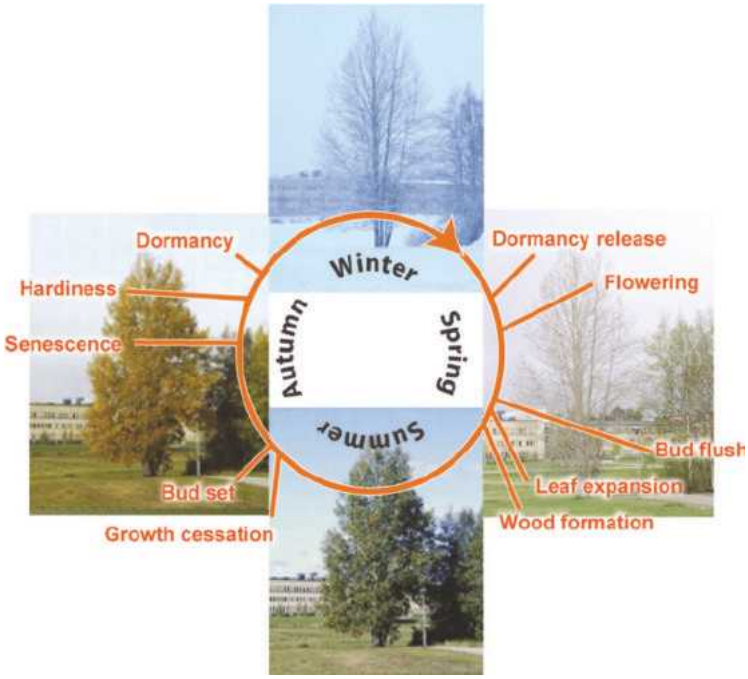
Stair manufacture explained



Sketch of A) quarter-sawn and B) flat-sawn timber



The weathered trunk of a lodgepole pine tree showing an extremely spiral grain



The annual cycle of a populus tree

Gravel plank

You may have noticed on vertical or wood panel fencing a board, or section of pre-formed concrete, running along the bottom nearest to the ground; this is a gravel plank. Its aim is to keep the bottom edge of the fencing off the ground and away from the area in which rot occurs. It can also be there to stop gravel or chippings migrating underneath the fencing.

Green wood

A word we use, similar to 'fresh', to describe wood logs and lumber that has just been cut and is very wet.

Groove

A channel we might cut, usually of parallel width and an equal depth and for a purpose or a decorative feature.

Gross features

Each different species of wood will have a number of gross features that can be used to help identify them and also help to define their uses. These features are those that are easily identifiable with the naked eye and do not need the aid of a magnifying lens or microscope. They'll include such characteristics as bark, smell, taste, weight, colour, texture, grain and so on.

Growth

Like all plants, trees grow either continuously or in yearly cycles. Most tropically grown trees will have continuous growth because there are no clear, regular climatic changes throughout the year. In temperate climates, like the UK, there are seasonal changes that stop and start growth at regular intervals. The former, when a piece of wood is cut across the grain, will show continuous growth and the latter will have growth rings. Although it may not be obvious, trees grow from the outside out. It's like slipping a glove on your hand every year over the one before! So if you look under the bark of a tree that's where the growing cells are – in the sapwood. As this growth expands it leaves behind the solid, structural elements of the wood, which is the heartwood. Of course there are many different factors that affect growth: changes in the climate, sudden trauma through, say, typhoon or hurricane, the soil upon which it grows and its exposure to the elements, etc. All fascinating stuff if you wish to research it.

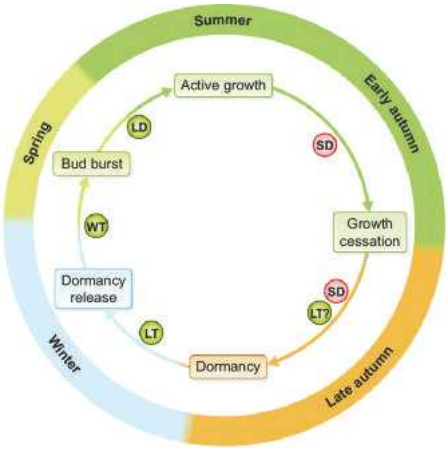


Diagram showing the annual growth cycle in trees

Growth rings

We covered this under the heading of 'annual rings' and also a little bit above.

NEXT MONTH

In part 19 of this series, Join Peter as he moves on to the end of the Gs and begins on the Hs, including terms such as hand saw, helical hinges and haunch

Growth rings on a pine trunk

LAGUNA REVO 12|16

Innovation has been key to the progress of the Laguna brand
and it is fully embraced here in the new REVO 12|16 Midi Lathe.

Turn to Perfection

Large heavy duty cast iron bed, headstock, tailstock and banjo
1 Hp Motor with Pulse Width Modulation to ensure constant torque and speed
Three speed settings and full variable speed from 50 to 3,500 rpm
12 1/2" swing over the bed and 15 1/2" between centres
Forward / Reverse and 24 position indexing system

PWM

£999 inc VAT

Shown with optional Floor Stand: £329 inc VAT

LAGUNA TOOLS UK

See the new 12|16 Revo on display at the following specialist Laguna stockists:

ENGLAND

BIVEN MACHINERY
Blackpool
www.bivenmachinerysales.co.uk

D.B KEIGHLEY MACHINERY
Pudsey
www.dbkeighley.co.uk

G & S SPECIALIST TIMBER
Penrith
www.toolsandtimber.co.uk

SNAINTON WOODWORKING SUPPLIES
Scarborough
www.snaintonwoodworking.com

TURNERS RETREAT
Doncaster
www.turners-retreat.co.uk

WEST COUNTRY WOODWORKING
St Austell
www.machinery4wood.co.uk

WALES

TIMBERMAN
Carmarthen
www.timberman.co.uk

SCOTLAND

JUST WOOD
Ayr
www.justwoodonline.com

MACGREGOR INDUSTRIAL
Inverness
www.macgregorsupplies.co.uk

NORTHERN IRELAND

B MCNAMEE AND CO LTD
Strabane
www.facebook.com/bmcnameestrabane

THE WOOD SHED
Belfast
www.wood-shed.com

IRELAND

JOE MCKENNA'S
Limerick
www.joemckenna.ie

RONAYNES
Thurles
www.mytools.ie

HOLLAND

BAPTIST VOOR HOUTBEWERKERS
Arnhem
www.baptist.nl

FINLAND

LAGUNA TOOLS FINLAND
Rovaniemi
www.lagunatools.fi

The front bearing is a double sealed 6006 LLU Ball bearing offering a 31% higher dynamic load rating than a typical 6005 bearing.

Laguna's patented tool-less belt change system ensures changing between speed ranges is simple and fast.

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

For more information please visit our website **www.lagunatools.uk**

MAYFLOWER MODEL

WILL SOON BE SHIPSHAPE

A one-tenth scale model of the ***Mayflower*** is due to be ready for commemorative events in Dartmouth this summer

Builders of a one-tenth scale model of the *Mayflower* are on schedule to complete the project in time for the start of commemorative events to be held in Dartmouth this summer. With work on the superstructures above deck progressing steadily, the last major element will be making and fitting the rigging.

Support for the project aims to raise awareness of the Axminster Tools & Machinery brand among regional and national boatbuilding and model making communities and also highlights the application of centuries-old traditional woodworking and carpentry skills.

Lead builder, Ian Kirkwood, is excited about the prospect of seeing the completed model revealed to the public, which was scheduled for June, but following updates regarding the COVID-19 outbreak, like all Mayflower 400 Partners, their intentions are to carry on with plans for the Mayflower Week, but now running from Sunday 30 August 2020 with the Grand Mayflower Pageant, through to Saturday 5 September 2020.

"It's been a painstakingly detailed project, which to date represents over 5,000 hours of volunteer work. I'm delighted to say that over the past two months we have had the support of an additional four volunteers, effectively tripling our team and we will have their support right through to completion," says Ian.

The view below decks on the one-tenth scale model of the *Mayflower*

Invaluable support

Ian said that the support of Axminster Tools & Machinery and their various supply partners since the start of the project in April 2018 has been invaluable. "The Axminster Trade specification table saw, bandsaw and extraction system helped us make steady progress right from the outset as we could safely cut and size timbers donated to the project. A generous donation of tools from Lie-Nielsen has put challenging hand-built components within our reach, while Tormek systems have helped keep chisels and planes sharp and accurate.

"Particularly helpful in construction of detailed components in the last few months has been several Proxxon machines provided to the project. The Proxxon products have been outstanding and model makers everywhere should keep them in mind. We've used the planer/thicknesser, the table saw, scrollsaw and mini chop saw to great effect to speed up many repetitive stages of the build. They've helped ensure a level of repeatable accuracy, which would otherwise have been difficult to achieve."

Revised dates

The completed model will be a feature display of the Dartmouth Museum's new *Mayflower* exhibition, but visitors are advised to check the website – **www.dartmouthmayflower400.uk** – and the associated social media pages for updates. Before the pandemic broke out, it was estimated that the diverse cultural and historical events marking the 400th anniversary of this famous voyage to the New World would generate significant tourism revenues in the South West and at other Mayflower-related towns and cities in the UK and overseas. The team are hopeful the event will still take place this year, but, like many UK businesses, are having to be guided by government advice. They are constantly monitoring daily guidance given by Public Health England and the NHS, and the website will be updated as regularly as possible.

Framing the hull

AXMINSTER
Tools & Machinery

The bulk of the tools and machines for the project were supplied by Axminster Tools & Machinery – visit **www.axminstertools.com**

Ian Kirkwood working on his one-tenth scale model of the Mayflower

Laying the decks

FURTHER INFORMATION

To find out more about Mayflower 400, see **www.dartmouthmayflower400.uk**

Article supplied by Axminster Tools and Machinery. For more features and projects, visit **www.knowledge.axminstertools.com**

ANYONE FOR TENNIS?

Paul Greer explores the history of tennis rackets through the ages, from wooden antiques to modern alternatives

Walk through any reputable sports shop today, and before long a rainbow of graphite tennis rackets is likely to catch your eye. However, the space-age technology which makes these possible was undreamt of when the game itself was born.

Modern (i.e. lawn) tennis began in England in the 1870s, when it swiftly replaced croquet as a popular garden pastime among the upper and middle classes. The first rackets were modelled on those used in the long-established sport of 'real tennis'. Their heads were roughly the area of those used in modern-day badminton, but many verged on a 'teardrop' shape, like those in the boxed tennis sets produced by Major Walter Wingfield, commonly regarded as the game's originator. He called it 'Sphairistike' (Ancient Greek for 'ball game'), but this was soon shortened to 'sticky' by its adherents. In time, some sets came to be designated 'for badminton and garden tennis', and whose rackets, though smaller, were robust enough for both games.

Some of the early racket manufacturers are still in existence. One is 'Slazenger', which in 1890 became 'Slazenger and Son', and introduced a star logo on the racket shaft or 'throat'. As makers grew in number, those based in the capital often just had 'London' stamped there, the city alone seeming to guarantee their quality.

Drawing of Major Walter Wingfield holding one of the very first wooden rackets

Evolving shape

Soon, the basic racket shape began to sprout decorative features. Slazenger's 'Sprite' model exhibits both the rare 'barley twist' throat, and 'fantail' handle, while its 'Rocket' handle splits into a 'fishtail'. Some early models bear a leather strip around the top of the frame to protect the strings, and by 1900, double central stringing was making the ball-contact area itself more durable. Some models also featured reinforced 'shoulders' (where the head bends to become the throat).

Slazenger's 'The Renshaw' model of 1898 may have been the first to carry the name of a celebrated player (or in this case, two, as between them the Renshaw brothers collected numerous Wimbledon titles). In 1912 the firm launched the 'Dorothea Lambert Chambers Autograph', after the seven-times Wimbledon winner of the Edwardian age, an early instance of a champion endorsing a racket.

Today's rackets have a handle grip, usually of soft leather, yet until the 1920s grips were 'combed', the bare wood of the handle being grooved deeply enough to offer a firm hold. Even when material grips became fashionable, two famous American players (Bill Tilden and Don Budge) disdained them, having calculated that wood absorbed perspiration much more slowly than even the best conventional materials.

Some wooden rackets earned distinction through a notable shape, logo, or inscription. Though English-made (by Slazenger in the 1960s), the 'Excelsis' would have been destined for the Australian market, as the throat features a kangaroo. Wording on its 'Challenge' model claims 'Slazenger rackets have won more Wimbledon titles than any other make'.
By the 1990s, wood rackets were rarely seen, but one firm paid homage to them by introducing a graphite model so manufactured that its surface resembled woodgrain.

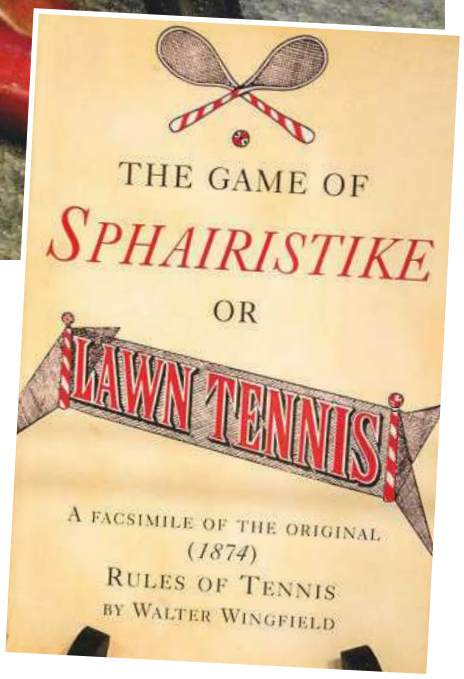
Two of the concluding developments of the wooden racket in the late 1970s were the Head company's 'Vector', which featured the open throat soon common among graphite models, and Slazenger's 'Challenge 100 Bi-Handler', whose elongated grip catered for players favouring two-handed shots.

Vintage tennis racket showing how a fabric-free handle grip used to be the 'norm'

Wood vs modern rackets

The modern rackets, which superseded wood, have undoubtedly improved play at all levels, granting serious competitors more power, while helping newcomers learn an essentially difficult sport. However, wooden ones have not lacked mourners. Someone who laments their passing is three-time Wimbledon singles champion John McEnroe, who argues that current professional play lacks subtlety, largely because the rackets do nothing to discourage a power-based strategy. McEnroe was the last player (in 1984) to win the men's singles title at Wimbledon with a wood racket (the Dunlop 'Maxply').

Most modern rackets are strung with nylon,

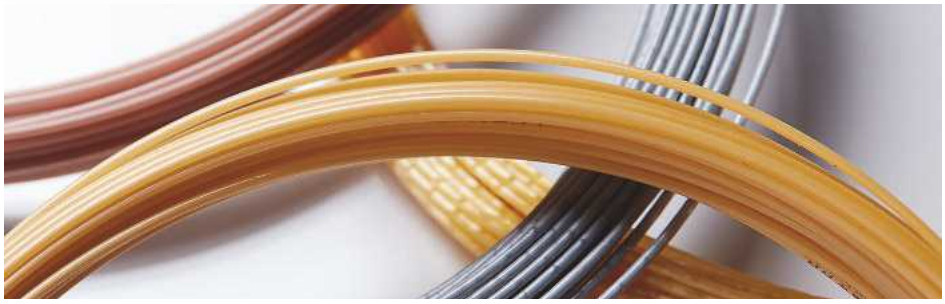


Cover of Major Wingfield's book on the rules of 'Sphairisticke' (Lawn Tennis)

Vintage racket with 'fishtail' handle-butt

Natural gut strings on a modern tennis racket

Unusual wooden racket press (e.g. with cross shape)



Luxilon strings

and one variety in particular, luxilon, lets players hit the ball with exaggerated spin, forcing the receiver to retreat, thereby promoting a 'backcourt' game. Wood rackets, in contrast, were usually strung with gut, resulting in the ball being hit 'flatter', which encouraged more forecourt play, and volleying. In addition, gut was more responsive than nylon, and better rewarded the skills of the 'touch' player. Gut is still very popular among professional players, while some (including Roger Federer) favour a combination of gut and luxilon.

Wood rackets were frequently at risk of warping. This could occur if left damp after play, or stored in an overly-warm place. As even a slightly-misshapen racket could prove unusable, most players consigned theirs to a press when not in action. Being of wood and metal, presses were quite heavy, but guaranteed to keep the racket-head straight. In the Autumn, rackets were confined to their presses until the Spring, as before the 1970s, there were few indoor courts in Britain, so nearly everyone had a long wait to resume. The Swedish five-times Wimbledon singles champion Bjorn Borg generated remarkable topspin with his wood racket, but this required very taut strings, which only a handful of experts could insert to his satisfaction. These were prone to snapping, and during one two-week tournament, Borg broke the strings of no fewer than 60 rackets. The gut of each had to be cut out promptly to avoid the otherwise inevitable warping from uneven stress.

Master craftsmen

Before tennis was many years old, the rackets produced by a few individuals earned them the status of master craftsmen. Hubert Preston was one. He learned his trade with Slazenger before establishing his own business in London in the 1920s. Many of the bespoke rackets he made were for the champions of his day. However, rackets continued to be made in this way only for as long as tennis remained the preserve of the well-off; but a surge in the game's popularity made a boost in production essential, and entailed the introduction of specialist machinery, and workers trained in specific functions rather than all-round skills.

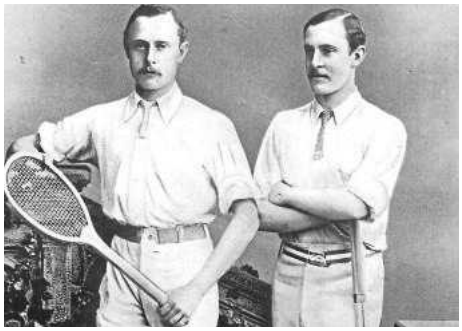
This 'industrialised' racket-making process began with a number of cut-to-size strips of laminated wood (usually ash, for its durability and flexibility) being placed in a steamer until pliable, before being bent around a racket-shaped mould to dry out, and allow the shape to become fixed. Once free of the mould, subsequent operations were performed by hand, with smaller pieces being glued onto this basic shape, a clamp attached, and the whole placed on a drying rack. Next, the frame head was smoothed, the handle and throat marked as necessary, holes bored for the strings, and polish applied with a spray. The maker's name and any stencil-work were added, a check made to ensure weight was distributed correctly over the length of the racket, then a leather grip was wound round the handle.

An ash tree, whose wood was that most used in racket manufacture

Front view of Wimbledon Lawn Tennis Museum

Real tennis racket made by Gray's of Cambridge

Wheel of vintage rackets (in WLTM gallery)



The Renshaw Brothers, notable early champions in the 'wood' era

Two rackets and a basket of balls

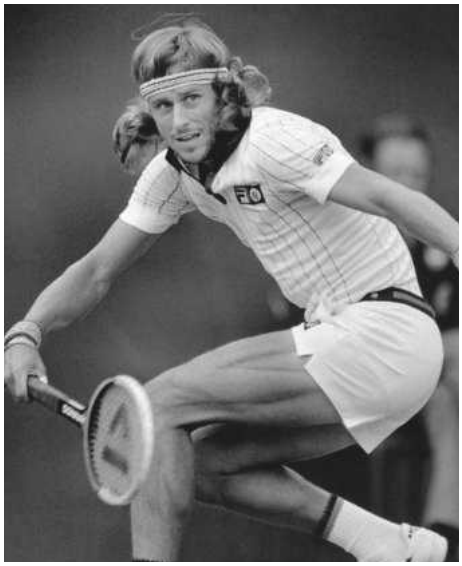
Tennis memorabilia

Lawn tennis is related to 'real' (or 'royal') tennis, a much older game popular in Britain and mainland Europe from the 13th or 14th century. Early lawn tennis rackets often resembled those used in real tennis, of which Gray's, a Cambridge-based firm founded in 1855, is the sole remaining manufacturer. These are small-headed and slightly lop-sided, but still made of wood. Real tennis is now emphatically a minority sport, with scarcely 30 courts left in Britain.

The Lawn Tennis Museum at Wimbledon is home to the largest collection of tennis memorabilia in the world, and the ideal place to savour rackets from every era. Wooden ones distinctive through age or association are highly-prized by collectors, and one once wielded by a famous player can command a sale price in excess of £10,000.

Croquet, the game whose loss of popularity helped pave the way for tennis

Dorothea Lambert Chambers, early champion and racket endorser



(The young) Bjorn Borg

(The young) John McEnroe

CARVED BY HAND

THE NHS HERO PLAQUE

To show his appreciation to the NHS for all their hard work during the Coronavirus pandemic, **Johnathon Whittaker** has been hand-carving and donating wooden plaques to hospitals

One of the plaques in situ at Royal Devon & Exeter Hospital

A woodcarver from Plymstock, Devon, has been showing his appreciation to the NHS by hand-carving and donating wooden plaques to hospitals. Johnathon Whittaker was inspired to design and carve his first 'NHS Hero Plaque' while out clapping for key workers one Thursday evening. His son Alex suggested he should carve something, and so he did. He shared his idea on social media and the original post received 350,000 hits in one week.

