

EST. 1901

THE ORIGINAL & STILL THE BEST

The Woodworker

November 2016

www.getwoodworking.com

& Woodturner



Using hand tools

Quick furniture

Observing wood grain

Decorative pomander

DESIGNER
DRAWERS



CART

before the horse

RESTORING A CLASSIC



ADIRONDACK CHAIRS

PLUS: LATEST WOODWORKING NEWS AND TOOLS

mytime media WOODWORKING GROUP



£4.50

IronmongeryDirect

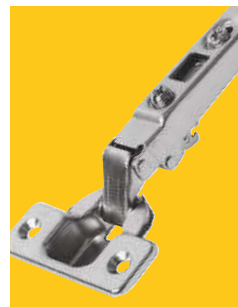
MASTERS OF OUR TRADE

🕒 ORDER BY 8PM GET IT NEXT DAY!

15,500 PRODUCTS **IN STOCK** FOR NEXT DAY DELIVERY



**CALL
0808 168 28 28
OR GO ONLINE
TO GET YOUR FREE
CATALOGUE**



Good product, great communication and the best speed of service that I have experienced.

Joe Reilly



**FREE DELIVERY
OVER £45***



**FREE RETURNS
WITHIN 30 DAYS**



**MINIMUM
5 YEAR GUARANTEE**



**LOW TRADE
PRICES**

CALL 7am-8pm 7 days a week

0808 168 28 28



ONLINE Shop 24/7!

IronmongeryDirect.com

*Ex VAT

FOLLOW US ON ▶



Welcome



It all came good in the end, but...

Despite our best intentions, it's pretty rare I'm sure for the average woodworking job to go perfectly smoothly and with no mistakes. Certainly my record of error-free enterprises is a short one. It's particularly galling when the end is in sight and you're already mentally packing up the van and driving away, only to find that you've done something careless and now there is an extra hour or so of reconstruction work ahead, and just when you don't need it, too.

So it was yesterday when I was installing the last of four oak posts holding up an existing lean-to roof over a balcony, only to find that I'd managed to cut it 65mm too short. With 100 x 100mm oak going at about £40 a metre down my way, I was reluctant to shell out again, not to mention the time delay that would also result. Out with the Domino jointer then for a butt jointed 'repair' and some discreet adjustments to the decorative chamfers on each corner. It all came good in the end (it's going to be painted), but the extra work and the waste of time is the last thing you want on a Friday afternoon.

The carpenter's classic warning 'measure twice, cut once' is forever running through my mind, but it only takes a moment's distraction to slip up and find yourself looking at the expensive second cut. I think that the culprit in this case (and sadly many others) was the Extraneous Mark. The extraneous mark has generally been drawn on a board or a length of timber at some point in the recent past, usually in preliminary setting out or even accidentally there at the time, but always just close enough to the real one to cause a problem. Despite my best intentions to cross them out or even erase them whenever I see them, extraneous marks still manage to attract my try square and pencil just prior to making an irreversible saw cut.

In my defence, though, working on site generally has a lot more distraction potential than joinery work in the workshop but, on reflection, solitary labour also has its fair share of slip ups for this particular woodworker. It's true that there is always something to be gained from making mistakes, but there are times when a body could do without the 'useful experience'. What to do, then? I don't expect I'm alone in my travails, so if any other woodworker out there can suggest anything to help, I'd be more than grateful to learn of it.

Mark

You can contact Mark on editor.ww@mytimemedia.com



If you can't always find a copy of the magazine, help is at hand! Complete this form and hand it in at your local store, and they'll ensure that a copy of each issue is reserved for you. Some stores may even be able to arrange for it to be delivered to your home. Just ask!

Subject to availability

If you don't want to miss an issue

Please reserve/deliver my copy of *The Woodworker* on a regular basis, starting with issue _____

Title _____ First name _____

Surname _____

Address _____

Postcode _____

Telephone number _____



CONTENTS

What's in store for you this month

40 BOXING CLEVER

Ian Wilkie takes you through the steps for producing a well-turned box with a lid

WOODWORK

14 Donkey work

Peter Bishop undertakes another restoration job and this time transforms an old, worn out donkey cart back to its former glory

26 Froward & upward

Beginning with a froe and ending with a smoother, Robin Gates converts an ash log in his quest to become more self-sufficient in timber

32 Archive

In this excerpt from *The Woodworker* of October 1935, can you guess the 12 tool operations shown that represent the hands of a woodworker engaged in everyday workshop operations? Good luck!