Carved By Hand

Johnathon began his career as a Civil Engineer focusing on coastal defence before he gave it up to become a full-time parent. He started his own business around 12 years ago, specialising in outdoor furniture and garden structures. Now a self-taught, self-employed woodcarver, he began by carving 'thank you' plaques and signs in his spare time. He soon realised he had a passion for carving and his business changed direction. He moved away from his original business, Urban Garden Structures, and relaunched as 'Carved By Hand'.

Initially, he continued with the plaques and signs but his natural talent meant he mastered new skills quickly and soon moved on to carving more intricate and detailed designs. He watched YouTube videos by established woodcarvers, such as Ian Norbury and Andrew Thomas, to further his skills. His portfolio consists of a multitude of wall art, pendants, seahorses, hares, whale tails, sharks, and lots of abstract pieces made from wood he finds on walks. More recently he's been working on realistic knots, horse heads, and the human form. Most of the pieces Johnathon carves are sold or on display in local shops and galleries.

Woodcarver Pat Waters working on one of her pieces

An evolving skill

Johnathon has been carving for five years now and his skill set is constantly evolving. The fact he is not a traditionally taught woodcarver leaves him free to explore with all manner of tools. He uses chainsaws, angle grinders, routers, power carving tools, knives, chisels, and rotary tools. He really likes to experiment, particularly with the finish and the use of colour and resin. His favourite wood stains are by Chestnut Products, both the traditional colours and the rainbow spirit shades.

The idea behind the design

Johnathon shares his skills and ideas through the classes he teaches in his workshop. His longest-standing student is 76-year-old Pat Waters; she has not only learned carving skills through his classes but has benefited from the confidence that comes from learning a new skill.

Johnathon had Pat in mind when he designed his first NHS Hero Plaque. The idea behind the design came from an NHS advertising campaign featuring the 'S' as the familiar superhero symbol. Unbeknownst to Johnathon the amount of attention the plaque would receive, he took the design and adapted it. He carved his first plaque for Pat, to let her know he was thinking of her and acknowledge everything the NHS does for her. He also thought Pat may like to have a go at carving one for herself. She has underlying health issues and has been in isolation for many weeks.

One of Johnathon's stunning carvings

An unexpected response

The plaque received such a positive response from Pat that Johnathon decided to make a larger version, this time for some friends who work in his local Derriford Hospital in Plymouth. It was this larger plaque that Johnathon posted on his Facebook business page, Carved By Hand. It didn't take long for requests for more plaques to start dropping into his inbox. Johnathon's partner, Christie Lee Waters, has been helping with the admin.

"We never expected to get the sort of reaction we did. It has been truly phenomenal and (I may be biased) but so well deserved. He is carving all day every day, well into the evening – although that isn't necessarily unusual. He is doing this for everyone else, not for his own benefit at all. Recognition for producing something beautiful is all he really wants," she comments,

The woodworking community

Johnathon has committed to carving well over 100 plaques himself. He put a call out

on woodworking forums for carvers to join him, so that he might commit to more. If he can get enough support from the woodworking community, he would like to adapt the design and extend the gesture to include care homes.

The Royal Devon and Exeter (RD&E) Foundation Trust was one of the first hospitals to receive their NHS Hero Plaque: "We'd like to thank Johnathon and Christie for the beautiful woodcarving they donated to the hospital. Following quarantine, it's now sitting proudly in our main reception," said a spokesperson for the RD&E Foundation Trust.

Johnathon carving a horse's head

Axminster Tools & Machinery heard Johnathon's story and wanted to help. Supported by suppliers including Hermes, Mirka, DMT, Dura Grit, Kirschen, Leigh, Trend and Tormek, Axminster supplied Johnathon with a bundle of tools and consumables to make carving quicker and easier. He commented: "Thank you, Axminster Tools – I'm blown away! The tools are a carver's dream. We can't thank you enough and with your generosity, we'll be able to keep on carving and donating these plaques to the amazing NHS facilities around the UK. If my designs make staff feel more appreciated at the end of a long shift, it's the least I can do."

How to make your own NHS Hero Plaque

If you have been inspired by Johnathon's design and would like to have a go at making one of his NHS Hero Plaques yourself, take a look at the useful video he has put together: **www.youtube.com/watch?v=SJAsIsxzFEw**. Coming soon will be a tutorial on how to create the plaque using a router and power tools. Subscribe to Johnathon's YouTube channel – go to **www.youtube.com** and search for **'Johnathon Whittaker'** – for the next instalment.

AXMINSTER
Tools & Machinery

Article supplied by Axminster Tools and Machinery. For more features and projects, visit **www.knowledge.axminstertools.com**

TOOLS & EQUIPMENT REQUIRED

60° V-groove gouge
6mm shallow cut back bent gouge
Flexcut MC150 six-piece mallet tool starter set – includes a 60° 'V' groove gouge as mentioned above
Chisel set – 5-25mm width
Abrasives – 120 & 240 grit
Large wooden mallet

FINISHES

Liberon Woodstain
Shellac flakes
Acrylic lacquer

MATERIALS

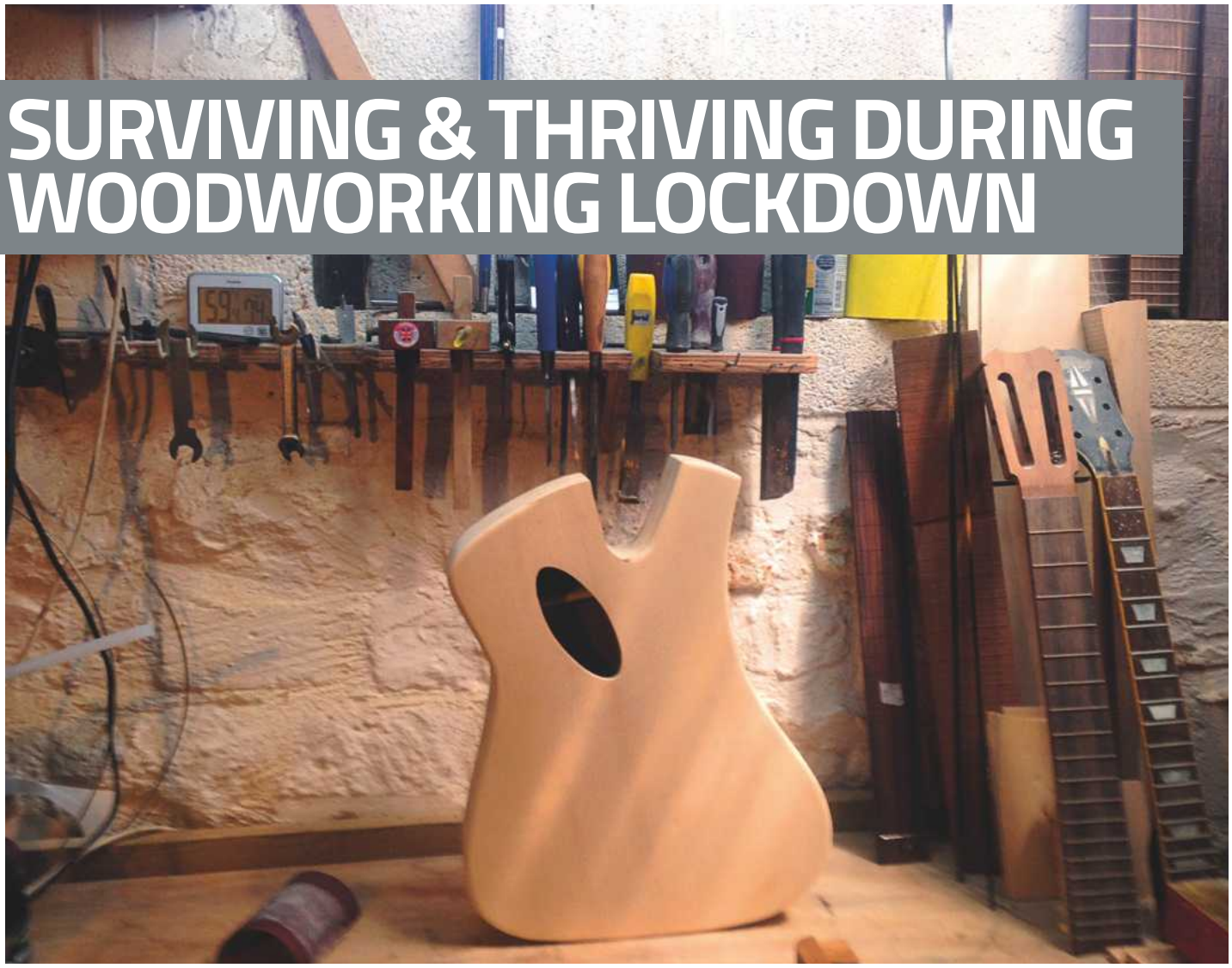
Johnathon tries to use locally sourced wood: regular pine, 2×4s and scaffolding boards – materials that you should be able to source easily at your local store, rather than using exotic timbers

You can find all equipment required by visiting **www.axminstertools.com**

FURTHER INFORMATION

If you think you can help Johnathon with his mission to put a smile on the faces of our key workers, please get in touch with Carved By Hand – visit **www.carvedbyhand.co.uk** or connect on Instagram: **@johnathon_whittaker**

SURVIVING & THRIVING DURING WOODWORKING LOCKDOWN



In the event of prolonged lockdown, what guidance is there for woodworkers to help meet some of the challenges and how can we turn these into opportunities? **Jeremy Broun** shares his thoughts

We are faced with facts, statistics, opinions, and some confusing and contradictory advice, but the main messages are 'keep a distance' and 'collective responsibility' during this unprecedented Coronavirus pandemic. So how can we woodworkers keep positive? We are fortunate enough to have a practical skill, whatever the level, and many of us have access to a home workshop during this period of self-isolation, which is a definite blessing. Younger woodworkers may be in rented accommodation with limited space, or are used to sharing workshop co-operatives, whereas others will be living with parents or children, with a partner or on their own, and are virtually locked in 24/7, with no access to such amenities.

A simple tool rack project

Isolation & restriction

Some people are already used to isolation irrespective of age. In my own case, as a child growing up in rural Derbyshire in the 1950s, I enjoyed the freedom to roam that subsequent generations have been increasingly deprived of, but I was also paradoxically 'locked down' for much of that childhood, having to go to bed early, and learning to be resourceful. I believe this has been a useful tool in later life, as well as for me as a furniture maker: I have always made the most of limited space, tools and materials.

As a child, I had an active imagination and learned to not only live in the moment, but part of that moment was creating dreams and hopes for a better tomorrow. I think this need to focus on the moment and the day, but to have a future dream in mind, is particularly helpful during these unusual times.

Turning challenge into opportunity

Beyond the need for food, water, exercise and sleep, we are faced with the challenge of surviving mentally and only fairly recently has the taboo of 'mental health' been addressed. But we are creatures of mood and early psychologists acknowledged that people vary in their natural disposition – the 'glass half full or half empty' analogy. My observations of teaching in many schools and colleges over the decades is that it is about attitude, and skill alone gets you nowhere without it. Being creative and working with a medium such as wood is a huge advantage. Woodworking demands discipline, patience, determination, planning and the very activity can be a mood changer once you start the ball rolling. So this 'lockdown' can be viewed as a new opportunity to catch up with tasks or projects, have tidy-ups, re-organisation of tools, and perhaps develop new skills. My own pre-lockdown survival strategy is to make a daily list and work on a variety of projects with new ideas on the go. The following text describes a typical lockdown day for me.

Tidying the timber store


Try adding some fresh paint to your workshop walls

A day in the lockdown life

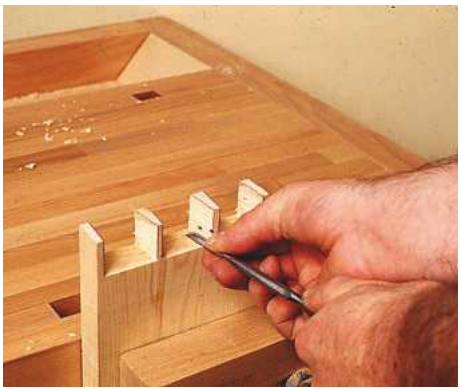
I get up around 8am and my next door neighbour takes my dog to the farm. I have breakfast with a nice cup of ground coffee. Next, I confront my list of daily tasks, which I wrote the night before. Working at the computer usually eases me into the living world, so I work on a new guitar song I am learning and also absorb myself in video editing for my YouTube channel. I prepare some visual props for a 'Lockdown Livestream' session and have decided they work best for me when I do them when I feel like it, rather than schedule the same time, so I go live in the afternoon, jamming on my guitar as the basis of the livestream to chat about woodworking.

Before the pandemic, I had bought an electric pedal-powered bike. It is ideal as I live in a city of hills so I am able to do my daily exercise, buy some basic food from a local shop and then get my heart pumping while pedalling up the hill, not to mention a dose of vitamin D from the sun. I take an afternoon catnap around 4pm as I often work into the early hours of the morning. I play chess against my computer andcatch up with the news on the radio, then I choose a film to add to my Amazon watchlist for that evening. Later I cook dinner and make sure there is enough to last me a couple of days. Before the lockdown, I frequented my local supermarket café every day, which was also a point of human contact as the staff always chatted to me. I then tidy my workshop for an hour, and do some aerobics using two massive G clamps! I then settle in to watch the film and do a bit of texting and catching up. Next I write my task list for tomorrow, which is another day. Lists and filling my day with variety are very important for me, but taking each day at a time and limiting my dose of daily news is paramount.


Nails come in handy for some jobs

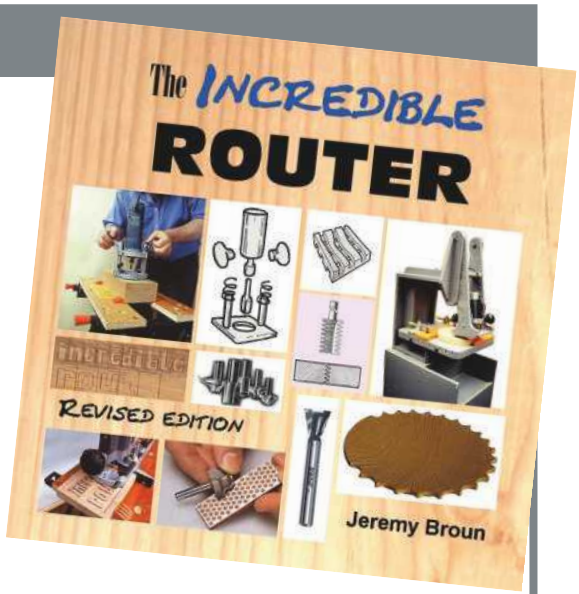
A woodworker's survival strategy

Routine and daily structure will help, especially if you are used to it at work. Certainly for the long haul and if you are married or cohabiting, you already know that personal space is essential – time and a place to be on your own. The shed owner has the perfect escape; it is a micro environment and there will be endless catch up tasks to do, such as cleaning up and reorganising tools. A thorough spring clean is a great excuse, and what about that dust extraction installation you never got around to completing? If you are completely new to woodworking, have limited space and tools, it is surprising how easy it is to get absorbed with a penknife carving a spoon out of a piece of green wood. A little can go a long way. For many, this crisis is an opportunity to reflect, to communicate better, slow down, care about others outside the immediate horizon, and perhaps do a daily good deed for a neighbour, as well as being a great time to read.


Develop those hand skills

READER OFFER

During lockdown, Jeremy is offering 20 signed copies of his new hardback book, ***The Incredible Router Revised Edition*** (based on the definitive original edition). Usually priced at £19.95, you are asked to just cover the cost of postage (£5). This offer is available to the first 20 readers who apply at **www.woodomain.com/incredoffer** – please note this offer is open to UK residents only



ETHEREAL LOUNGE CHAIR

Constantly striving to transcend the barriers of art, design, sculpture and furniture, this iconic piece by **Marc Fish** really does stand in a class of its own

Marc Fish's 'Ethereal Series' was born out of an exploration to develop new, innovative techniques for combining resin with his signature wood laminations. Marc has created a revolutionary material that allows light to pass through poured and carved resin. Reflecting off the paper-thin wood veneers, the light takes on different shades, manipulated by the spaces between the laminations. The effect is that of a constantly shifting, illuminated surface quality.

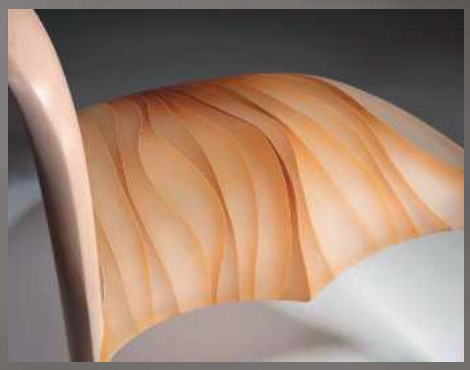
Ever inspired by the elements of the natural world, Marc's 'Ethereal Series' mimics the delicacy of the leaf structures. In an exploration to design new, innovative techniques, he has pushed the limits of 21st century furniture design.

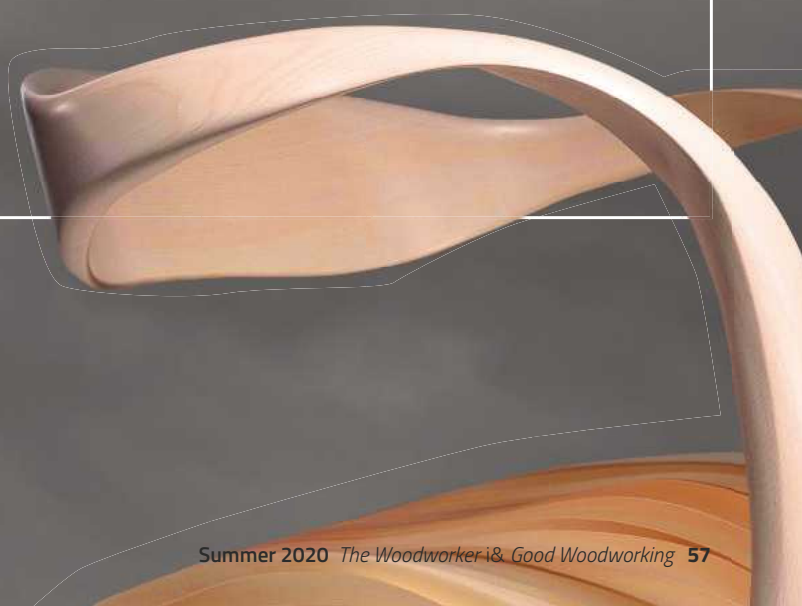
Marc is also the Founder and Principal of 'robinson house studio' furniture school, which has recently moved into a sustainable state-of-the-art unit in Newhaven, on the picturesque south coast of England. 'robinson house studio' offers the unique chance for students to be taught furniture making and design by one of the world's most eminent designer-makers, together with Senior Tutor Theo Cook, who is known in the woodworking world for his amazing Japanese dovetails. All of which makes this educational establishment a very unique place with students flocking from all around the globe to be taught by these talented craftsmen, who are both passionate about passing on their knowledge to the next generation of furniture makers.

FURTHER INFORMATION

Medium: sycamore & acrylic
Date of manufacture: 2019 – limited edition of seven
Dimensions: 28in high × 26in wide × 34in diameter

Web: **www.marcfish.co.uk**
Instagram: **@robinsonhousestudio**





CRAFTING A WOODWORKING COMMUNITY

Anselm and Tom Fraser

The Chippendale International School of Furniture prides itself on family values and fostering a strong support network among students and tutors. Here, Principal **Tom Fraser** talks us through some of the steps they've been taking during lockdown

Built on the site of the family home by school founder and former Principal Anselm Fraser, the Chippendale School prides itself on family values and has worked hard to foster its now global community. Since its inception in 1985, we have welcomed more than 500 students from over 50 countries around the world. We treat our international student community like extended family, providing a supportive environment and home away from home during their time with us. We never forget a student's name and keep in touch with graduates, checking in on life post-Chippendale to see how their businesses have been developing.

The School has a strong team of tutors and teaching experts who cover an array of both traditional and modern skills and techniques

Staying connected

Due to our small course sizes, with no more than 26 students on the Professional course, we can provide a very high-level of 1-2-1 teaching, with ample opportunity for small group working practice. There is nowhere to hide at our small school – this is a great thing, as it enables our students to quickly form strong bonds with the people they will be learning and working alongside every day during their studies. With many students coming to the school from outside of the UK, it is important that they connect and make friends while away from their home countries.

These friendships have been vital in keeping our students motivated during the recent lockdown period, where they have been away from their families and the workshop under incredibly challenging circumstances. To prevent isolation, we have worked hard to help students stay connected by using video calls, social media and chat groups. We've also worked on setting up fun social activities as well as engaging and creatively challenging learning opportunities. When we get back into the workshop again, we do not doubt that students will be overjoyed to get stuck back into finishing their projects that have been on pause for so long, not to mention catching up with one another in person.

Chippendale family

We have a strong team of tutors and teaching experts who cover an array of both traditional and modern skills and techniques. Some of our team have even been with us for more than half their lives – they are as much a part of the furniture as they are the Chippendale family!

Growing up at the school, I have known some of our longest-serving staff members and suppliers my whole life. Our longest-serving staff members, Alan McGovern, Graham Davies and Clare Charleston, have been with us since they were apprentices, with Alan joining us at the start of our journey back in 1985! Our tutors know the school and their craft inside out, sharing their expertise and knowledge with each student that passes through the school doors.

Students are encouraged to work both together and independently while taking this opportunity in their careers to learn from one another, their teachers and those graduates who have stayed on to grow their businesses on-site at our unique incubation hub, Myreside studios.

Students are safe in the knowledge that there is a comprehensive support system in place to help them every step of the way through their woodworking journey

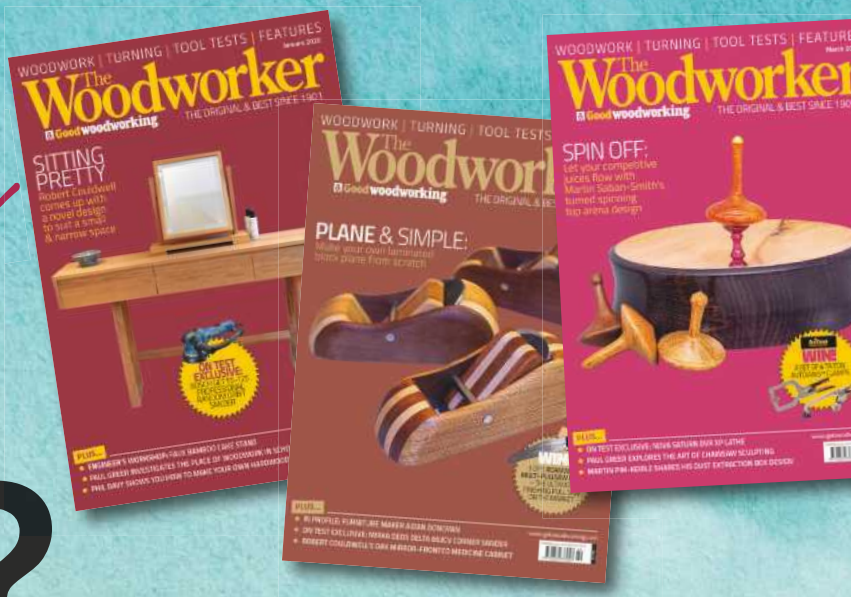
Our school is well-known in the local community and we have amazing relationships with local landlords and host families, who we rely on to accommodate our students during their studies. Locals are so welcoming when students arrive in the village and are genuinely interested in getting to know new faces. We believe that by offering a warm and welcoming environment where our students feel safe, we allow them to flourish. Our students are safe in the knowledge that there is a comprehensive support system in place to help them every step of the way through their woodworking journey.

The Chippendale School provides a warm and welcoming environment for those seeking to pursue a passion for woodworking and craft a career in furniture making. We are now taking applications for our next Professional course – find out more by visiting our website: **www.chippendaleschool.com**.

FURTHER INFORMATION

If you're interested in getting into furniture making, then apply to study on the Professional course at the Chippendale School – find out more at **www.chippendaleschool.com**

Why not try 3 issues for £1?



PRINTED, DIGITAL or BOTH!

- Get your first 3 issues for £1 (saving £13.25)
- No obligation to continue
- Pay just £3.23 for every future issue (saving 32%) if you carry on**
- Delivered conveniently to your door
- Significant savings on **DIGITAL** only and **BUNDLE** options available

If you have enjoyed this issue of **The Woodworker**, why not claim the next **3 issues for just £1**? If you're into working with wood, you'll know how indispensable The Woodworker is. It is brimming with useful advice, reviews of the latest tools and equipment and so much more! So don't miss a trick; subscribe today!

3 SIMPLE WAYS TO ORDER

BY PHONE
0344 243 9023

ONLINE
tww.secureorder.co.uk/TWW/341FP

POST
Complete this form and return to:
The Woodworker Subscriptions,
MyTimeMedia Ltd,
3 Queensbridge,
The Lakes, Northampton,
NN4 7BF

*Calls are charged at the same rate as standard UK landlines and are included as part of any inclusive or free minute allowances. No additional charges with this number. Overseas calls will cost more.
**Future savings based on the current annual shop price.

GET 3 ISSUES OF THE WOODWORKER FOR £1

☑ Yes, I would like to subscribe to The Woodworker with 3 issues for £1 (UK only)

I understand that if I am not 100% satisfied, I can cancel my subscription before the third issue and pay no more than the £1 already debited. Otherwise my subscription will automatically continue at the low rate selected below.

YOUR DETAILS (MUST BE COMPLETED)

Mr/Mrs/Miss/Ms..... Initial ..... Surname .....

Address .....

.....

..... Postcode .....

Country..... Tel .....

Email .....

INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY (please select option)

Originator's reference 422562

❑ **PRINT ONLY:** £1 for 3 issues followed by £10.50 every 3 months
❑ **DIGITAL ONLY:** £1 for 3 issues followed by £7.45 every 3 months
❑ **BUNDLE (DIGITAL & PRINT):** £1 for 3 issues followed by £12.50 every 3 months

Name of bank.....

Address of bank .....

..... Postcode .....

Account holder.....

Signature..... Date .....

Sort Code

Account Number

Reference Number (official use only)

Instructions to your bank or building society: Please pay MyTimeMedia Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with MyTimeMedia Ltd and if so, details will be passed electronically to my bank/building society.

DIRECT Debit

Please note that banks and building societies may not accept Direct Debit instructions from some types of account.

TERMS & CONDITIONS: Offer ends 17/10/2021. MyTime Media collects your data so that we can fulfil your subscription. We may also, from time to time, send you details of MyTime Media offers, events and competitions but you always have a choice and can opt out by emailing us at unsubscribe@thewoodworker.co.uk. Please select here if you are happy to receive such offers by email ❑ by post ❑, by phone ❑. We do not share or sell your data with/to third parties. Details you share with us will be managed as outlined in our Privacy Policy here **www.mytimemedia.co.uk/privacy-policy**.
Please visit **www.mytimemedia.co.uk/terms** for full terms & conditions

CODE: 341FP

ORIENTAL DELIGHT PART 2

In the second part of this series, join **Tim Molderez** as he finishes his Japanese blanket chest build

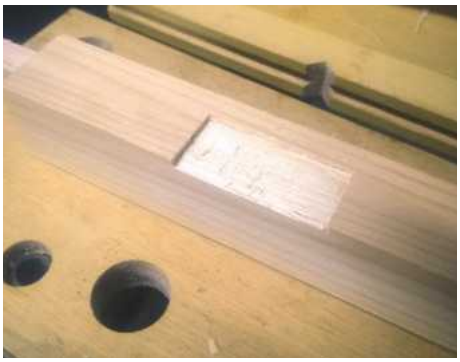
In the first part of this article, I discussed deciding on the initial shape of the blanket chest (frame), making the side panels, middle studs, bottom panel, and the lock mechanism, as well as sharing the lessons I learned along the way. Here, I'll take you through the making of the finished shape, constructing the sliding compartment, then how I went about finishing and carving the side panels. Enjoy!

Frame: finished shape

Japanese furniture often features many subtle curves to give the entire piece a more slender appearance. In this part, we'll apply several curves to the frame's pieces to slim down the blanket chest (**photo 35**). Before we move onto making curves, we should first attach hinges for the lid, as this is easier while the frame's edges are still straight. First, grab the frame piece where the lid's hinges should be attached. The idea is to embed the bottom half of these hinges into the frame, such that it sits flush with the frame. To do this, use a utility knife to mark where to make pockets for the hinges to sit into (**photo 36**). Next, use chisels to carve out these pockets (**photo 37**). Do several test fits until the hinges sit flush in their pockets. Once these are carved out, we can move onto adding curves and slimming down the frame: we'll finish up the hinges in a later step.

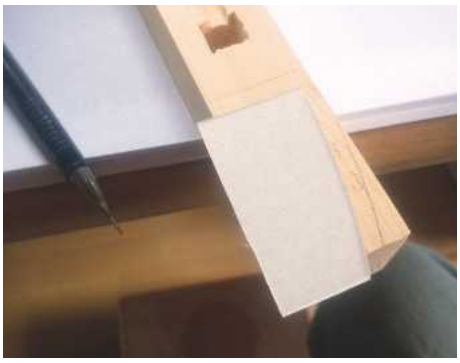
35 Several curves will be applied to the frame's pieces to slim down the blanket chest

36 Use a utility knife to mark where to make pockets for the hinges to sit into



37 Use chisels to carve out these pockets

38 For the added curves, I created several templates out of thicker paper



39 The larger template is used to draw the curves on the sides of the legs

40 Using a pencil, draw the curves as shown here

41 Use abrasives to reach the curve drawn on the bottom of each leg

TOOLS & MATERIALS REQUIRED

Here's a list of all the tools and materials used in this project. I'm sure there are many ways to achieve a similar end result using a different set of tools, but this list is just intended to give you a rough idea:

TOOLS

- Bandsaw (alternatively a table saw and jigsaw)
- Chisels and mallet
- Hand plane
- Drill press (a drill should be fine too)
- Plunge router
- Random orbit sander
- Measuring tools (combination square, ruler, utility knife and pencil)

MATERIALS

Wood

- 1 sheet of 28mm-thick pine (Scots pine, to be precise)
- 1 sheet of 18mm-thick pine

Metal hardware

- Pair of hinges
- Latch/sliding lock
- Chain

Other

- Wood glue
- Walnut coloured wood stain
- Primer and black lacquer paint
- A range of abrasives (60 and 120 grit)
- Double-sided tape
- Stick-on table feet

For these curves, I created several templates out of thicker paper (**photo 38**). There are two templates for the frame's legs, and two for the horizontal pieces. Let's first work on the table legs. The idea is to create a short curve on the bottom side of each leg, but only on the inside corner of the table chest. The larger template is used to draw the curves on the sides of the legs (**photo 39**); the small template is used to draw the curve on the bottom. Using a pencil, draw the curves according to **photo 40**.

Cut the curves on the sides of each leg on the bandsaw – there's no need to hold the frame legs in any special position while making these cuts; they can just lay flat on the bandsaw table.

Use abrasives to reach the curve drawn on the bottom of each leg (**photo 41**). Likewise, use abrasives to slightly round over the edges. Note that you'll make a larger curve with coarser abrasives – I used 120 grit.

Next up are the curves for the horizontal frame pieces. The larger template here is meant for the frame pieces of the left/right side, and the slightly smaller one for the front/back side. To draw the curve, lay the template on the top side of the frame piece, such that the curve is visible on the outside of the blanket chest. Once the curves are drawn, cut them on the bandsaw, then clean them up with abrasives.

Sliding compartment

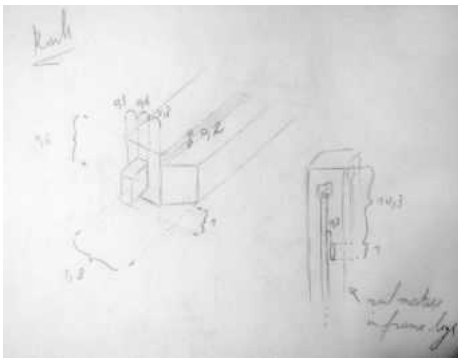
The blanket chest also features a sliding, removable compartment, which rests on top of two wooden rails that can be mounted in the blanket chest's frame (**photo 42**). Let's first make the rails. Cut two 558 × 16 × 18mm pieces, then cut tenons for both on the bandsaw (**photo 43**) followed by a decorative 45° angle. Using chisels (or the router), cut a rebate on each piece that the compartment can slide into (**photo 44**).

Also make a small notch in the middle of each piece with the bandsaw, such that it doesn't interfere with the middle studs. Finally, cut corresponding mortises in the frame legs using

42 The blanket chest also features a sliding, removable compartment, which rests on top of two wooden rails that can be mounted in the frame

LESSONS LEARNED

You can first rough-cut a curve on the bandsaw, and afterwards slowly refine that cut by rubbing the piece against the spinning bandsaw blade. Don't hold the piece still for too long, though, or it'll leave burn marks



43 Drawing showing the construction of the rails

44 Using chisels (or a router), cut a rebate on each piece that the compartment can slide into

45 Cut corresponding mortises in the frame legs using a tiny chisel

46 & 47 Weave in the horizontal strips one by one...

... by going over and under each vertical strip in an alternating fashion

a tiny chisel (**photos 43** & **45**). Next, we can make the compartment itself. While I went to visit the carpentry tools museum in Japan, I noticed a few places that incorporate wood weaving, so I wanted to give that a try as well. To start, cut several ~1-2mm thin strips of wood on the bandsaw, 18mm wide and at least 500mm long. Weaving the strips of wood turned out to be easier than I thought. First lay down the vertical strips of the pattern, then weave in the horizontal strips one by one, by going over and under each vertical strip in an alternating fashion (**photos 46** & **47**). There's no need to worry if the strips' edges don't line up, as the pattern is cut to size later. As you can tell from the photos, I also stained half of the strips in a walnut colour, in order to achieve the alternating colour pattern.

To make the compartment's sides, cut two 492 × 80 × 8mm pieces, and two 250 × 80 × 8mm pieces, then cut a dado near the bottom of each side with a 5mm straight router bit, 4mm deep. Cut a 45° angle on each of the compartment's sides to make mitre joints. To strengthen the mitre joints, I cut two slots in each corner (**photo 48**). I then cut thin strips of wood that fit into these slots. The strips should fit quite snugly in there so you can already trim the excess now with, for example, a backsaw.

At this point it's possible to test-assemble the sides of the compartment, and to determine the final size of the woven pattern. The pattern can now be cut to size (**photo 49**).

To add strength beneath the woven pattern, I cut three slats (**photo 50**). For these slats I also made mortises that slightly overlap with the dadoes for the woven pattern, such that the slats are effectively pushing onto the pattern. Before gluing everything up, now would be the time to stain the sides of the compartment, then it can all be glued up. I first glued up only two of the mitre joints, together with the strips of wood in their slots (**photo 51**). The woven pattern and its slats are in place, but they won't be glued. To glue up the final two mitre joints, it's very tricky to keep the woven pattern in place, so it's best that you get someone to help out with this step. Once everything fitted together, I put some clamping force on the sides by tying string around it, and increasing the tension by wedging in a random small object (**photo 52**), but you could obviously use clamps as an alternative.

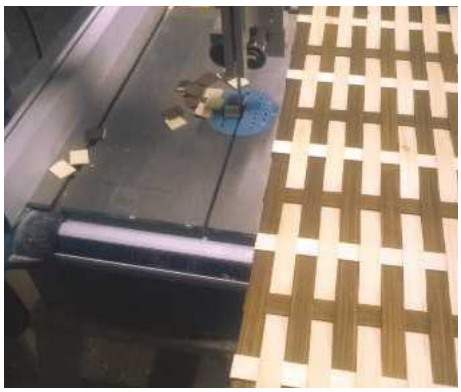
LESSONS LEARNED

I needed a tiny chisel to make mortises for the two rails, so I fashioned one out of a tiny flat-head screwdriver (**photo 45**). I just sharpened the screwdriver on an oilstone until it became a chisel – this goes to show that tools can have more uses than what they were intended for. Be careful when cutting a woven pattern to size on the bandsaw. A saw generally is quite safe as long as you keep your workpiece steady, and keep your hands away from the blade. However, because the ends of the woven pattern can wobble very easily, it's best to put a sheet of wood on top to keep it all steady

Paints & stains

We're getting there! While browsing through photos of Japanese furniture, I found many (combinations of) darker and lighter wood colours, as well as black lacquer, so I wanted to include all three in this blanket chest. The general idea is to paint the frame black, stain everything else on the outside in a walnut colour, and to leave everything on the inside untouched. When painting I lay my pieces on top of leftover slats of wood, to prevent anything sticking to the

48 To strengthen the mitre joints, I cut two slots in each corner



49 The pattern can now be cut to size

50 To add strength beneath the woven pattern, I cut three slats

51 I first glued up only two of the mitre joints, together with the strips of wood in their slots

52 I put some clamping force on the sides by tying string around it, and increasing the tension by wedging in a random small object

53 First stain the outside of all side panels in walnut (in just one layer)

newspaper underneath. First stain the outside of all side panels in walnut (in just one layer). The stain I used is also protective, so I didn't add anything else to it (**photo 53**).

The middle studs are also stained. I found that wood stain doesn't penetrate the timber very deeply at all; with just a little sanding the stain comes right off. Knowing this, you can create a nice effect by lightly sanding only the edges of the middle studs, so the edges are highlighted (**photo 54**). Next, paint one layer of lacquer primer on all frame pieces (**photo 55**). I did this in two passes: first paint three sides, let it dry, then flip it over to complete the final side. Add two layers of black lacquer to the frame, with a light sanding between layers (**photo 56**).

The top side of the lid is first stained. Next, we want to paint a 35mm border around the lid in black lacquer. To do this, first draw the border in pencil by following the edge of the lid with a combination square set to 35mm (**photo 57**). Add masking tape to prevent painting outside the border.

As with the frame, prime and paint the border black (on both the bottom and top side of the lid) (**photo 58**). I carved a thin decorative V-groove between the black border and the stained part of the lid (**photo 59**). This can be done by making two passes with a utility knife (one for each side of the V-groove).

Side panel carving

In this part we'll add a decorative carving to the front (and partially the side) of the blanket chest (**photo 61**). I think this step was my favourite; there's something very relaxing about carving wood. This carving also makes use of the fact that wood stain doesn't penetrate very deeply. Just carve off a little and you'll see the original colour of the wood.

I first drew my design on the computer using Adobe Illustrator, using outlines of various flowers as reference material. Being a Japanese-style chest, I had to include a few cherry blossoms. What you may not notice is that the left- and right-hand side of the drawing aren't exact mirror images. For example, there are minor differences in the flowers' shapes. My intent was to suggest that this plant is gently moving with the wind.

Next, the design is printed on several sheets of A4 paper, which are then taped together (**photo 62**). To carve the design onto each panel, use several pieces of masking tape to attach the sheet of paper onto only one side of a panel (**photo 63**).

54 You can create a nice effect by lightly sanding the edges of the middle studs, so edges are highlighted

55 Paint one layer of lacquer primer on all frame pieces

56 Add two layers of black lacquer to the frame, carrying out a light sanding between layers

57 Draw the border in pencil by following the edge of the lid with a combination square set to 35mm

58 As with the frame, prime and paint the border black (on both the bottom and top side of the lid)

59 I carved a thin decorative V-groove between the black border and the stained part of the lid

LESSONS LEARNED

It's really, really important to thoroughly remove all glue squeeze-out when making the panels. Wood stain cannot penetrate glue, so any glue marks can be easily seen when staining wood. It looked really bad on the lid (**photo 60**), so I ended up chiselling and planing the whole thing down to remove the stain. Only use the random orbit sander once most stain is removed; abrasives clog up really fast if you use them on a fully stained surface.

I used many small pieces of masking tape to mark the lid's curved border. In hindsight, it would be better to lay down one long strip of masking tape, and cut the desired curve into the tape. The reason is that, between every transition from one bit of masking tape to the next, paint is likely to spill through a little

60 Wood stain cannot penetrate glue, so any glue marks can be easily seen when staining wood

This allows you to quickly flip back and forth between the paper and the panel – similar to how traditional animation is done, where you need to flip back and forth between one frame of animation and the next.

Using a utility or chip carving knife, lightly trace over lines on the sheet of paper to copy them onto the wood. Flip away the paper and cut a 'V' groove along the lines that were just cut in two passes (once for each side of the groove).

Final assembly

This is the most rewarding and perhaps the most stressful step at the same time. All the joints and pieces work individually, but do they all work together? The good thing is, because the frame's joints won't be glued together, you can always take everything apart again.

To assemble one side of the blanket chest, take a horizontal frame piece for the bottom of the chest and insert its middle stud.