34 For old folks at home

Tony 'Bodger' Scott devises two simple phone supports for his partially sighted mother-in-law



58



48 Drawers on show

Brian Barber uses his own open frame construction design to build an heirloom chest of drawers

64 Observer's guide – part 1

When preparing timber, Andy King says you should read what's written in the grain's small print



26

68 Furniture on the quick

Rick Wheaton's bookcase and round table can be made using only basic kit and the addition of eye-catching colours really makes them stand out from the crowd

72 Relaxing, American style

Having discovered the Adirondack chair on a recent road trip across the USA and Canada, on arriving home



64



To celebrate their 60th anniversary, Felder are running a fantastic competition in conjunction with *The Woodworker* and *Good Woodworking* magazines to find three of the best furniture makers across the UK – there's also some fantastic prizes up for grabs

See page 36
for further details

TURNING

46 Hot off the press

Ian Wilkie looks at two brand-new woodturning books from Mark Baker

58 Getting decorative

Making use of a banksia nut, Colin Simpson shows you how to turn a decorative pomander complete with top cap and finial in a contrasting timber – or why not adapt the design to make a festive decoration for your tree?

ON TEST

78 Record Power AC400 workshop air filter

80 Bosch wireless charging platform & battery

81 Bosch M480 Net abrasives & backing pad

82 Proxxon cordless tools range

REGULARS

3 Welcome

8 AOB & diary

11 Timber directory

13 News from D&M Tools

25 Readers' letters

32 Archive

62 Subscriptions

89 Marketplace

90 Timeslip

Chris Finch set about finding his own plans and the outcome is a truly fantastic pair

90 The exclusivity of HJ Shop

Peter Baker picks up where he left off and discusses the Radio Frequency (RF) curing of glue lines – a technical process that aimed to accelerate assembly times while reducing labour content



68

The Woodworker & Woodturner

November 2016

Published by **MyTime Media Ltd**
Suite 25, Eden House, Enterprise Way,
Edenbridge, Kent TN8 6HF

UK & overseas
Tel: +44 (0)1689 869 840
www.getwoodworking.com

SUBSCRIPTIONS

UK – New, Renewals & Enquiries

Tel: 0344 243 9023

Email: help@tw.secureorder.co.uk

USA & CANADA – New, Renewals & Enquiries

Tel: (001)-866-647-9191

REST OF WORLD – New, Renewals & Enquiries

Tel: +44 1604 828 748

CURRENT & BACK ISSUES

Website: www.mags-uk.com

Tel: 01733 688 964

EDITORIAL

Group Editor: Tegan Foley

Email: tegan.foley@mytimemedia.com

Editor: Mark Cass

Email: editor.ww@mytimemedia.com

PRODUCTION

Designer: Nik Harber

Retouching Manager: Brian Vickers

Advertising Production: Robin Gray

ADVERTISING

Business Development Manager: David Holden

Email: david.holden@mytimemedia.com

Tel: 01689 869 867

Online Sales: David Holden

Email: david.holden@mytimemedia.com

Tel: 01689 869 867

MARKETING & SUBSCRIPTIONS

Subscriptions Manager: Kate Hall

Subscriptions: Sarah Pradhan

Tel: +44(0)1858 438 798

MANAGEMENT

Group Advertising Manager: Rhona Bolger

Email: rhona.bolger@mytimemedia.com

Tel: 01689 869 891

Chief Executive: Owen Davies

Chairman: Peter Harkness

mytimemedia
print & digital media publishers

© MyTime Media Ltd. 2016

All rights reserved ISSN 1752-3524

The Publisher's written consent must be obtained before any part of this publication may be reproduced in any form whatsoever, including photocopies, and information retrieval systems. All reasonable care is taken in the preparation of the magazine contents, but the publishers cannot be held legally responsible for errors in the contents of this magazine or for any loss however arising from such errors, including loss resulting from negligence of our staff. Reliance placed upon the contents of this magazine is at reader's own risk.