61 The decorative carving will be added to the front (and partially the side) of the blanket chest

62 The design is printed onto several sheets of A4 paper, which are then taped together

63 To carve the design into each panel, use several pieces of masking tape to attach the sheet of paper onto only one side of a panel

64 Insert the two side panels for this side

65 Insert the corresponding horizontal frame piece for the top of the chest, then attach both legs

66 join the three sides assembled so far

LESSONS LEARNED

Carving with the grain is much easier than against the grain. A shallow cut is easier to make than a deep one. These two facts combined: try to avoid cutting too deep when going with the grain, because you'll have a hard time if you want to reach the same depth when going across the grain. After finishing a large section of carving, you may want to add some pieces of tape to that section in the sheet of paper to prevent it from falling apart

Insert the two side panels for this side (**photo 64**). Insert the corresponding horizontal frame piece for the top of the chest, then attach both legs (**photo 65**). Assemble the adjacent sides in the same manner (except for when attaching the legs). Next, join the three sides assembled so far (**photo 66**).

Insert the rails for the sliding compartment, then insert the bottom panel (**photo 67**) – this one required a lot of force on my part. Assemble the final panel and attach it to the rest of the chest, then attach the lid hinges to the frame – ensure to drill a pilot hole before inserting the screws.

67 Insert the rails for the sliding compartment, then insert the bottom panel

With the hinges closed, put the lid on top of the blanket chest and into the desired position, then use a pencil to mark the position of the hinges on the lid. Now attach the hinges to the lid. Insert the small piece that connects the sliding lock to the lid in place. Close the lid, and mark where the mortise for this piece should go. Next, cut that mortise and insert the piece. If needed, glue it to the lid. To prevent the lid from accidentally falling down when the chest is open, attach a chain to both the lid and frame with two screws and washers (**photo 68**). The only step that remains is to attach the stick-on table feet to the bottom of the legs, and we're done! This blanket chest is all wrapped up and ready to go. I do hope you've enjoyed following along with this series.

68 Attach a chain to both the lid and frame using two screws and washers

LESSONS LEARNED

It's likely few of the pieces are just going to fit on the first try, because some of the lacquer paint may find its way into the joints. You'll need to spend some time cleaning out the joints with a chisel. There are several techniques I tried for the first time in this project. Whenever you try something new, practise first on a scrap piece of wood to gain enough confidence to try it on the real thing.

Throughout this project, always keep track of which piece goes where in the final piece, and in which orientation. This is especially important since hand tools are involved, meaning every piece and joint will be unique

69 The sliding compartment is now ready to be put into place

70 The Japanese-inspired blanket chest is now complete

NEW STORE - NORTHAMPTON - OPENING SOON!

Machine Mart

65 SUPERSTORES NATIONWIDE

WHERE QUALITY COSTS LESS

Clarke TABLE SAWS

LEG STAND KITS FOR CTS10D AND CTS11 ONLY £27.59 INC VAT

FROM ONLY £72.99 EXC.VAT £87.59 INC.VAT

BEST SELLER

INCLUDES LEFT & RIGHT TABLE EXTENSION

CTS10D

MODEL	MOTOR	BLADE	EXC.VAT	INC.VAT
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

£96.99 EXC.VAT £116.39 INC.VAT

CS4-6E

BEST SELLER

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

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

CTS14

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

£129.98 EXC.VAT £155.98 INC.VAT

SHOWN WITH OPTIONAL LEG KIT CLK5 £19.98 EXC.VAT £23.98 INC.VAT

Clarke 10" TABLE SAW WITH STAND

CTS16

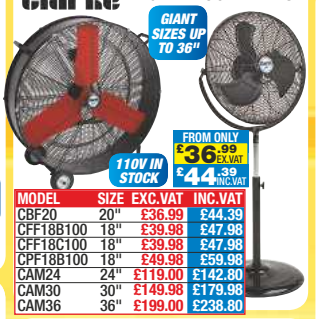
- 1600W motor
- 250mm blade size
- 0-45° tilting blade
- Cutting depth: 73mm at 90° / 53mm at 45°

INCLUDES LEFT & RIGHT TABLE EXTENSION

£109.98 EXC.VAT £131.98 INC.VAT

Clarke HIGH VELOCITY FANS

GIANT SIZES UP TO 36"



110V IN STOCK

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

MODEL	SIZE	EXC.VAT	INC.VAT
CBF20	20"	£36.99	£44.39
CFF18B100	18"	£39.98	£47.98
CFF18C100	18"	£39.98	£47.98
CPF18B100	18"	£49.98	£59.98
CAM24	24"	£119.00	£142.80
CAM30	30"	£149.98	£179.98
CAM36	36"	£199.00	£238.80

Clarke GARAGES/WORKSHOPS

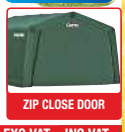
FROM ONLY £229.00 EXC.VAT £274.80 INC.VAT

IDEAL ALL-WEATHER PROTECTION

BRIGHT WHITE INTERIOR

LENGTH UP TO 24'

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



ZIP CLOSE DOOR

MODEL	SIZE (LxWxH)	EXC.VAT	INC.VAT
CIG81015	4.5 x 3 x 2.4M	£229.00	£274.80
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

£74.99 EXC.VAT £89.99 INC.VAT

CBS1-5B

- Quality Induction 250W motor

Clarke CIRCULAR SAWS

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

FROM ONLY £41.99 EXC.VAT £50.30 INC.VAT

CON185

*Includes laser guide

MODEL	MOTOR	MAX CUT 90/45 (mm)	EXC.VAT	INC.VAT
CCS185B	1200W	65/44	£41.99	£50.39
CON185*	1600W	60/40	£59.98	£71.98

Clarke PLUNGE SAWS

MASSIVE PRICE CUT NOW FROM £59.98 EXC.VAT £71.98 INC.VAT *WAS £83.98 inc.VAT

CPS160

MODEL	MOTOR	EXC.VAT	WAS	INC VAT	INC.VAT
CPS85	550W	£59.98	£83.98	£71.98	
CPS160	1200W	£129.00	£166.80	£154.80	

Clarke MULTI FUNCTION TOOL WITH ACCESSORY KIT

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

PRICE CUT £34.99 EXC.VAT £41.99 INC.VAT WAS £45.59 inc.VAT

CMFT250

Clarke BELT SANDERS

Makita

CBS2

- Ideal for surface removal, sanding and finishing

PRICE CUT NOW FROM £34.99 EXC.VAT £41.99 INC.VAT WAS £45.59 inc.VAT

*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 DRILL PRESSES

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

B = Bench mounted
F = Floor standing

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

CDP152B

MODEL	MOTOR (W) SPEEDS	EXC. VAT	INC. VAT
CDP5EB	350 / 5	£69.98	£83.98
CDP102B	350 / 5	£79.98	£95.98
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 DISC SANDER (305MM)

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

£129.98 EXC.VAT £155.98 INC.VAT

CDS300B

Clarke DUST EXTRACTOR/ CHIP COLLECTORS

CDE7B

CWVE1

FROM ONLY £109.98 EXC.VAT £131.98 INC.VAT

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

MODEL	MOTOR	FLOW RATE	BAG CAP.	EXC.VAT	INC.VAT
CWVE1	1100W	183 M3/h	50Ltrs	£109.98	£131.98
CDE35B	750W	450 M3/h	56Ltrs	£149.98	£179.98
CDE7B	750W	850 M3/h	114Ltrs	£159.98	£191.98

Clarke HARDWOOD WORKBENCH

- Includes bench dogs and guide holes for variable work positioning
- 2 Heavy Duty Vices
- Large storage drawer
- Sunken tool trough
- LxWxH 1520x620x855mm

CHB1500

£149.98 EXC.VAT £179.98 INC.VAT

Clarke DETAIL SANDERS

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

CDS-1V

ONLY £19.98 EXC.VAT £23.98 INC.VAT

280W

ALL MODELS INC. SANDING SHEETS

Clarke SHEET SANDERS

CON320

- Ergonomic design for optimum comfort

NEW VARIABLE SPEED

FROM ONLY £23.99 EXC.VAT £28.79 INC.VAT

MODEL	SHEET SIZE	MOTOR	EXC.VAT	INC.VAT
COS210	190X90mm	200W	£23.99	£28.79
CON320	230X115mm	320W	£34.99	£41.99

Clarke CPF13 ELECTRIC POWER FILE

- Variable belt speed
- Tilting head

*Black & Decker

FROM ONLY £49.98 EXC.VAT £59.98 INC.VAT

MODEL	MOTOR	BELT SIZE (mm)	EXC.VAT	INC.VAT
CPF13	400W/230V	13x457	£49.98	£59.98
KA900E*	350W/230V	13x455	£59.98	£71.98

Clarke POWER PLANERS

NEW RANGE

CEP450

FROM ONLY £34.99 EXC.VAT £41.99 INC.VAT

MODEL	WIDTH OF CUT	EXC.VAT	INC.VAT
CEP450	60mm	£34.99	£41.99
CEP720	82mm	£44.99	£53.59
CON950	110mm	£67.99	£81.59

Clarke 3-IN-1 MULTI SANDER

CMS200

NEW

ONLY £44.99 EXC.VAT £53.99 INC.VAT

1/3 SHEET SANDER

DISC SANDER

Clarke PALM SANDERS

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

CPS125

NEW

INC DUST EXTRACTION

ONLY £19.98 EXC.VAT £23.98 INC.VAT

Clarke 18V CORDLESS LI-ION STAPLE / NAIL GUN

- Includes 300 nails and 400 staples
- Supplied with charger, carry case and 1 x 2aH 18V LI-ION Battery

SPARE NAILS / STAPLES IN STOCK

CONSN18LIC

ONLY £109.98 EXC.VAT £131.98 INC.VAT

ELECTRIC AND CORDLESS MODELS IN STOCK

Clarke CONTRACTOR 18V BRUSHLESS COMBI DRILLS

- 2 forward and reverse gears

powered by Li-ion

CON180LI

FROM ONLY £109.98 EXC.VAT £131.98 INC.VAT

*was £191.98 inc. VAT

MODEL	VOLTS	BATTS	EXC. VAT	INC. VAT
CON18LIC	18V	2x 2.0Ah Li-Ion	£109.98	£131.98
CON180LI*	18V	2x 4.0Ah Li-Ion	£139.98	£167.98

VAC KING WET & DRY VACUUM CLEANERS

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

FROM ONLY £49.98 EXC.VAT £59.98 INC.VAT

* SS = Stainless Steel

MODEL	MOTOR	CAPACITY DRY/WET	EXC. VAT	INC. VAT
CVAC20P	1250W	16/12ltr	£49.98	£59.98
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

Clarke RANDOM ORBITAL SANDER

- Adjustable front handle improves control
- 7000-14000rpm

CROS3

INC DUST BAG AND SELECTION OF 125MM DIAMETER SANDING DISCS

ONLY £34.99 EXC.VAT £41.99 INC.VAT

Clarke OSCILLATING BOBBIN SANDER

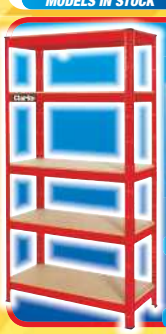
- Dust collection port
- Inc. 6 sanding sleeves/bobbins

COBS1

£129.98 EXC.VAT £155.98 INC.VAT

Clarke BOLTLESS SHELVING/BENCHES

- Simple fast assembly in minutes using only a hammer



SAVE 10% WHEN YOU BUY ANY MIX OF 4 FROM THIS RANGE SAVE UP TO £23.99 INC. VAT

FROM ONLY £29.99 EXC.VAT £35.98 INC.VAT

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

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

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

MODEL	DIMS WxDxH(mm)	EXC.VAT	INC.VAT
150kg	800x300x1500	£29.98	£35.98
350kg	900x400x1800	£49.98	£59.98

Clarke WHETSTONE SHARPENER (200MM)

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

CWS200B

ONLY £119.98 EXC.VAT £143.98 INC.VAT

Clarke PLANERS & THICKNESSERS

CPT800

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

FROM ONLY £179.98 EXC.VAT £215.98 INC.VAT

MODEL	PLANING WIDTH	MAX THICK. CAPACITY	EXC. VAT	INC. VAT
CPT600	6"	120mm	£179.98	£215.98
CPT800	8"	120mm	£219.98	£263.98
CPT1000	10"	120mm	£299.00	£358.80

Clarke OSCILLATING BELT & BOBBIN SANDER

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

COEBS1

£179.98 EXC.VAT £215.98 INC.VAT

29940LH

PAY Monthly NO DEPOSIT

- Over 18, 24 or 36 months
- From only £300 minimum spend*
- 18.9% Rep. APR

5 MIN APPLICATION!

EASY TO USE WEBSITE

NOW OVER 21,000 PRODUCTS ONLINE!

For hard-to-find, specialist items visit the Xtra section on machinemart.co.uk

FREE 508 PAGE CATALOGUE

Over 500 PRICE CUTS & NEW PRODUCTS

GET YOUR FREE COPY NOW!

- IN-STORE
- ONLINE
- PHONE

0844 880 1265

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

CWL1000B

ONLY £136.99 EXC.VAT £164.39 INC.VAT

BEST SELLER

LOCKABLE TAILSTOCK

Clarke 40" WOODTURNING LATHE WITH COPY FOLLOWER

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

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

INCLUDES COPY FUNCTION

ONLY £359.00 EXC.VAT £430.80 INC.VAT

INCLUDES STAND

CWL1000CF

Clarke BENCH BANDSAWS

• Produces fast, precise mitre & longitudinal cuts • 350W motor • 7.5" throat size • Cuts in all types of wood

£129.98 EXC.VAT £155.98 INC.VAT

CBS190B

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

£189.98 EXC.VAT £227.98 INC.VAT

REMOVABLE DUST TRAY

CBS225

Clarke PROFESSIONAL BANDSAWS

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

• 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

FROM ONLY £219.98 EXC.VAT £263.98 INC.VAT

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

TURBO AIR COMPRESSORS

airmaster 8/260 NEW

• Superb range ideal for DIY, hobby & semi -professional use

FROM ONLY £89.98 EXC.VAT £107.98 INC.VAT

* 'V' Twin Pump
# Oil free

MODEL	MOTOR	CFM	TANK	EXC.VAT	INC.VAT
8/260 NEW	2HP	7.5	24ltr	£89.98	£107.98
7/250	2 HP	7	24ltr	£94.99	£113.99
11/260 NEW	2.5HP	9.5	24ltr	£109.98	£131.98
8/550 NEW	2HP	7.5	50ltr	£119.98	£143.98
7/510#	2HP	7	50ltr	£119.98	£143.98
11/550 NEW	2.5HP	9.5	50ltr	£139.98	£167.98
16/550* NEW	3HP	14.5	50ltr	£199.98	£239.98
16/1050* NEW	3HP	14.5	100ltr	£249.98	£299.98

Clarke 13" MINI WOOD LATHE

£159.98 EXC.VAT £191.98 INC.VAT

CWL325V

• Ideal for enthusiasts/ hobbyists with small workshops • 325mm distance between centres • 200mm max. turning capacity (dia) • 0.2HP motor

Clarke STATIC PHASE CONVERTERS

• Run big 3 phase woodworking machines from 1 phase supply • Variable output power to match HP of motor to be run

ROTARY PHASE CONVERTERS ALSO IN STOCK

PC60

FROM ONLY £229.00 EXC.VAT £274.80 INC.VAT

CONVERT 230V 1PH TO 400V 3PH

MODEL	MAX. MOTOR HP	FUSE	EXC.VAT	INC.VAT
PC20	2HP	10Amps	£229.00	£274.80
PC40	3.5HP	20Amps	£269.00	£322.80
PC60	5.5HP	32Amps	£319.00	£382.80

Clarke CONTRACTOR ROUTERS

BOSCH

• Powerful heavy duty machines ideal for trade and DIY use

CR4

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

*was £107.98 inc. VAT

MODEL	MOTOR (W)	PLUNGE (mm)	EXC.VAT	INC.VAT
CR1200	1200	0-55	£44.99	£53.99
POF1400ACE*	1400	0-55	£84.99	£101.99
CR4	2000	0-66	£99.98	£119.98

Clarke GRINDERS & STANDS

• Stands come complete with bolt mountings and feet anchor holes

6" & 8" AVAILABLE WITH LIGHT

FROM ONLY £35.99 EXC.VAT £43.19 INC.VAT

STANDS FROM ONLY £47.98 INC.VAT

With sanding belt
*8" whetstone & 6" drystone

MODEL	DUTY	WHEEL DIA.	EXC.VAT	INC.VAT
CBG6RP	DIY	150mm	£35.99	£43.19
CBG6250	HD	150mm	£37.99	£45.59
CBG6RZ	PRO	150mm	£42.99	£51.59
CBG6RSC	HD	150mm	£56.99	£68.39
CBG6SB#	PRO	150mm	£58.99	£70.79
CBG6RWC	HD	150mm	£59.98	£71.98
CBG8W* (wet)	HD	150/200mm	£59.98	£71.98

Clarke ROUTER TABLE

CRT-1

Router not included

BEST SELLER

• Converts your router into a stationary router table • Suitable for most routers (up to 155mm dia. Base plate)

£69.98 EXC.VAT £83.98 INC.VAT

Clarke JIGSAWS

CON750

FROM ONLY £15.99 EXC.VAT £19.19 INC.VAT

^was £33.59 inc. VAT

*DIY #Professional

MODEL	POWER (W)	DEPTH OF CUT (WOOD/STEEL)	EXC. VAT	INC VAT
CJS380*	420W	55/6mm	£15.99	£19.19
CON750#^	750W	80/10mm	£24.99	£29.99
Bosch PST700E*	500W	70/4mm	£44.99	£53.99

Clarke 12" DOVETAIL JIG

• Simple, easy to set up & use for producing a variety of joints • Cuts work pieces with a thickness of 8-32mm • Includes a 1/2" comb template guide & holes for bench mounting

£54.99 EXC.VAT £65.99 INC.VAT

CDTJ12

Clarke WOODWORKING VICES

Record WV7

FROM ONLY £14.99 EXC.VAT £17.99 INC.VAT

MODEL	MOUNTING	JAW (WIDTH/OPENING /DEPTH)mm	EXC.VAT	INC.VAT
Clarke CHT152	Bolted	150/152/61	£14.99	£17.99
Record TV75B	Clamped	75/50/32	£22.99	£27.59
Clarke WV7	Bolted	180/205/78	£29.98	£35.98
Record T52PD	Bolted	175/205/75	£46.99	£56.39

Clarke SCROLL SAWS

CSS400C

FROM ONLY £79.98 EXC.VAT £95.98 INC.VAT

BEST SELLER

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

MODEL	MOTOR	SPEED RPM	EXC. VAT	INC. VAT
CSS400D	120W	400-1600	£79.98	£95.98
CSS16VB	90W	550-1600	£94.99	£113.99
CSS400C	90W	550-1600	£119.98	£143.98

Clarke MITRE SAWS

• For fast, accurate cross, bevel & mitre cutting in most hard & soft woods • 1800W motor • Laser guide

FROM ONLY £114.99 EXC.VAT £137.99 INC.VAT

CMS250S

‡ was £226.80 inc.VAT

MODEL	BLADE DIA/BORE (mm)	MAX CUT DEPTH/ CROSS	EXC.VAT	INC.VAT
CMS2250S	250/30	85/250	£114.99	£137.99
C2MS210MP	216/30	65/305	£139.98	£167.98
C2MS250MP‡	255/30	90/305	£179.00	£214.80