The Woodworker & Woodturner, ISSN 1752-3524, is published monthly with an additional issue in summer by MYTIME MEDIA Ltd, Enterprise House, Enterprise Way, Edenbridge, Kent TN8 6HF, UK.

The US annual subscription price is 59GBP (equivalent to approximately 98USD). Airfreight and mailing in the USA by agent named Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

Periodicals postage paid at Jamaica NY 11431.

US Postmaster: Send address changes to The Woodworker & Woodturner, Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

Subscription records are maintained at dsb.net 3 Queensbridge, The Lakes, Northampton, NN4 7BF.

Air Business Ltd is acting as our mailing agent



When you have finished with this magazine please recycle it.

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



'THE' TOOL SUPERSTORE

HAND, POWER TOOLS & MACHINERY SPECIALIST

DM-TOOLS.CO.UK

YOUR TRUSTED PARTNER

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

LOW TRADE PRICES!

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

OVER 10,000 LINES IN STOCK!

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

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.



1 HR DELIVERY WINDOW

We use DPD Predict for the majority of our deliveries (except heavy or oversize items) so you will receive a 1 hour delivery window via email or text meaning you don't need to wait in all day.

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.

Here you will 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.

More details on our website:
www.dm-tools.co.uk



MASSIVE CHOICE FROM THE BIGGEST BRANDS!



'THE' TOOL SHOW '16

WWW.THETOOLSHOW.COM

A huge **THANK YOU** to everyone who visited or exhibited at this years' show in October. Dates for next years' show will be available soon.

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



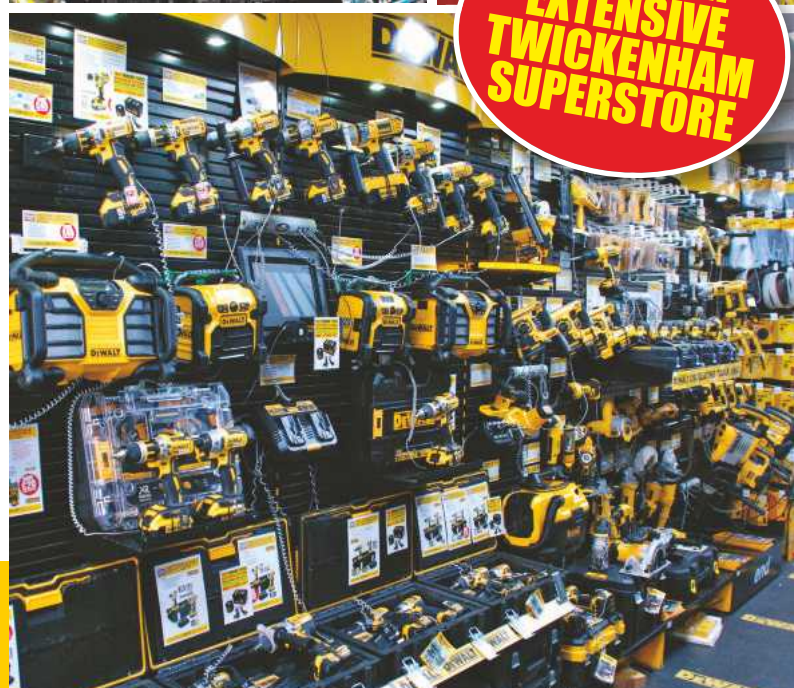
020 8892 3813
MON-SAT 8.30am-5.30pm
(CLOSED BANK HOLIDAYS)



FREE CATALOGUE
- OVER 650 COLOUR PAGES



VISIT OUR EXTENSIVE TWICKENHAM SUPERSTORE



OUR CUSTOMERS LOVE US!

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

★★★★★

"D&M tools are very well priced, turn up on time and have superb telephone support just in case anything goes wrong. This is a business I will use in the years to come. Thanks for a job well done."

★★★★★

"Quick Quality Quantity and Value - D&M offer a fast efficient service which they couple with an excellent range of manufacturers tools which are always available in the numbers you need at a competitive price."

★★★★★

"Best customer service... Ever! - I believe the real test of a companies customer service is when they have to deal with problems. My delivery came quickly and well packaged. I had an issue with the tool after about a month of use. The guys in the phone quickly arranged for collection, repair of the tool and return with great communication throughout. Very pleased with the way they resolved my issue."

★★★★★

"Brilliant prices and brilliant service - I have now traded with D&M Tools twice now and both times have received impeccable service and also nothing is to much trouble for their staff to sort out."

★★★★★

"Excellent service makes a refreshing change - first time I have used this company, was quite amazed by the quality and speed of service and delivery, a fine example of what can be done with first class staff."

★★★★★

"Best place for tools online - I've bought a lot of gear from D&M Tools over the last few years and they always provide a first class service, plus they always seem to have everything I need at the time."

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



@DM_Tools



DandMTools



DMTools1

In brief...

ANY OTHER BUSINESS

Often, when musing with friends in a relaxed environment, or when prompted by a recent event, I'm sure we've all asked the question: 'What will they think of next?' Well I'm tempted to say 'this particular adhesive', but the truth is that it's been around for ages, or at least the principle of a glue that goes off when exposed to ultraviolet light. Known in the trade as UV-curing adhesive, the photochemical process was originally developed during World War II and entered general commercial use in the 1960s. Since then its usage has grown, particularly in the health industry, and is now poised to enter the consumer market. It's likely some readers will have seen this product or one like it before, but if you haven't then I'd recommend you give it a go. I was favourably impressed with its performance while fixing a pair of workshop reading glasses; a springy kind of frame break, which only

gaffer tape had previously been able to hold together. A squeeze of the new glue followed by a few seconds of UV light and I was Cyclops no longer. It did the job successfully and I especially liked its speed and the fact that no complicated clamping was required. Not cheap, but a really top class addition to the glue drawer, and fun to use as well! **Mark**



Lazer Bond – note precision applicator



The onboard UV torch cures the glue in seconds

Lazer Bond from JML – priced at £9.99 and available in shops and online – see www.jmldirect.com



GET STARRY DIY'D THIS FESTIVE SEASON

Dremel's new Christmas kits are the perfect way to create a sparkle in any tool fanatic's eye this festive season. Each kit includes a different selection of add-ons, offering users a bundle for every level of expertise and each comes with a unique EZ wrap storage solution.

3 Star Multi-Tool Christmas kit

A great starter package, this kit features includes a mandrel screw, 13mm sanding band & mandrel, 9.5mm aluminium oxide grinding stone and 32mm cut-off drills. Priced from £39.99.

4 Star Multi-Tool Christmas kit

This kit offers increased versatility with three Dremel attachments. The line and circle creates

perfect holes and easily performs straight cuts, while the multi-purpose cutting kit is suitable for providing controlled cutting in a variety of different materials. The kit includes a range of 55 high quality accessories, which allows the user to tackle a wide range of applications quickly and effectively. Priced from £79.99.

5 Star Multi-Tool Christmas kit

The 5 Star bundle is perfect for even the most experienced DIY, hobby and craft fanatic. Five versatile attachments are included alongside the Dremel 3000. As well as a line and circle cutter, multi-purpose cutting kit and flexible shaft attachment, the expansive kit also includes a detailer's grip to offer increased control, as well as a shaping platform, which enables users to sand and grind at both 45 and 90° angles. Presented in a robust, aluminium tool box – priced from £99.99.

Share your work

Each kit also includes a chessboard and pieces, enabling enthusiasts to use their Dremel multi-tool to create a customised set. Once complete, users can share their unique creations online for a chance to win exclusive Dremel prizes. For further information, visit www.dremel.co.uk.