VISIT YOUR LOCAL SUPERSTORE

OPEN MON-FRI 8.30-6.00, SAT 8.30-5.30, SUN 10.00-4.00

BARNSLEY Pontefract Rd, Barnsley, S71 1EZ	01226 732297	**EXETER** 16 Trusham Rd. EX2 8QG	01392 256 744
B'HAM GREAT BARR 4 Birmingham Rd.	0121 358 7977	**GATESHEAD** 50 Lobley Hill Rd. NE8 4YJ	0191 493 2520
B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills	0121 7713433	**GLASGOW** 280 Gt Western Rd. G4 9EJ	0141 332 9231
BOLTON 1 Thynne St. BL3 6BD	01204 365799	**GLOUCESTER** 221A Barton St. GL1 4HY	01452 417 948
BRADFORD 105-107 Manningham Lane. BD1 3BN	01274 390962	**GRIMSBY ELLIS WAY,** DN32 9BD	01472 354435
BRIGHTON 123 Lewes Rd, BN2 3QB	01273 915999	**HULL** 8-10 Holderness Rd. HU9 1EG	01482 223161
BRISTOL 1-3 Church Rd, Lawrence Hill. BS5 9JJ	0117 935 1060	**ILFORD** 746-748 Eastern Ave. IG2 7HU	0208 518 4286
BURTON UPON TRENT 12a Lichfield St. DE14 3QZ	01283 564 708	**IPSWICH** Unit 1 Ipswich Trade Centre, Commercial Road	01473 221253
CAMBRIDGE 181-183 Histon Road, Cambridge. CB4 3HL	01223 322675	**LEEDS** 227-229 Kirkstall Rd. LS4 2AS	0113 231 0400
CARDIFF 44-46 City Rd. CF24 3DN	029 2046 5424	**LEICESTER** 69 Melton Rd. LE4 6PN	0116 261 0688
CARLISLE 85 London Rd. CA1 2LG	01228 591666	**LINCOLN** Unit 5. The Pelham Centre. LN5 8HG	01522 543 036
CHELTENHAM 84 Fairview Road. GL52 2EH	01242 514 402	**LIVERPOOL** 80-88 London Rd. L3 5NF	0151 709 4484
CHESTER 43-45 St. James Street. CH1 3EY	01244 311258	**LONDON CATFORD** 289/291 Southend Lane SE6 3RS	0208 695 5684
COLCHESTER 4 North Station Rd. CO1 1RE	01206 762831	**LONDON** 6 Kendal Parade, Edmonton N18	020 8803 0861
COVENTRY Bishop St. CV1 1HT	024 7622 4227	**LONDON** 503-507 Lea Bridge Rd. Leyton, E10	020 8558 8284
CROYDON 423-427 Brighton Rd, Sth Croydon	020 8763 0640	**LUTON** Unit 1, 326 Dunstable Rd, Luton LU4 8JS	01582 728 063
DARLINGTON 214 Northgate. DL1 1RB	01325 380 841	**MAIDSTONE** 57 Upper Stone St. ME15 6HE	01622 769 572
DEAL (KENT) 182-186 High St. CT14 6BQ	01304 373 434	**MANCHESTER ALTRINCHAM** 71 Manchester Rd. Altrincham	0161 9412 666
DERBY Derwent St. DE1 2ED	01332 290 931	**MANCHESTER CENTRAL** 209 Bury New Road M8 8DU	0161 241 1851
DONCASTER Wheatley Hall Road	01302 245 999	**MANCHESTER OPENSHAW** Unit 5, Tower Mill, Ashton Old Rd	0161 223 8376
DUNDEE 24-26 Trades Lane. DD1 3ET	01382 225 140	**MANSFIELD** 169 Chesterfield Rd. South	01623 622160
EDINBURGH 163-171 Piersfield Terrace	0131 659 5919	**MIDDLESBROUGH** Mandale Triangle, Thornaby	01642 677881
		NORWICH 282a Heigham St. NR2 4LZ	01603 766402
		NORTHAMPTON 4B, Beckett Retail Park NN5 5JW	01604 267840
		NOTTINGHAM 211 Lower Parliament St.	0115 956 1811
		PETERBOROUGH 417 Lincoln Rd. Millfield	01733 311770
		PLYMOUTH 58-64 Embankment Rd. PL4 9HY	01752 254050
		POOLE 137-139 Bournemouth Rd. Parkstone	01202 717913
		PORTSMOUTH 277-283 Copnor Rd. Copnor	023 9265 4777
		PRESTON 53 Blackpool Rd. PR2 6BU	01772 703263
		SHEFFIELD 453 London Rd. Heeley. S2 4HJ	0114 258 0831
		SIDCUP 13 Blackfen Parade, Blackfen Rd	0208 3042069
		SOUTHAMPTON 516-518 Portswood Rd.	023 8055 7788
		SOUTHEND 1139-1141 London Rd. Leigh on Sea	01702 483 742
		STOKE-ON-TRENT 382-396 Waterloo Rd. Hanley	01782 287321
		SUNDERLAND 13-15 Ryhope Rd. Grangetown	0191 510 8773
		SWANSEA 7 Samlet Rd. Llansamlet. SA7 9AG	01792 792969
		SWINDON 21 Victoria Rd. SN1 3AW	01793 491717
		TWICKENHAM 83-85 Heath Rd.TW1 4AW	020 8892 9117
		WARRINGTON Unit 3, Hawley's Trade Pk.	01925 630 937
		WIGAN 2 Harrison Street, WN5 9AU	01942 323 785
		WOLVERHAMPTON Parkfield Rd. Bilston	01902 494186
		WORCESTER 48a Upper Tything. WR1 1JZ	01905 723451

5 EASY WAYS TO BUY...

SUPERSTORES NATIONWIDE

ONLINE www.machinemart.co.uk

TELESALES 0115 956 5555

CLICK & COLLECT OVER 10,500 LOCATIONS

CALL & COLLECT AT STORES TODAY

29814RH

THE DISAPPEARING PENNY

Bringing us another money box project from *The Woodworker* archives, **Peter Dunsmore** employs a few modern techniques to recreate this puzzle from the June 1951 edition

This novel money box was inspired by an article from the June 1951 issue of *The Woodworker* (**photo 1**) and will be as much fun today as it was nearly 70 years ago, when it was first published. The box is made in the form of a miniature sideboard with most of the front detail being simply lines scratched into the surface of the wood, which is achieved using a sharp chisel. There is one opening front drawer, camouflaged to give the appearance of two, which is pulled out and into which a coin is placed and the drawer closed. On opening the drawer again, the coin has disappeared. The first challenge to be faced by the young would-be magician is to work out where the coin has gone. Shaking the box tells you that the coin is in the sideboard; however, the second and, probably harder challenge, is to work out how to open the box to retrieve the coin! The original plans show imperial measurements as would be expected, but these can be easily converted if required and the project adjusted accordingly. However, as most tape measures have an imperial scale marked on them, I thought it would be easier to stick with these measurements. An added bonus is working with fractions again. I keep telling my children that 'fractions are fun!'. The following article shows how I made this novelty box using more modern techniques than were available post-war and employing a small router table for making the various joints, while still retaining the charm of this puzzle.

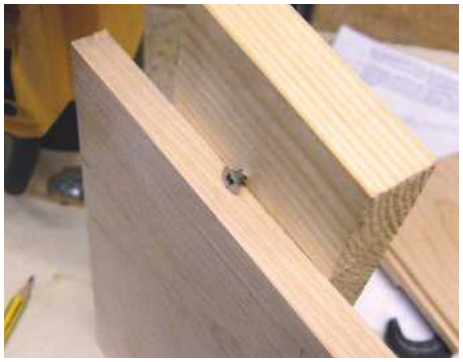
Novel Money Box for the Kiddies

THE DISAPPEARING PENNY

1 The original inspiration for this project

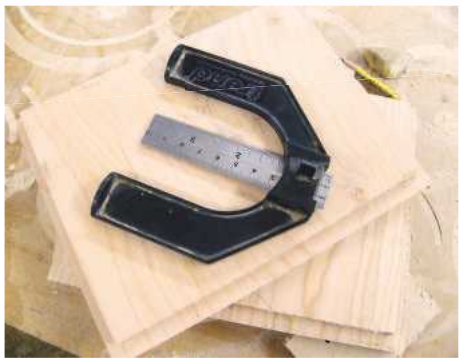
Making a start

The choice of timbers posed problems at the outset. Due to the nature of the box, it is ideally suited to offcuts of plywood and thin strips of model maker's timber. The panel lines could then be simply drawn or scratched in as on the original. After all, the object is the trick rather than trying to recreate a miniature sideboard. However, I wanted to make something that would look attractive in its own right, and I had a few small pieces of leftover cherry that suited this size of project. Begin by cutting both the front and rear panels to the dimensions shown on the plan. Use a suitable straight router cutter fitted in a router table to cut the rebates on the ends of both the front and rear case panels and the rebate along the lower inside edges, into which the bottom of the carcass will fit. A problem with some timbers, in particular cherry, is the tendency for the fibres to chip as the cutter fights with the



2 Scoring the edge of the wood prior to routing the rebate

3 Fortunately the depth gauge is also scaled in imperial!



4 The front and rear panel cut to size

5 Marking out the front panel

6 A sharp blade slices the wood fibres to prevent tearing

7 Careful work with a chisel will form the bevel

8 Turn the panel through a quarter turn to form the corners

grain direction. A method to overcome this is to score the timber prior to cutting the rebate with a blade – I use a flat-headed screw dressed with a file so the circumference is sharp. Screwing this perpendicularly into a scrap of wood (**photo 2**) enables the fibres to be cut before routing the rebate (**photo 3**). The depth is adjusted by turning the screw accordingly. The result should be an identical front and rear panel (**photo 4**).

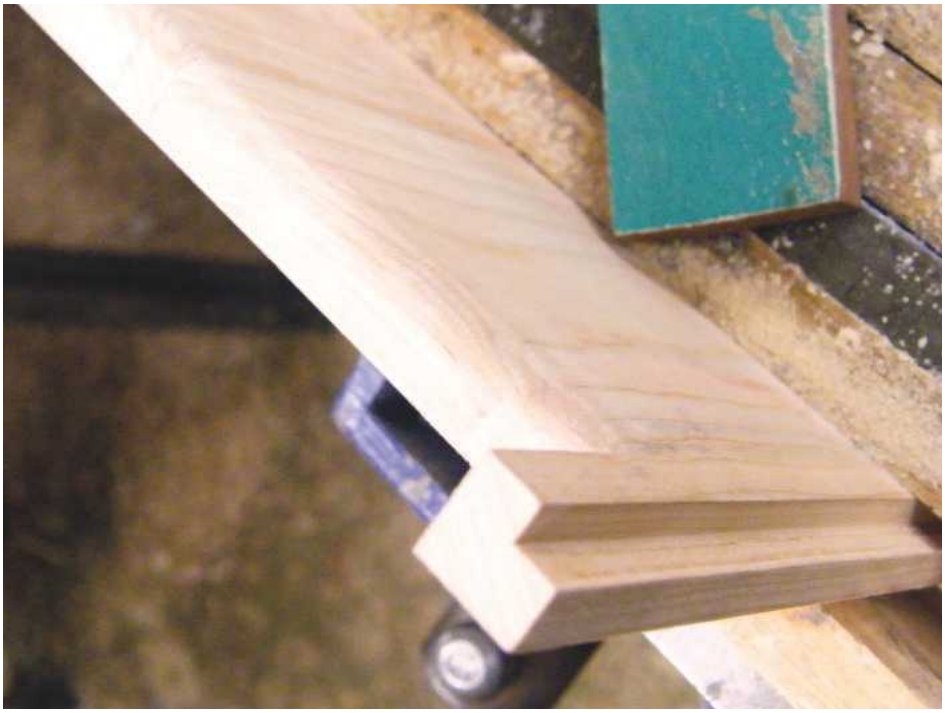
Decorating the front piece

The front of the case is decorated to give the appearance of a dresser base and this is more easily tackled prior to assembly as the panel can be clamped to the desk top. Remember that the object of this project is a trick rather than trying to create a miniature piece of furniture, so keep this part simple. Use a square to pencil in the relevant parts, including the opening for the drawer front (**photo 5**). Use a sharp knife to cut the wood fibres of the two front door panel surrounds (**photo 6**). With the wood panel held securely on the workbench, use a sharp chisel to gently form a bevel to imitate the door panel (**photo 7**).

When it comes to the corners, turn the panel a quarter turn and repeat the process around the door panel. With a little care an effective fielded panel can be formed (**photo 8**). Remove the timber that will form the drawer opening and with some abrasive paper taped to some timber, round over the rear lower edge of the opening (**photo 9**); this will allow the drawer bottom to close more easily.

Assembling the casework

Begin assembling the case by gluing and pinning the plywood floor to the case front and rear and gluing the end pieces in place (**photo 10**). Note that the end pieces are each cut from one piece of timber but that used for the opening drawer is cut appropriately to form the drawer front. This enables the grain to flow through from the top of the case to the bottom giving a much more decorative appearance. Next, the thin strips of cherry should be glued in place to form the rails of the case. I have a piece of MDF onto which is taped some abrasive paper to smooth the ends of such projects level (**photo 11**). Go easy on the adhesive and avoid any spilling out and potentially



9 Note the rounding over at the rear of the drawer opening

10 Begin assembly of the casework

11 Applying the case rails

12 Note how the grain will flow through the drawer front

13 Cutting the drawer rebates

14 The five pieces that make up the secret drawer

15 Note the neat fitting green baize

16 Note that the grain flows through

ruining the wood. Keep the piece used for the drawer front aside for later (**photo 12**).

Making the secret drawer

The secret drawer is a straightforward box involving suitably cut rebates (**photo 13**), which is then assembled onto a plywood base. A method I use for a neater finish is to cut the rebate for the drawer base about 1mm deeper than required. Some self-adhesive baize or felt is then fitted to the drawer base and trimmed all round. When all the drawer components (**photo 14**) are glued together the result is a very neat fitting felt as the edges are tucked under the drawer sides (**photo 15**). Care should be exercised when cutting the drawer sides as this should be a sliding fit into the case. Finally, glue the false drawer front that was put aside earlier on, remembering to fit this the correct way up. For an accurate fit this is probably better carried out when the drawer is in place. When this has dried, fit the decorative rails in place to match those on the other end of the case (**photo 16**) ensuring the drawer is not glued shut in the process!

Making the top drawer

This drawer is actually quite tricky to make. It runs on scrap wood runners glued onto scrap wood guides, which are then glued in place on the inside faces of both case ends. The points to remember are that the guides should be parallel with each other and the runners should be level with the bottom edge of the drawer opening (**photo 17**). The drawer front is made in a similar way to the false doors on the case in that it is easier to cut the bevels if the timber can be clamped to the worktop (**photo 18**). The drawer sides are made using the router to cut the rebates after carefully measuring and marking their lengths. A problem that occurs when cutting rebates on narrow timbers using a router is the lack of support for the timber. I overcome this by making square a piece of MDF with a suitable handle in the middle, made from scrap. The timber is held firmly against the MDF and level with the front edge. The MDF can then be slid across the fence and the piece supported. It is even easier if the majority of the rebate is first cut away with a saw and the router used just to

17 The drawer runner and guides

18 Shaping the drawer fronts

19 Note the MDF support for the narrow timber being cut

20 The linen is glued in place

21 Locate this piece accurately

22 Cut a small notch to suit the locking mechanism

23 Drill holes into which will fit the cherry plugs

24 The plugs are pushed in and levelled with the top

make a neat, clean joint (**photo 19**). The secret to this drawer is the hinged base that flaps down as the drawer is closed, thus dropping the coin into the second drawer. As the drawer is pulled open the base is then pushed upwards by the curve that was shaped on the rear of the panel front. The underside of the drawer front and both sides need to be rebated to a depth just a little deeper than the thickness of the timber used for the drawer base, including the thickness of the baize that will be used. I found a piece of hardboard from the back of a broken picture frame to be ideal for this. As can be seen in **photo 20**, the linen acts as the hinge. This is glued into a shallow rebate cut into the drawer bottom and onto a narrow strip of the timber used for the base that has been glued into the drawer front. This is a slight variance to the original plan and is easier to achieve yet works just as well. As can be seen from the drawings, a piece of timber is glued to the rear of the drawer that acts as a stop to prevent the secret drawer being pulled out (**photo 21**). To locate this piece accurately, close the secret drawer fully and butt this piece against the inside of the drawer. Either mark its location or clamp the piece in place until the adhesive has dried. Now fit both drawers in place and pull out the top drawer a little way. Using a sharp pencil, mark around the portion of wood that is pushing against the rear drawer face. Remove the drawer and cut this slot for a sliding fit (**photo 22**). This part is the key to the secret drawer opening and care should be taken to avoid a sloppy fit otherwise it would make opening this drawer much easier.

Making the top

To make the top, take a piece of cherry and plane it to 6mm thickness, then cut to fit with a similar overlap on both sides and the cabinet front. The back should be level with the case. Plane a shallow bevel on three undersides, which will help to visually lighten the top. Rather than gluing the top down, I opted to drill four 10mm holes part way through the timber and then used four small screws to screw the top into the drawer guides (**photo 23**). Next, plug the holes with timber cut with a plug cutter. The plug cutter I used produces slightly tapered plugs for a better fit and I simply tapped them in place before levelling with a chisel (**photo 24**). If access was required in the future, the top could be removed by picking out the plugs and taking off the top. In keeping with the piece, I used blacked japanned round-head screws as suitable door and drawer knobs, remembering to drill suitable pilot holes first to prevent splitting the wood. I didn't apply any finish to this particular project as the wood grain looked pretty as it is, but a Danish oil would add a protective finish if desired. When the drawer is pulled out to the point where the back timber lines up with the slot cut into the lower drawer, a small unobtrusive mark can be made on the drawer side but my daughter has very quickly worked out the exact distance it needs to be pulled out by looking at the space between the drawer front and the edge of the top! Even though this project is based on an article published nearly 70 years ago, it has been immense fun making it and my 13-year-old daughter has had terrific fun challenging her siblings and any visitors that arrive. Obviously the secret stays with her much to their annoyance!

nova™

Smart Tools, Powerful Solutions

AWARD-WINNING DESIGN AND TECHNOLOGY FOR OVER 30 YEARS

Voyager DVR 18"
Drill Press

"Exceptional quality; quiet operation; easy to set up for every type of drill imaginable; does everything you could possibly want to do on a drill; **the only drill press you will ever need."**

- Jonathan Salisbury, The Woodworker & Good Woodworking Magazine, November 2019

RRP inc. VAT **£1,599.99**

Scan the code to find out more:

Contact an Approved Stockist to find out more:

Stiles & Bates
Dover, CT15 5DF
www.stilesandbates.co.uk

West Country Woodworking Machinery
Cornwall, PL26 7SR
www.machinery4wood.co.uk

Poolewood Machinery
Online only
www.poolewood.co.uk

David Biven Machinery
Lancashire, FY4 3RL
www.bivenmachinerysales.co.uk

Interhire Tools
Derbyshire, DE7 5DA
www.intertoolsonline.co.uk

Turners Retreat
Nottinghamshire, DN11 8RU
www.turners-retreat.co.uk

Wigley DIY
Worcestershire, DY13 9QB
www.wigleydiy.co.uk

Joe McKenna
Limerick, Ireland
www.joemckenna.ie

W.H. Raitt & Son Ltd
Co. Donegal, Ireland
www.whraitt.ie

The Carpentry Store
Co. Kildare, Ireland
www.thecarpentrystore.com

Distributed in the UK & Ireland by

Craft Supplies
BE INSPIRED, BE CREATIVE

LETTERS

★LETTER OF THE MONTH

Various stages of Sam's stool construction

Creating the stool's top, complete with his Godson's name, which was added using a CNC machine

A PROJECT TO BE PROUD OF

Hi Tegan,

I thought I'd write in to share a recent project that I'm really proud of. While at a friend's house last year, they asked if I might be able to 'fix' a cheap softwood stool of theirs, which had a snapped leg. It was an attractive looking stool despite the broken leg, so I attempted to fix it with wood glue but this didn't feel strong enough, so I decided to completely remake a new one from hardwood, in a similar style.

Having never made a piece of furniture apart from a jewellery box, I soon realised that I might be a little out of my depth but continued anyway as a learning process. I dismantled the pinned mortise & tenons from the broken stool, took measurements of dimensions and angles (the joints were angled to create a splayed leg) and set about trying to recreate the joints with the tools I had available in a friend's workshop.

Once I had my dimensioned chestnut, I started to create the angled mortises using a pillar drill and then fine-tuned them with chisels. I first tried making my tenons using the mitre saw thinking it would be quick and accurate, but it turned out to be neither, so I went back to hand saws and a rasp to create a rounded tenon. I then created a central lap joint for the two pairs to become one unit. It took far longer than I anticipated but the finished joints were tight and strong.

I then turned my attention to the seat, milling a gorgeous piece of oak I had into a square and framing it using some leftover chestnut I had from the legs. As an extra design feature and to strengthen the mitred corners, I added tiger oak splines to each corner.

Last July, their son (my Godson) was born and I thought it might be a nice idea to make the stool for him, so I rounded the corners to baby-proof them. I finished it off by adding his name to the top using a friend's CNC machine – everything from writing the programme to the actual carving. I then used the hardware from the original stool to bolt the legs to the seat through recessed holes in the top stiles.

After applying a few coats of Osmo, it was finished and I was able to give them something that I know they'll treasure forever.

Take care, **Sam Ward**

Hi Sam, what a lovely project! Your Godson is a very lucky lad and I'm sure he'll absolutely love using the stool for its intended purpose once he grows into it! In the meantime, it makes a perfect table for baby accoutrements! It sounds like you learnt a lot along the way in terms of techniques, which is always a good sign of growth with your woodworking, and all worthwhile as these can be implemented for future builds. Keep up the great work as you have a clear talent and I'm sure there are many other things Grayson would love to receive as he grows up! Best wishes, **Tegan**

The completed stool in situ – perfect for a baby's odds and ends, before it can be put to its intended use

MAY DELIGHTS

Our May issue, which featured the legendary Tom Lie-Nielsen

Dear Tegan,

I just wanted to write and say how very pleased I was when I opened the postbox to find this month's magazine subscription waiting for me, then to see Tom Lie-Nielsen pictured on the front cover just added to the delight. A tool-making legend indeed and it remains a leading ambition of mine to attend one of their annual 'open house' events over in Maine. I met with Tom at one of the woodworking shows here in the UK a few years back, and own a number of their exceptional tools. Such a gentleman too and the article about his works and philosophy did not disappoint in any way at all.