DIARY

NOVEMBER

- 2** Bandsaws
 - 2 & 19*** Sharpening with Tormek Hand Tools
 - 3–4** Turned boxes (Advanced)
 - 4* & 14** Scrollsaws
 - 7–8 & 15–16** Introduction to the small lathe
 - 8–9** Bee hive making
 - 8–9** Bowls & platters
 - 14** Introduction to Leigh Jigs
 - 16–17 & 24–25** Nutcracker wooden figures
 - 17** Spindle moulding*
 - 20–24** Windsor chair
 - 21** Turning a pestle & mortar*
 - 22** Christmas decorations & gifts (1 day)
 - 23** Turning pepper mills*
 - 24** Pen making
 - 29–30** Beginners' routing *
- * Course held in Sittingbourne, Kent
Axminster Tools & Machinery
Unit 10 Weycroft Avenue
Axminster, Devon EX13 5PH
Tel: 08009 751 905
Web: www.axminster.co.uk

- 1** Carve an English rose – a taster day
- 14–17** An introduction to picture framing
- 18–20** Japanning: Western lacquerwork for beginners
- 27–2** Advanced furniture making – individual projects
West Dean College
West Dean, near Chichester
West Sussex PO18 0QZ
Tel: 01243 811 301
Web: www.westdean.org.uk
- 14–19** Home-made workbench
- 25–28** Beginners' course
Chris Tribe, The Cornmill
Railway Road, Ilkley
West Yorkshire LS29 8HT
Tel: 01943 602 836
Web: www.christribefurniturecourses.com
- 11–12** Wood machining
John Lloyd Fine Furniture
Bankside Farm, Ditchling
Common, Burgess Hill
East Sussex RH15 0SJ
Tel: 01444 480 388
Web: www.johnlloydfinefurniture.co.uk

UK'S BIGGEST RANGE
15,000 PRODUCTS IN STOCK FOR NEXT DAY DELIVERY

CALL 7am-8pm 7 days a week

0808 168 28 28



ONLINE Shop 24/7!

IronmongeryDirect.com



CALL TODAY
FOR YOUR FREE CATALOGUE

DRAPER Tools

drapertools.com

900W 230V 75mm Belt Sander
Stock No. 23036



£64.00
*TSP Inc. VAT
£53.33 *TSP Ex. VAT

First Fix Draper Venom®
Double Ground Tool
Box Saw
Stock No. 82198



£5.20
*TSP Inc. VAT
£4.33 *TSP Ex. VAT

150mm Woodworking Vice
Stock No. 45233



£24.95
*TSP Inc. VAT
£20.79 *TSP Ex. VAT

500mm Second Fix
Draper Venom®
Triple Ground
Handsaw
Stock No. 82197



£6.49
*TSP Inc. VAT
£5.41 *TSP Ex. VAT

Multirasp Plane
Stock No. 13847



£14.95
*TSP Inc. VAT
£12.46 *TSP Ex. VAT

Stapler/Nailer
Stock No. 48434



£14.95
*TSP Inc. VAT
£12.46 *TSP Ex. VAT

300mm Draper
Venom® Double
Ground Tenon Saw
Stock No. 82200



£5.35
*TSP Inc. VAT
£4.46 *TSP Ex. VAT

5 piece Soft Grip
Screwdriver Set
Stock No. 09783



£7.97
*TSP Inc. VAT
£6.63 *TSP Ex. VAT

500mm First Fix
Draper Venom®
Triple Ground
Handsaw
Stock No. 82201



£6.20
*TSP Inc. VAT
£5.17 *TSP Ex. VAT

4 piece 150mm
Bevel Edge
Wood Chisel
Set
Stock No. 83351



£16.75
*TSP Inc. VAT
£13.96 *TSP Ex. VAT

300W 230V Oscillating
Multi-Tool Kit
Stock No. 23666



£61.00
*TSP Inc. VAT
£50.83 *TSP Ex. VAT

450mm Heavy
Duty Soft Grip
Dual Action
Clamps
Stock No. 02375



£26.95
*TSP Inc. VAT
£22.46 *TSP Ex. VAT

230W 230V 125mm
Random Orbit Palm Sander
Stock No. 41458



£44.70
*TSP Inc. VAT
£37.25 *TSP Ex. VAT



600mm Tilt
& Clamp
Fold Down
Workbench
Stock No. 09951

£28.99
*TSP Inc. VAT
£24.16 *TSP Ex. VAT

WHY NOT BROWSE
OUR CURRENT
CATALOGUE
ONLINE AT
**DRAPERTOOLS.COM/
CATALOGUE**



**BECOME A
DRAPER TOOLS
CLUB MEMBER**

Become a Draper Tools Club Member and you'll be kept up to date with all our new products, offers, competitions and more! Inside your account you'll be able to order copies of our publications.