I also enjoyed the piece on Axminster's Nuneaton store where Jeremy Broun and Andrew Lawton gave a list of their 'essential' tools and wish list together with the video link, which added to the excellent article. I always look forward to receiving the magazine every month and the promise that was shown when the two magazines merged, has, I am pleased to say, not disappointed in the slightest.

Very kind regards and stay safe, **Len Aspell**

Hi Len, firstly, thank you for your very kind words and also for your thoughts regarding the merging of the magazines. I am so pleased to hear that you think it has been a success, as do we, and we can honestly say that we're more passionate than ever about producing a publication that people are excited to receive, especially during the current crisis. We wanted to go for something a little different with this issue, so chose to put Tom on the cover, and who more deserving than the tool-making legend himself! I'm glad you also enjoyed Jeremy and Andrew's article, and it was great that we were able to link to a video so readers could see the entire experience in full. Many thanks again and long may you continue to love what we're doing here!

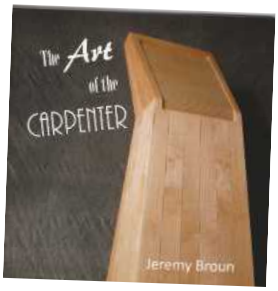
Best wishes, **Tegan**

MAVERICK OR TRAILBLAZER?

Dear Tegan,

In the latest issue of *The Woodworker & Good Woodworking*, I read Phil Davy's review of Jeremy Broun's book, *The Art Of The Carpenter*. I have a slight disagreement with his use of the word 'maverick', especially when used in reference to routing. One can hardly be a maverick (now taken to refer to someone who goes by a different rule book), when he was the one who wrote the definitive book on the subject, *The Incredible Router*. Perhaps keeping with the Wild West theme, I would respectfully suggest 'pioneer' or perhaps 'trailblazer' instead.

Kindest regards, **Joe O'Brein**



Jeremy Broun's *The Art Of The Carpenter* is available to buy now from **www.woodomain.com**

Hi Joe, thanks for your email. While I respect the point you've made, I am absolutely certain that Phil's use of the term was meant in a very positive way, and he was merely trying to emphasise Jeremy's contribution to the world of routing. Perhaps a different term could have been used, but I do not think that using such a word detracts from what Phil was trying to get across, and which, in my view, he did eloquently and succinctly. I think that, at the end of the day, it really comes down to a case of semantics. Thanks for raising the point and for sharing your views, however, which we always try to encourage here at the magazine.

Best wishes, **Tegan**

Dear Tegan,

I read the review of *The Art of The Carpenter*, which I generally thought was a good one, but I'd like to offer the following comments. I would like to point out at this point that I have never met the author, Jeremy Broun. The only knowledge I have of him is through his YouTube channel, which have I been watching for approximately 10 years now. I have a copy of

READERS' HINTS & TIPS

For the next six 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**

WORKSHOP LAYOUT

Rather than focus on workshop tips when making a project, I thought I would share my experience regarding workshop layout after nearly 30 years working from a home workshop/converted garage. My workshop is constantly being tweaked but it has reached the point where it works very well for me.

The bench is level with the saw table to give support to wider timber as it is cut

Painting & adding flooring

The first change I made when converting the garage was to paint the ceiling and walls with a matt white emulsion in order to reflect as much light as possible back into the workshop, and it was surprising just what a difference this made. Not long after moving here we had to replace a carpet in the house and rather than take the old one to the tip, this, complete with the underlay, was laid on the workshop floor. Not quite wall to wall, but enough. It serves several purposes: firstly, it makes it less tiring than standing on a hard concrete floor but also a little warmer in winter. However, the biggest advantage is the number of times it has prevented damage to either a cutter or a piece of work that has been accidentally dropped onto the floor. The third addition was to add Celotex, the insulation board used in building work, to the up and over door and in the roof space. Not only does this insulate the workshop from the extremes of temperature outside, but also helps considerably in the reduction of noise emitting from the workshop.

Saw table & workbench

Having prepared the area I placed the saw table reasonably centrally to give maximum feed in and out of timber, but alongside this I placed the wooden workbench. By adding pieces of plywood under the saw table, I managed to raise this level with the bench top so that, if required, this can act as a support for wider pieces of timber being cut. Tools will vary depending on the use of the workshop but another change to the normal that I have included in my layout is to place the hand tools slightly out of reach. I hope my experiences help others who are planning a workshop layout to make the most of their working environment, whether it is in the pursuit of pleasure or profit. **Alan Bates**

BONUS TIP

Recently, I needed to make a number of cutouts for a small project I was working on and it was important that each cut was square in order for the object to fit together. To achieve this, I removed the majority of the wood with a saw, cutting close to the marked line. I then used a piece of plywood that is cut square and held this between the back of the chisel and the wood being cut before pressing down on the chisel. The result, assuming the chisel is sharp, is a perpendicular cut each and every time, and the project can then go together accurately

Alan used a piece of plywood that was cut square and held this between the back of the chisel and the wood being cut before pressing down on the chisel

The result, assuming the chisel is sharp, is a perpendicular cut each and every time, and the project can then go together accurately

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 ¼in 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!

the book, purchased independently, and found it to be a great insight into one of the country's top woodworkers. The reviewer refers to Jeremy as a router 'maverick' but my understanding is that he is a pioneer of using the router? His YouTube channel is full of videos of him explaining the versatility of the tool. Considering the book is a hardback, I'm surprised it was concluded as being expensive. It's definitely not a tutorial, but rather a well put together artistic, poetic journey of Mr Broun's life and creative mind.
Best regards, **Lee Cornwall**

*Hi Lee, I welcome your comments regarding the review and as I said to Joe, we take these on board. As you say, Jeremy is indeed one of the UK's top woodworkers and his YouTube channel – **www.youtube.com/user/Woodomain** – is hugely popular and insightful. I'm sorry that you felt the value and depth of the book was not adequately communicated or explained in the review, and I think it is also important to point out that each of the copies are signed by Jeremy himself, which is a huge selling point. We take all feedback on board here at the magazine, both good and bad, and endeavour to grow from it as a result.*
Best wishes, **Tegan**

AROUND THE HOUSE WITH PHIL DAVY

If there's any positive aspect to the current lockdown situation then it's surely that many of us have extra time on our hands. I find it easy to waste time, so a routine is helpful, especially in the workshop. Make a list of jobs you've been putting off. Tidy that chaotic cupboard or sort the offcuts pile before lunch, then be more creative in the afternoon. Tool maintenance is always essential, but this can get tedious. Or perhaps it's time for paring back. Compile a list of your tools: ones rarely used; those you can't do without. Earmark items to sell or give away.

How about online woodworking tutorials, some of which are free? All you need to do is take a look at YouTube and you're met with countless pieces of woodworking content, and you're bound to find inspiration for your next project here. Or maybe it's the perfect time to introduce kids to woodwork – there are loads of simple, suitable projects out there. But whatever you do, stay safe

MULTI-LEVEL DISPLAY

SUMMER PROJECT: LADDER PLANTER

Takes: Half a weekend
Tools you'll need: Mitre saw, drillstand, jigsaw, sander, router, hand tools

Phil Davy builds a planter sturdy enough for nine heavy plants and foldable for storage

Friends were recently giving their new garden a major makeover and wanted to brighten up a corner of fencing, but without painting the panels to resemble seaside beach huts. I was asked to build a tiered planter that could be used to display several pot plants at different levels.

Although this had to be strong enough to support the weight of perhaps nine or so fairly heavy plants, it needed to fold for storage in the garage during winter. Not only that, but as I had to deliver the planter, it needed to fit in the back of the car, too.

Tiered trays

I used PAR softwood for the whole project, with 140 × 20mm for the front and rear uprights. Shelf backs and ends are cut from 70 × 20mm, while slats for the shelf trays were reduced in width to 40mm. You could thickness these slats down from 20mm to reduce weight. There are no fancy joints here, just exterior PVA glue, nails and screws, though it's important to drill pilot holes to prevent timber splitting. As far as possible, all top edges should either be rounded over, bevelled or sloping to help water run off.

Shelf trays are screwed to the uprights, though to make it even easier to take the structure apart you could use stainless steel coach bolts to secure these. Wing nuts are faster to tighten than standard hex nuts, but should be used with washers.

You could just paint the finished ladder planter with a suitable exterior paint such as Cuprinol Shades, though for a belt-and-braces job it's a good idea to brush on a clear preservative first. Alternatively, build the planter from pressure-treated wood, though you'll be more restricted in timber size if you choose to build this way.

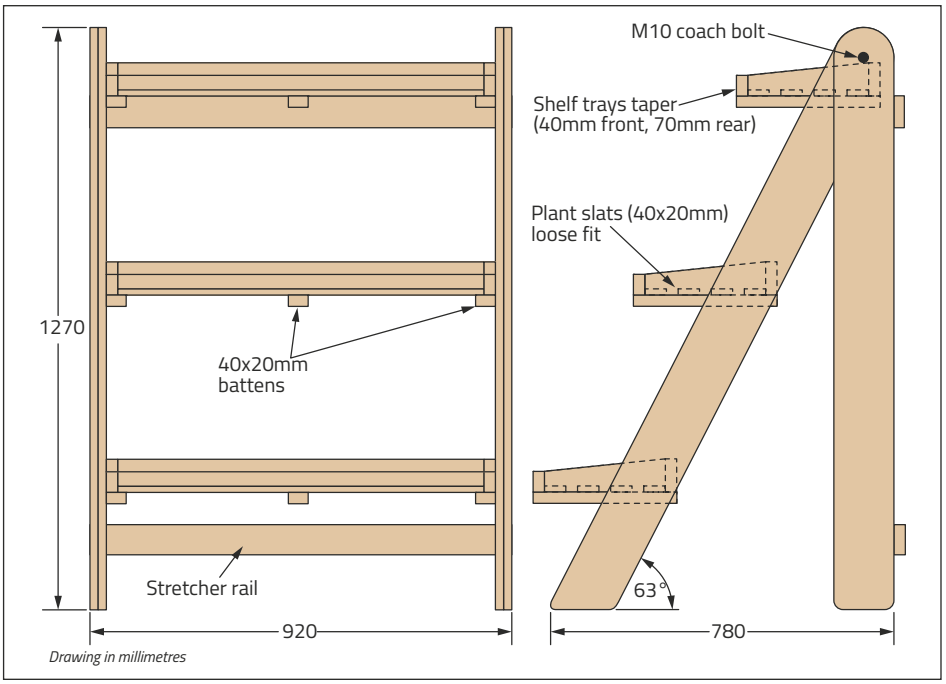


Fig.1 Ladder planter dimensions

1 Cut shelf ends, front and back components to length; mark height of front rail on end pieces

2 Repeat with back rail and draw line between points to create a taper; this will help water run-off

3 Cut a bevel on end pieces with a jigsaw or bandsaw, taking care to keep on the waste side of the pencil line

4 Cramp several ends together and secure in a vice; plane down to the pencil line, checking for square

5 Components are simply butt-jointed; pre-drill pin holes to prevent timber splitting when nailing

6 Spread glue and cramp shelf components together, leaving the ends slightly proud; punch heads below the surface

7 Trim the end-grain flush with a block plane; true up top edges with a plane, avoiding breakout

8 Slats are supported by battens nailed underneath the shelves; fix to ends and centre for strength

9 Set the mitre saw to 27° and cut the lower end of the front uprights – round off any sharp corners

10 Mark the upright to length and use compasses to draw a semi-circular top end on both pieces

11 Cut around curve with a jigsaw fitted with a narrow blade, keeping to the waste side of the line

12 Clean up curved ends on a sanding drum mounted in a drillstand; cut rear uprights in the same way

13 Carefully drill a 10mm-diameter hole to suit a coach bolt; repeat process on both rear uprights

14 Check that front and rear uprights line up and coach bolts fit snugly, then secure with washers and wing nuts

15 Sand arrises on shelves, then shape the ends of the support battens with a bearing-guided roundover router bit

16 Shelf trays are fixed to the framework with 5mm screws; mark hole centres, drill and countersink

17 Shelves are screwed to uprights at 63°; set the sliding bevel and cramp shelf before fixing

18 Screw upper and lower shelves to uprights first, then check the position of the middle shelf

19 Each shelf tray has five slats; the centre one is nailed, with others left loose for plant pot drainage

20 Fill any knots or defects in the timber before sanding all surfaces with 120 grit abrasive or finer

21 To check the length of the rear upright, cramp together and adjust until all shelves are level

22 Shelf trays are supported by battens fixed to uprights; cut these to length, glue and nail

23 Add a stretcher rail across rear uprights for rigidity and strength; fix in place with 5mm screws

24 Bolt the front and rear uprights together and check they close up together with no obstructions

25 To prevent uprights opening out too far, fix galvanised chain both sides, experimenting with its position

26 Saw remaining slats to length so they're a loose fit in shelf trays; sand and remove the arrises

27 If storing the plant ladder over winter, an extra upper stretcher adds rigidity when disassembled

28 Treating all timber with suitable clear preservative, such as Cuprinol, will extend the planter's life

29 Brush on two coats of exterior paint; this is easier to do when the parts are disassembled

30 Position the finished ladder and load up with suitable plant pots, adjusting the slats for drainage

FROM FINIAL TO FINISH

Les Thorne gets artistic as he turns a curly top box with some added decorative details, including a lovely ebony finial, which finishes it off perfectly

Prior to lockdown and restrictions in place due to the Coronavirus outbreak, a fair bit of my turning life involved demonstrating at woodturning shows, clubs and retail outlets.

I have been going to some of the clubs annually for over 16 years, so as you can imagine, coming up with something new to make isn't easy. This particular box has evolved from numerous demonstrations involving demos of box making, carving and texturing. I suppose the initial inspiration came from a French turner called Benoît Averly, and this design has now become one of my signature pieces and the subject of a recent DVD.

The principle of making lidded boxes remains the same whether you leave it plain or the piece is embellished. Always try and do as little removing and remounting of the wood on the lathe during this process as this can lead to the timber not running true, which can subsequently lead to problems during making the box. Any type of timber is suitable but a dense hardwood that is very dry and stable will always give you better results when you are relying on two surfaces fitting together perfectly, as is expected on any well-made box. Before you start, make sure the centres line up, especially if you are using a swivel head lathe.

1 For an added bit of interest, I am using a piece of eucalyptus from Australia; this is the timber that smells like Vapo Rub when first cut and it has great colour to it

2 Mount the wood between centres and use a spindle roughing gouge to make it round. The box lid and base will both be hollowed, so a chucking spigot needs to be turned on both ends

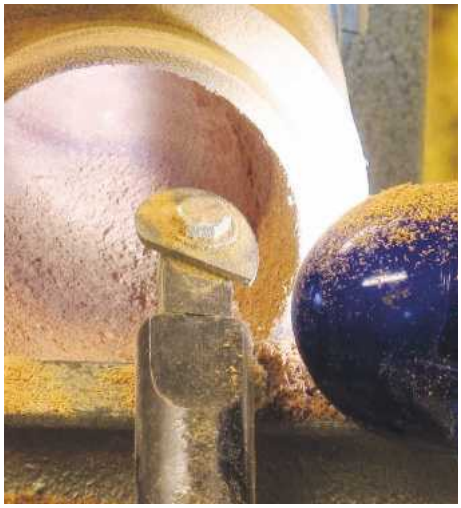
3 You need to decide which end is going to be the lid and this can then be mounted in your chuck. The top of the lid is going to be carved away so if there are any defects in the end of the wood, you will be able to remove them

4 The lid is about three-fifths of the length and the box spigot is cut in at this point. A 13mm long spigot will allow me to get a good suction fit between the lid and base. The 1.5mm parting tool is used to cut away the base leaving the spigot on the lid

5 When I cut the lid off, I like to leave a tiny piece of the spigot on the base; this will act as a guide to how wide I need to hollow it for a good fit. Remember it's only a guide, though

6 My choice of tool for hollowing a box of this size is the 13mm signature spindle gouge. The wings on the tool have been ground back and this is best done using a grinding jig

7 Having the wings of the tool ground back allows me to use the tool in a pull cutting mode working from the centre outwards. This will lead to a good surface finish on most timbers



8 If the finish off the gouge isn't as good as it could be, then you may need to reach for the scraper. This tear-drop cutter on a big, solid bar is perfect. Here I'm using an LED light on a flexible stem

9 Sanding inside a piece like this is never easy with your fingers, so a good method is to make up your own sanding sticks. I'm using a proprietary available sanding ball, which the abrasive is attached to using a hook-and-loop fastening

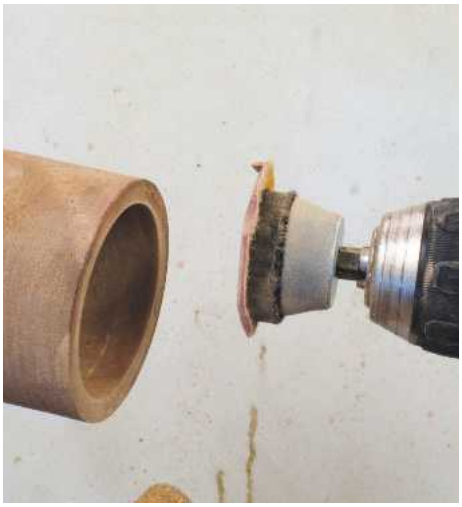
10 Once you are happy with the inside finish on the lid, mount up the base and hollow initially using the gouge. To get the straight sides required on the base, turn the flute right over as you come up the side walls

11 Check the depth frequently and make sure you're not going too deep – this will avoid any potential mishaps. I like to leave about 10mm at the base, which will allow me to turn away the spigot and add some detailing if I wish

12 The inside of the base has straight sides and a flat base. The best tool I have found for cleaning up the bottom is the 10mm round skew: use the tool horizontally and make sure you use the whole cutting edge rather than just the points

13 If you don't have compressed air to get rid of the shavings, then a small brush will work just as well. I need to leave the wall thickness around 8mm as I am going to turn away some of the outside in the shaping of the box

14 I am struggling to get the desired finish on the inside due to the nature of the timber, so I have sprayed some lacquer into the box to harden up the fibres before making a final pass with the tool. You can see that the wood is now coming off as a paste



15 The flat bottom is best sanded with a power sanding pad mounted in a drill. You need to be very careful not to generate any heat here, which could crack the end-grain

16 At this stage, the lid will need to be a tight fit to allow you to turn and then carve the top. Attach the lid to the base and bring in the tailstock for support; the centres do need to line up at this point

17 I use a spindle roughing gouge for the initial shaping but a bowl or spindle gouge may be easier for the less experienced. At this stage I am looking for a bullet shape with a 30mm diameter flat end

18 As I am turning across the box's joint, I keep stopping and checking to make sure that I'm not going too thin. The final wall thickness on the base will be about 4mm

19 I can now create the fish tail shape on the top by cutting a cove from the right; this needs to blend seamlessly into the curve on the left. Imagine the top curve ending at a point on the bottom

20 Before starting the carving it's worth just taping on the lid; this will stop it coming off and allow you to carve it more quickly. The shape here is similar to an old milk bottle – remember those?

21 The shaping can be done using a rasp, Microplane or in my case, a powered rotary rasp. The Proxxon mini angle grinder with the carbide disc is user-friendly and perfect for small projects such as this

22 Once you have removed the timber you don't want, the point on the end needs sanding. As I am going to texture the box, I only sand with 150 grit, but if you wanted a natural finish, then you need to go through the grits

23 Use the skew to cut some small grooves; this offers some parameters for you to texture between. I also cut a groove on the joint of the box to hide the fact that the grain probably doesn't line up now

24 It's very important that when the lathe is running, you keep the toolrest away from the end of the piece – you don't want to ruin all your hard work at this late stage

25 Any small rotary burr can be used for the texturing; the one I'm using here happens to be the ball cutter of a tool called the Decorating Elf from Henry Taylor Tools. I have found it to cut really cleanly on most timbers

26 Any fibres that are picked up by the cutter can be cleaned off using a rotary sanding brush. This 3M sanding wheel is soft enough not to remove the texture

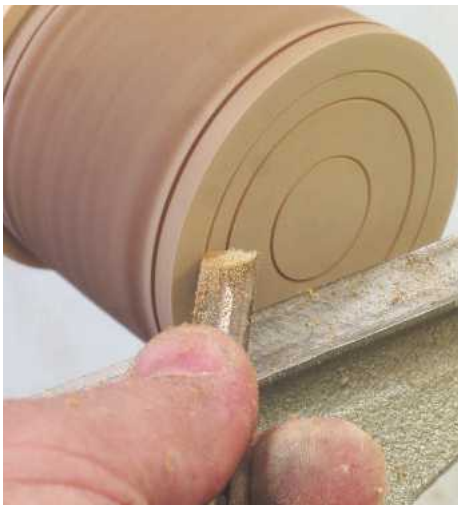
27 It's always worth giving the textured surface a coat of sanding sealer; this will make any loose fibres stand up so you can sand them off. This is the first time you can see what the wood will look like when it's finished

28 Once you're happy with the textured surface, the parts of the box that will be left as plain wood need to be sanded. Start with 240 grit and be really careful not to sand the textured surface

29 The chucking spigot needs to be removed off the base and a softwood jam chuck turned. If you turn a taper on the end, then you will be able to gauge the diameter that is required to ensure a tight fit

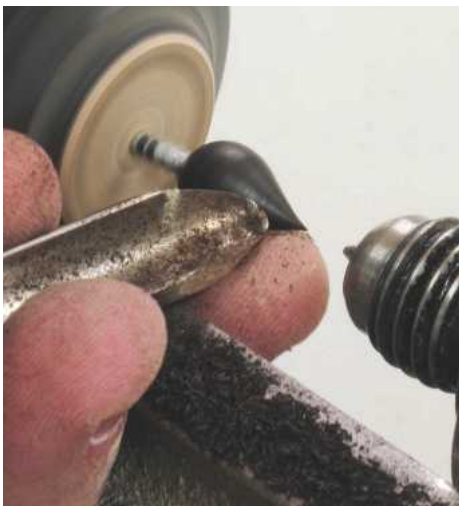
30 The base is mounted up tightly on the pine chuck. It's vitally important that the shoulder of the pine is on the top of the box; this will guarantee you both strength and accuracy

31 Use the tailstock for support for as long as possible. Here you can see that the bevel of the tool is in contact with the wood the whole time. If the tip of the tool touches the wood, then the tool will run back and cause a dig-in

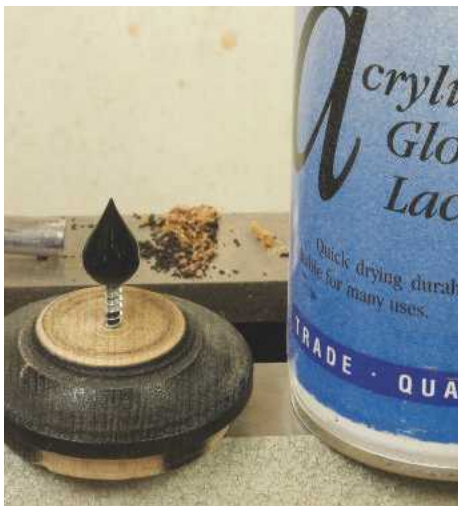


32 The decorative grooves on the base are cut in using the point of a skew – I think three looks about right. This proves that you have taken the time to re-turn the base rather than just cutting it off

33 To finish the box and to complement the shape, I like to put a small flame finial on the top. For this I need a small piece of ebony and one of my small home-made screw chucks. A 3mm hole is drilled in the end



34 The ebony is mounted on the end of the screw. If the timber is bigger, then it must be placed all the way onto the screw as the screw could break. I keep the tailstock in place apart from when making the final cuts, which I support with my fingers



35 I always like to finish my ebony using a high gloss finish; this will also contrast greatly against the satin finish that I intend to put on the box. The finial is glued to the top using a small blob of PVA glue

36 The completed curly top box should look something like this

THOMAS FLINN
& Co Ltd

SHEFFIELD • ENGLAND

The UK's last remaining traditional saw and hand plane manufacturer

Garlick MADE IN SHEFFIELD ESTABLISHED 1858 · E.T. ROBERTS & LEE · PAX ESTABLISHED 1776 · CLIFTON

www.flinn-garlick-saws.co.uk

orderonline@flinn-garlick-saws.co.uk

Tel: 0114 2725387

LIVE WIRE

Zac Matchett-Smith's live-edge coffee table features a fun, pixellated pattern, which is achieved using contrasting pieces of walnut and maple

I don't know about you, but I LOVE live-edge furniture. Unfortunately, however, this type of furniture doesn't leave a lot of room for creativity: you basically just buy a slab of wood, add some legs to it and call it a life. Or, at least, that's what I used to think.

Join me here as I try to tackle putting a unique spin on a piece of live-edge furniture. If you'd prefer to watch this project as a video, however, you can do so by visiting my YouTube channel – **www.youtube.com/zacbuilds** – and clicking on the 'pixellated live-edge coffee table' video.

Materials

Before we start let's talk about everything you're going to need for this project. First and foremost, though, you'll need a live-edge slab of wood (the dimensions of mine were 1,219 × 1,219 × 38mm thick). I bought the walnut slab used here from a local sawmill and also picked up a few pieces of maple (125mm wide × 1,219mm long × 38mm diameter) to use as an accent/contrasting wood.

TOOLS & EQUIPMENT REQUIRED

- Wood filler
- Set of 16in hairpin legs
- Wood glue
- Table saw
- Mitre saw
- Track saw
- Drum sander/belt sander
- Plastic sheeting or drop cloth
- Thickness planer
- Sander
- Router
- Measuring tape
- Blue painter's tape
- Large square
- Rag
- Screwdriver
- Screws
- Eye protection, plus mask & gloves
- Rubio Mono Coat 2C Pure

1 I started by planing and jointing my pieces of maple…

2 … and spent a little bit of time cleaning them up and making them nice and square

3 Using a large square and my track saw, I cut off the live-edges and set them aside for later

4 I also used the track saw to square up the ends of the slab

Preparing the wood

The first step in this project is to prepare all the wood. I started by planing and jointing my pieces of maple (**photo 1**). They were pretty rough when I bought them from the sawmill, so I spent a little bit of time cleaning them up and making them nice and square (**photo 2**).

Next, I turned my attention to the live-edge slab of walnut. Using a large square and my track saw (**photo 3**), I cut off the live-edges and set them to the side for later. I also used the track saw to square up the ends of the slab (**photo 4**).

Cutting the wood

Using my table saw, I cut the remaining walnut and the maple into 25mm strips (**photo 5**). Don't forget to wear your safety gear, dust mask and safety goggles when carrying out this step. Note: the 25mm dimension is completely arbitrary, so feel free to try something different if you want; it's completely up to you!

When I was finished on the table saw I was left with around 20 or so strips of walnut and maple. Using my mitre saw, I cut the 25mm strips of wood to random lengths (**photo 6**). I took a little bit of time here, ensuring to remove any big knots and cracks, and trying to only use the best parts of the wood.

Working out the pattern

Now here's where things get interesting! I took the live-edge pieces set aside earlier and placed them on my worktable, followed by all of the walnut and maple just cut on the mitre saw. Next, I attempted to arrange them into a pattern that I found aesthetically pleasing. This is by far my favourite part of the process.

I decided on a starburst pattern, with most of the maple clustered in the middle and then slowly fading out towards the edges (**photo 7**).

Gluing it all together

After I'd decided on the pattern, I rolled all of the individual pieces onto their sides and started applying a generous helping of wood glue (**photo 8**). Due to the size of this project,

I chose to only glue up half of the table top at one time. I then repeated the same procedure for the opposite side.

Clamp it & let the glue dry

Using a selection of clamps, I carefully clamped everything together (**photo 9**). The trick to clamping a big glue-up like this is to only tighten the clamps until you see a little bit of glue squeezing out of every gap. Once that happens, give the clamps a quarter turn more and leave the glue to set. Wood glue takes approximately 30 minutes to set, so put your feet up and make a cup of tea. After 30 minutes, I repeated both of the last two steps, but on the other half of the table top.

Smooth out the glue-up

After I took the clamps off, I found the table top halves to be far from smooth. There are always slight variations in the height of all the individual blocks, and to fix that and smooth everything out, I used a new tool in my 'shop – a drum sander (**photo 10**).

You could be forgiven for not knowing what

5 Using my table saw, I cut the remaining walnut and the maple into 25mm strips

6 Using my mitre saw, I cut the 25mm strips of wood to random lengths

7 I decided on a starburst pattern, with most of the maple clustered in the middle and then slowly fading out towards the edges

8 After I'd decided on the pattern, I rolled all of the individual pieces onto their sides and started applying a generous helping of wood glue

9 Using a selection of clamps, I carefully clamped everything together

10 There are always slight variations in the height of all the individual blocks, and to fix that and smooth everything out, I used a drum sander

a drum sander is, as it's a specialised piece of equipment. Inside this odd-looking tool is a giant rotating sanding head that removes any high points. By repeatedly passing the wood through it while lowering the sanding head, I was able to smooth out the table top halves. You could achieve similar results using a belt sander, but it would take a lot longer, which is what I used to do in the past. Or, you could also use a block plane and then finish sand afterwards.

Joining the two halves together

With both of the table top halves smoothed out, I applied some glue to the centre seam and clamped them both together for 30 minutes (**photo 11**).

11 With both of the table top halves smoothed out, I applied some glue to the centre seam and clamped them both together for 30 minutes

Clean up the loose ends

When I'm working on these projects I always run the ends a little longer so I don't have to worry about squaring them up during the glue-up process. Instead, I just use my track saw to square them up after the glue dries (**photo 12**).

Next, I used my cordless trim router, fitted with a round-over bit, to slightly round the edge of the coffee table (**photo 13**). No-one wants a table with a sharp edge!

Sanding the project

Using my random orbital sander, I gave the whole table top a good, thorough sanding (**photo 14**). I started out using an 80 grit sanding pad and slowly worked my way up to 220 grit abrasive. I spent some extra time on the live-edges, removing the little remaining bark and smoothing out any rough patches. By the time I was finished, the whole table had a super-smooth texture.

Apply the finish

For this project, I decided to use a finish I've only used once before called Rubio Monocoat (**photo 15**). It's a two-part finish, which you mix together and then apply by spreading it around with a card. As the name implies, it's a one coat and done finish, which I really like. I love watching the way the colour of the wood changes after the finish is applied – it's such a satisfying process. I used the card to spread the majority of the finish around and then used a lint-free rag to finish the corners and all the edges.

Attaching the legs

The last step is to attach the legs (**photo 16**). Normally I like to make my own legs for projects, but I wanted to focus on just making the top here, so decided to buy a set of hairpin legs from Amazon. All four legs cost me around £15, which I thought was a great deal. I marked their locations and screwed them in place using some 25mm wood screws.

Take it home & start using it

With the legs attached, all that was left to do was to load it into the truck, take it home and enjoy it. I set it up in its new home in my living room. That's it for now, but I hope you liked this project and thank you for reading!

FURTHER INFORMATION

To find out more about Zac and his other projects, visit his YouTube channel – **www.youtube.com/zacbuilds** – or follow him on Instagram: **@zacbuilds**

12 I used my track saw to square up the edges after the glue dried

13 Next, I used my cordless trim router, fitted with a round-over bit, to slightly round the edge of the coffee table

14 Using my random orbital sander, I gave the whole table top a good, thorough sanding

15 For this project, I decided to use a finish I've only used once before called Rubio Monocoat

16 The last step is to attach the legs

17 The completed coffee table, at home in the living room

Coming up in the next issue...

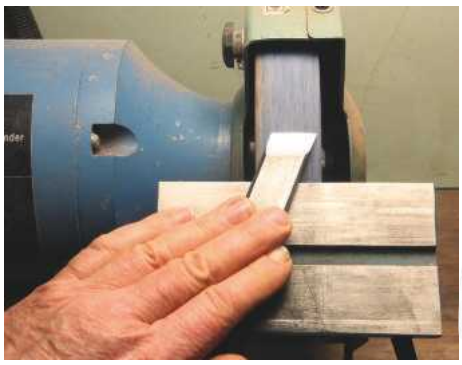
The Woodworker & Good Woodworking September issue – on sale 14 August

TIPPING THE BALANCE

Choosing to make furniture and wooden objects that are different and unique, just like we are, Fernanda Nunez's furniture making style focuses on traditional craftsmanship that often combines modern methods for striking visual effects, finds Martin Pim-Kierle

SOPHIE'S DESK

Join Zac Matchett-Smith as he makes a custom-built desk in maple and ash complete with hairpin legs, all in time for his girlfriend's 30th birthday



SHARP END OF THE BARGAIN

In this in-depth article, Mike Darlow looks at sharpening angles in general, grinding equipment, honing, the three popular types of grinding jig as well as how to sharpen the main tool types

veritas

SEND IN YOUR TOP WORKSHOP HINT/TIP/ POINTER OR PIECE OF ADVICE & YOU COULD BE IN WITH A CHANCE OF WINNING A **VERITAS APRON PLANE FITTED WITH PM-V11 BLADE**

Double WIN!

GIVEAWAY 1

Win 1 of 2 *Trend* T32 M Class site dust extractors, plus 2 runner up prizes of the new *Trend* single pocket hole jig PH/JIG/BS

GIVEAWAY 2

Win 1 of 5 classic outfits from *Dickies Workwear*, including their best-selling Portland shirt, iconic Denison T-shirt, new FLEX Trousers, plus well-known Cameron boots

PLUS ▪ Tale of turning a 'walnut whopper' ▪ Cenote bowl ▪ Rainbow wood cutting board Sanding with Dremel ▪ **On test:** Makita DLS211ZU compound mitre saw ▪ NEJ Stevenson: designers & makers of fine furniture

TOOLS YOU'LL NEED

- All parts of the lathe are made of oak but you could use offcuts of beech or ash. The A-frame is made of pine

TURNING IN MINIATURE

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

Pole-lathes have been around for centuries and only went out of commercial production around 40 years ago. Today, they are being used by craft workers in forests and by an increasing number of hobbyists who enjoy the hands-on experience of this ancient tool. It's certainly a cheap, safe way to enjoy the pleasures of woodturning.

I built my own pole-lathe about four years ago and have spent many happy hours turning green wood into usable items, including a couple of Windsor chairs.

The idea of making a smaller version came from a photo of a medieval lathe operated in the sitting position and driven by a bow. This, of course, only leaves one hand to work the cutting tool.

I wondered if it was possible to make a mini lathe that could be driven by leg power in the sitting position, leaving both hands free. Many hobbyists don't have room for the 4-5m pole originally used on these lathes and have to use car roof rack bungies to drive their lathes. These can be attached to the workshop ceiling and provide the spring return for the treadle. In my mini version, the spring return comes from rubber stretched across the framework about 300mm above the workpiece.

It's cheap and simple to build and offers the chance for a complete novice to have a go at turning. As the power all comes directly from the operator, it's also safe for children to use, under supervision.

MINI POLE-LATHE CUTTING LIST

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

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

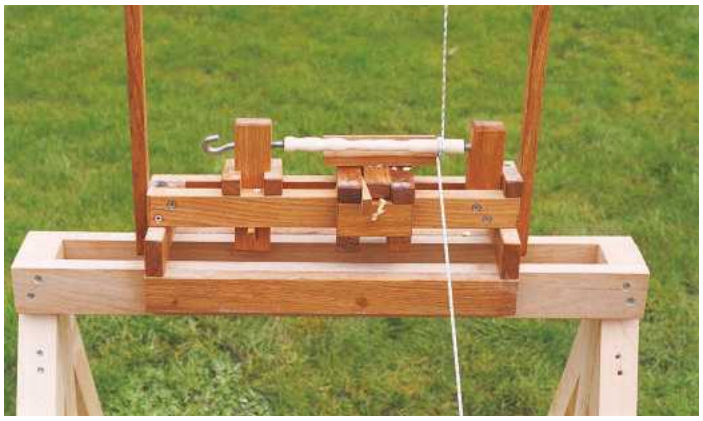
Lathe bed

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

Poppets

To make the poppets you will need 12mm threaded bar and bolts. On the left-hand poppet, drill a 10mm diameter hole, 20mm deep and 25mm down from the top. It should be perfectly horizontal to the lathe bed. Turn the threaded bar into this hole to cut the threads in the timber. Remove the bar and grind one end to a point. Cut to a length of about 35mm and screw into the hole until tight. The left poppet can now

1 View of the lathe with workpiece ready for turning



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

be screwed in place on the lathe bed. The right poppet is also drilled with a 10m bit, 25mm down but this time it is drilled all the way through, see **Fig.2**.

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

When cutting the slot at the bottom, drill the lower hole at a slight angle to correspond with the wedge taper. Note that the top of the slot will be just above the base of the bed, so that the wedge will lock the poppet in place.

The 60 × 20 × 20mm pieces can now be screwed centrally onto the 8mm deep slots and the accuracy of the centres can be checked by moving the right-hand poppet across to meet the fixed left poppet, just like the drive centres of a powered metal lathe.

Wedge

Cut the wedge from a 100 × 30 × 8mm piece and round off the bottom edge of the taper to correspond with the round edge at the bottom of the slot.

Toolrest

On a pole-lathe, the rest usually sits up against the poppets and is held at one end by a screw. Adjustment is needed for different diameter workpieces. I decided to design a toolrest that would slide across the bed and be adjustable for height and size of workpiece. Note that the gap between the two top cross pieces is 30mm, allowing the 27mm lower section of the rest to be moved into place and held by wedges. The height is adjusted by using a spacer underneath.

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

TIP

If space is tight, make the A-frame with bolts and wing-nuts, so that it can be taken apart and stored away in the workshop ready for next summer

The rubber

Raid the sewing box for elastic or use a bungie or part of a bike tyre inner tube for this part, but remember that the tension determines the pressure needed to drive the lathe as well as the return action. On my machine, I used 1.2m of model aircraft rubber. The ends were knotted together and the length halved and fastened by hooks.

Making the A-frame

I am 1.88mm tall and when sitting with the stool level at 460mm, this frame is the ideal height. You will have to experiment to find the right size for you.

If the A-frame is made to a height of 1,100mm, it can be used standing up. In this case, the treadle would be pivoted from a base measuring 500mm square, which the operator stands on when using the lathe.

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

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

Driving cord

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

FIVE STEPS TO GREEN TURNING

Step 1

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

Step 2

Wrap the drive cord twice around the blank and push onto the centre of the left poppet.

Step 3

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

Step 4

The blank should rotate towards you as you push on the treadle and spring back as you release it. The drive cord should run smoothly on the work

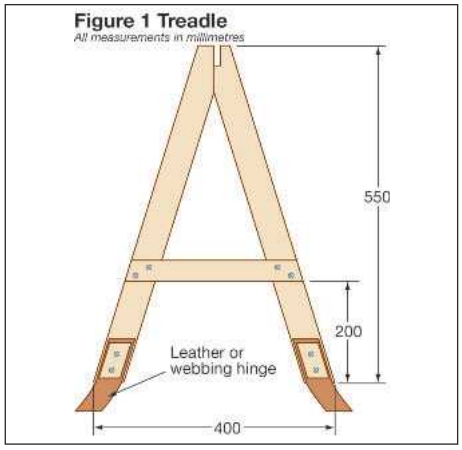


Fig.1 Treadle

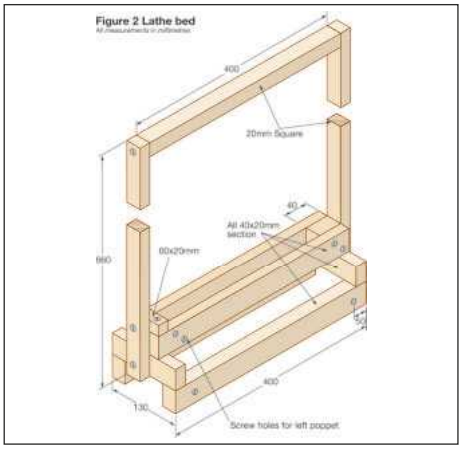


Fig.2 Lathe bed

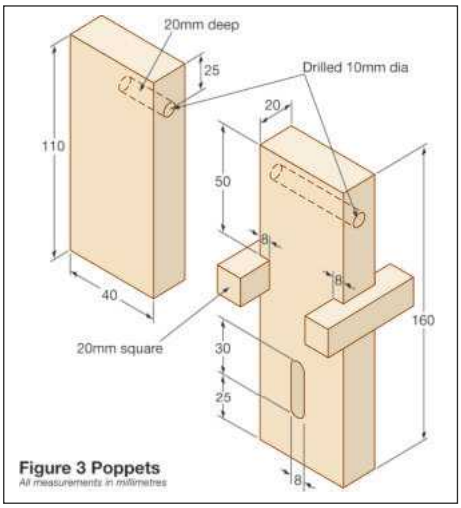


Fig.3 Poppets

and not cross over itself. You can adjust if needed by moving the attachment point of the cord to the rubber. When you tension the rubber, it should still allow the treadle to move easily.

Step 5

Rest your gouge on the top of the rest and cut as the wood rotates towards you. The gouge is then pulled back slightly as the treadle returns. You soon get used to the action as you practice. Your right foot is used to provide stability by resting on the frame's rear stretcher.

Gouges

A 25mm or wider spindle roughing gouge is essential to turn the blank into a cylinder. I use woodcarving gouges of 5 and 10mm for the shaping and a 50mm firmer chisel for smoothing.

I did try working my mini pole-lathe with a bow but found that it must have been a simple curved stick with cord held loosely between the ends. The concave arch is held facing downwards and the cord becomes taut when wrapped twice around the workpiece. It's surprising how much drive is transferred to the work with minimal effort but you need a lot of practice to use the gouge skilfully with only one hand. I hope you enjoy making and using your own mini pole-lathe – happy turning!

MAKING YOUR BLANKS

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

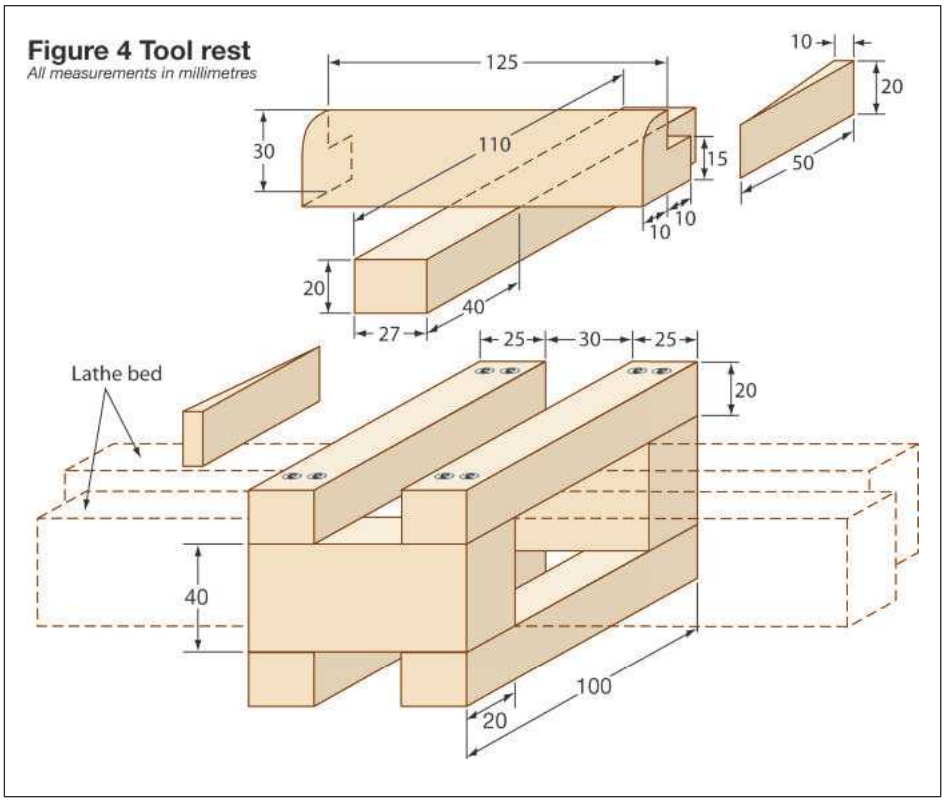


Fig.4 Toolrest

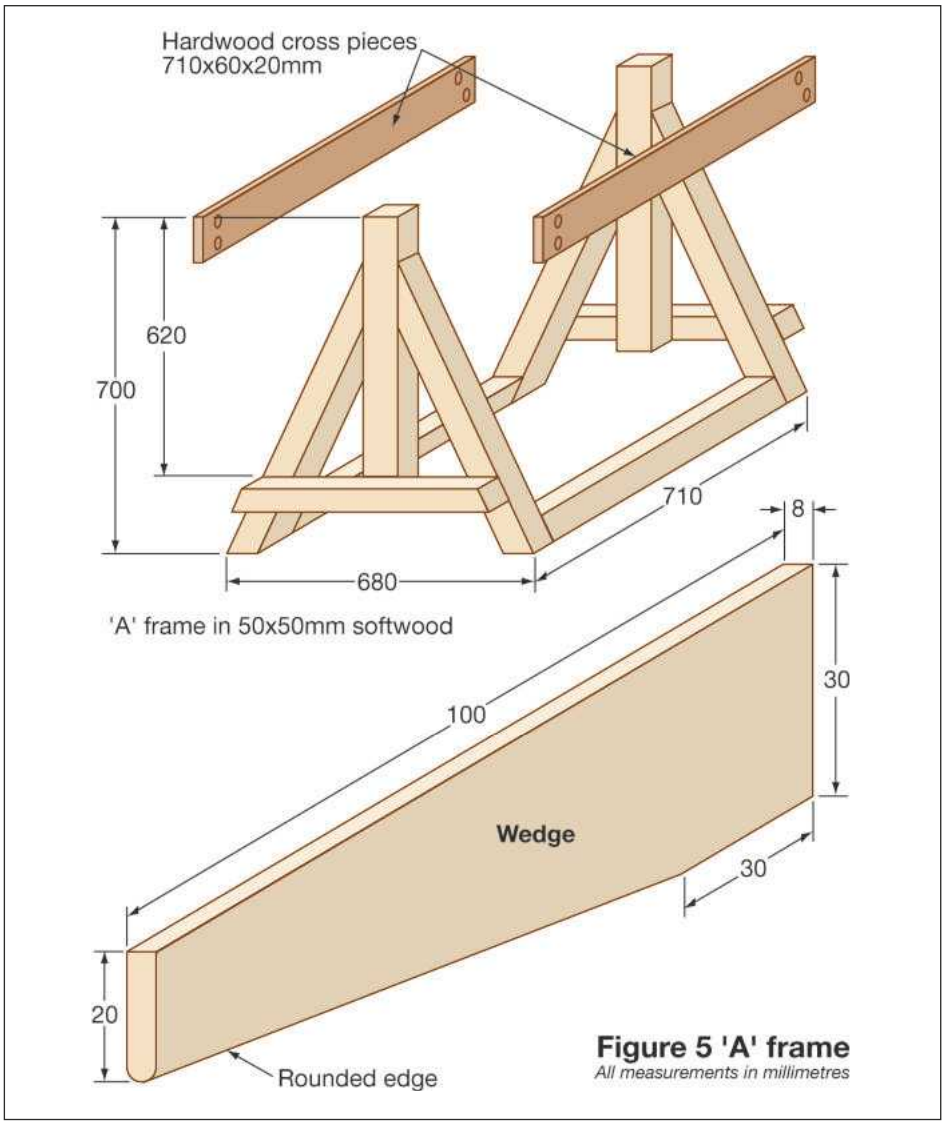


Fig.5 'A' frame

WEB GUIDE

MUSICAL INSTRUMENT MAKERS

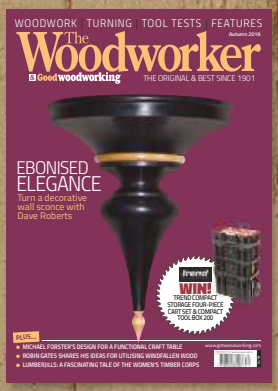
MISSED AN ISSUE?

Did you miss a copy of

The Woodworker & Goodwoodworking ?

YOU CAN NOW ORDER THESE ONLINE

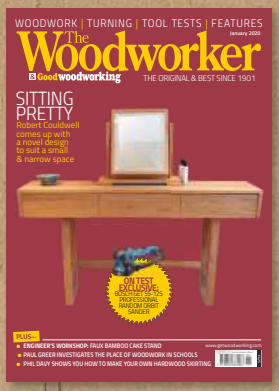
October 2019



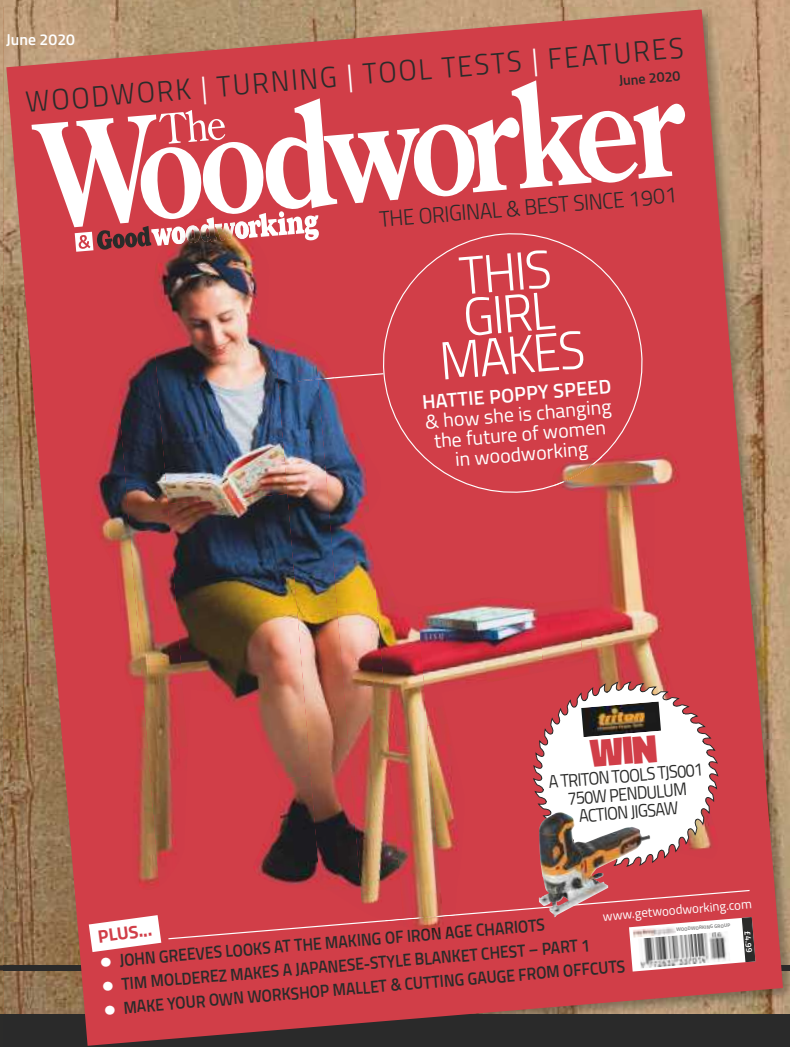
Autumn 2019

November 2019

December 2018



January 2019

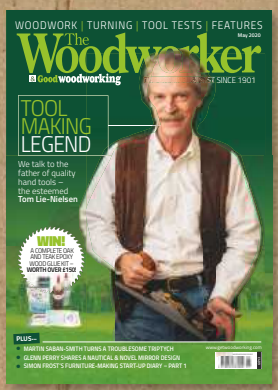


June 2020

February 2020

March 2020

April 2020



May 2020

Order Online: www.mags-uk.com

mytimemedia
print & digital media publishers

Please note that we cannot guarantee the availablity of all issues displayed above.

FOR SALE

Good woodworking issues 2-332 (June 2018) – FREE to the person prepared to collect
01233 756 775 (Kent)

Record Power AC400 air cleaner – never been used but out of box. Bought prior to illness, which forces sale. Cost £159.99 in 2018; selling for £100, if buyer collects. If buyer requires postage, make contact & delivery costs can be calculated
07936 124 950 (Merseyside)

Full set of ***Good Woodworking/The Woodworker*** magazines. All in excellent condition – some boxed; buyer collects
0208 850 8548 (London)

SIP 01375 HD 1in mortiser – comes with chisels & cabinet; £225. Will deliver within 20 mile radius of Cambridge
01954 260 534/07767 793 379 (Cambridge)

Woodworker **magazines**: a rare collection of *Woodworker* magazines from 1902–1965 – 187 copies with patterns; £500
07917 391 800 (Tyne and Wear)

WoodRat 900 – comes with MR4 rail, mitre box, several cutters (no router) spare parts, plunge bar, dust porting, etc. – all in excellent condition; £450 – buyer collects
01323 431 913 (Eastbourne)

Trend mortise & tenon jig – complete with instructions, cramps, bush guides, cutters for ¼in mortise & tenon & sub-base; £120
01733 897 459 (Peterborough)

Jet 18Q bandsaw on wheels – as new & very little used. Come & try it; £1,000 ONO
07871 726 919 (Cardigan)

Myford PR11 bench planer – with extension rollers; £120 – buyer collects
01497 847 065 (Hereford)

Axminster 355WL lathe with four-prong drive & live centres – all unused; buyer collects; £455
01926 499 259 (Warwick)

Metabo HC260 10in blade bench planer together with Metabo SPA 1200 extractor. Also, Hitachi M12V ½in router – sensible offers; buyer collects
07760 421 396 (St. Albans)

Wadkin Bursgreen 9in BFT surface planer single-phase & in nice condition; £225 – no offers
01288 361 970 (Cornwall)

Felder CF731 combination machine (saw, planer, thicknesser & spindle moulder/router) – three-phase; DIY use only; £6,500 – collection only
07905 267 992 (N.Lincs)

Bound ***Woodworker*** **annuals** – 1960–1970; £10 each plus postage
01225 706 533 (Bath)

Myford ML8 lathe on maker's stand – comes with bandsaw attachment with many blades, mortising attachment (no chisels), rear sanding attachment with 2 discs, rear turning attachment, several faceplates, Axminster SK114 chuck (new but no jaws), compound slide and as new three-jaw chuck, Duplex chuck and jaws, plus many other centres and accessories; £1,200 OVNO – buyer collects
01323 431 913 (Eastbourne)

WANTED

Robert Sorby ProEdge sharpening system – any condition considered
01912 685 387 (Tyne & Wear)

Fence plus guide rails for a Wadkin 10in AG5 table saw
07724 386 061 (Wrexham)

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

Dust extraction spout for DeWalt 1150 planer/thicknesser
023 8089 8123 (Southampton)

Spiers/Norris/Henley planes wanted by private collector; any quote beaten. Call Ron Lowe on **01530 834 581** (Leics)

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

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

BOOK YOUR FREE AD

Please publish this advertisement in the next available edition of *The Woodworker*. I am a private advertiser and have no trade connections
PLEASE TICK: FOR SALE ❑ WANTED ❑

- This space is available only to private individuals wishing to buy or sell woodworking machinery and tools.
- The maximum value of any item for sale must not exceed £500. A small fee is payable for items offered at over £500; please ring 01689 869 852 for details.
- Each coupon is valid for one free insertion in the next available issue.
- The publisher accepts no responsibility for errors or omissions in this section.

Name_____
Address _____
_____
Postcode_____
Daytime tel no._____
Signature _____

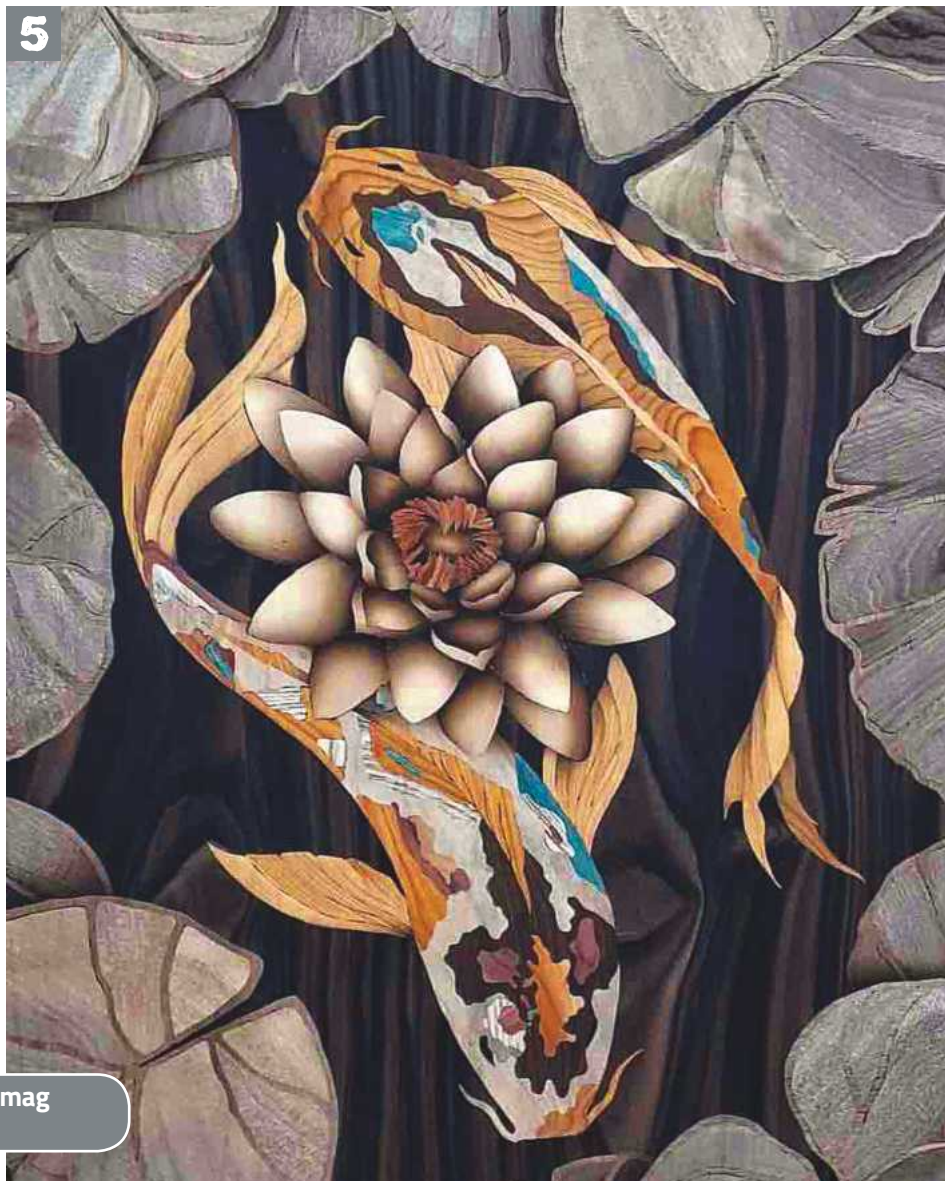
My advertisement (max 20 words please) reads as follows:

_____
_____
_____
_____

Please write your advertisement in **BLOCK CAPITALS** and send it to:
The Woodworker Marketplace, MyTime Media Ltd, Suite 25, Eden House, Enterprise Way, Edenbridge, Kent TN8 6HF. You can also email your free ad to: **tegan.foley@mytimemedia.com**. Send/email a photograph of your item and we'll include it with your ad for **FREE**

TAKE 5

Despite the unrest in the world, it's our aim to brighten your spirits with more examples of wonderful woodworking from Instagram – we hope you enjoy this month's selection



1 Beautiful rustic bed by **@woodwork.sun**

2 Maple spinning top by **@ga.fa_woodworker**

3 Gorgeous wooden staircase from **@easy_woodworking**

4 Hand-carved Netsuke squirrel by **@arisaoguro**

5 Incredible marquetry detailing of koi carp on a table top by **@petitutkart**

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

For the ultimate sharpening experience!

Axminster Trade Ultimate Edge

Code: 106232

£449.95 inc VAT

With forward, reverse and [illegible] control together with fast [illegible] will revolutionise the sharpening of woodturning tools. This quality [illegible] restoration projects.

[illegible]d giving greater [illegible] the Ultimate Edge

Sharpening Table 105426
Twist n Fix Arbor 105419
Additional Arbor 105420
Additional Arbor x 3 720623
Pre-Filter Pad (Pkt 10) 101850
More accessories can be found on our website

A single-speed version of the Ultimate Edge
Code: 105529

Shown with the
Honing Guide Assembly
Code: 105281 **£39.95**

AXMINSTER
Tools & Machinery

To see the quality of this product **visit one of our stores**, search **axminstertools.com** or call **0800 371822**

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

Prices may be subject to change without notice

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

Rated **'Excellent'** on Trustpilot

Coronet Herald Heavy Duty Cast Iron Electronic Variable Speed Lathe

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

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

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

Heavy-duty spindle lock and 24 point indexing

Features the latest motor technology to deliver huge amounts of torque from the 750 W output motor

Rotating headstock features accurate angle stops and can swivel 360°

Shown with optional leg stand

5 YEAR GUARANTEE

ONLY
£999.95 Inc. VAT

Specifications

Maximum bowl diameter:	533 mm
Maximum between centres:	508 mm
Maximum swing over bed:	355 mm
Spindle speeds:	96-3890 rpm
Motor input P1:	1000 W
Motor output P2:	750 W
Thread:	M33 x 3.5
Taper:	2 Morse taper
Weight:	48 kg
Size:	W870 x D290 x H252 mm

BUY SAME TIME

16015 Tubular Stand	£129.99	**Save £20.00**
16011 Cast Iron Bed Extension	£149.99	**Save £30.00**
16013 Cast Iron Outrigger	£39.99	**Save £10.00**
16012 Bench Feet	£59.99	**Save £10.00**

CORONET Herald — Used by members of the Register of Professional Turners

Prices valid until 31.08.2020. E&OE.

RECORD POWER
ESTABLISHED 1909®

www.recordpower.co.uk Tel: 01246 571 020

Over 100 years
Experience • Knowledge
Support • Expertise

RECORD POWER ESTABLISHED 1909
STARTRITE
CORONET
CamVac
BURGESS

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