Join at: drapertools.com/club-member



TO SEE OUR FULL RANGE OF PRODUCTS VISIT **DRAPERTOOLS.COM**



The Rocking Horse Shop Ltd

Designers, makers & Restorers of fine wooden
Rocking Horses since 1976

Medium 'Rocky'

Laminated Rocking Horse Simple construction !

Special Offer

Plan 129 Only £10*

(Voucher code **P12916** Full price £14.99)

Horse Timber Pack £170*

(incl instructions)

(Voucher code **T12916** Full price £185)

Plus postage

(Stand not included)

For more details see our website

www.rockinghorse.co.uk

For info, FREE catalogue or order phone 0800 7315418

The Rocking Horse Shop, Fangfoss, YORK YO41 5JH

* Both offers valid until 31st December 2016



TURNERS TOOL BOX
DAVID MARTIN



CREATIVE WELSH WOODTURNING LTD.

Turners Tool Box.Com

WOODTURNING – WOODWORKING – WOODCARVING
TOOLS & ACCESSORIES

LOG ON TO:

www.turnerstoolbox.com



Woodturning Chucks including the:
Robert Sorby Patriot Woodturning Chuck
Axminster Evolution SK114 Woodturning Chuck
All with additional accessories making your time at the
lather a more pleasurable experience



New
Pen Mandrel Support



New

Bolt Action & Bullet Pen Kits

In a variety of different metal finish's

Including the required sized
Drill bits & the bushing sets



Extension Bars &
Morse Taper Adaptor

Colt MaxiCut® Forstner Bits:
Metric & Imperial Sizes



Colt HSS-M2 150mm Pen Drill Bits
Sizes from 7mm upwards



DELIVERED WORLD WIDE

For more information Visit: www.turnerstoolbox.com

Order online Open 24hrs – All at the click of a button and delivered straight to your door

Email: info@turnerstoolbox.com – Tel: 01873 831 589 – Mobile: 07931 405 131



In brief...

THE WOODWORKER TIMBER SUPPLIERS DIRECTORY, NOVEMBER 2016

Adhectic Ltd

Tel: 01235 520 738
Web: www.adhectic.co.uk
(Abingdon)

A Harrison

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

Bennetts Timber

Tel: 01472 350 151
Web: www.bennettsttimber.co.uk
(Lincolnshire)

Black Isle Woodturning

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

Brodies Timber

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

Brooks Brothers Timber

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

C&G Barrett Ltd, Cilfiegian Sawmill

Tel: 01291 672 805
Web: www.cilfiegiansawmill.com
(Monmouthshire, South Wales)

D Emmerson Timber

Tel: 01507 524 728
Web: www.emmersonsttimber.co.uk
(Lincolnshire)

Earlswood Interiors

Tel: 01564 703 706
Web: www.earlswoodinteriors.co.uk
(Solihull)

English Woodlands Timber

Tel: 01730 816 941
Web: www.englishwoodlandsttimber.co.uk
(West Sussex)

Exotic Hardwoods

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

EO Burton, Thorndon Sawmills

Tel: 01277 260 810
Web: www.eoburton.com
(Essex)

Eynsham Park Sawmill

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

FH Ives

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

Fulham Timber

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

G&S Specialist Timber

Tel: 01768 891 445
Web: www.toolsandtimber.co.uk
(Cumbria)

Good Timber

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

Interesting Timbers

Tel: 01761 241 333
Web: www.interestingtimbers.co.uk
(Emborough)

ISCA Woodcrafts

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

John Davis Woodturning Centre

Tel: 01264 811 070
Web: www.johndaviswoodturning.com
(Hampshire)

Joyce Timber

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

Lincolnshire Woodcraft

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

Nottage Timber

Tel: 01656 745 959
Web: www.nottagetimber.co.uk
(Bridgend, South Wales)

Ockenden Timber

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

Olivers Woodturning

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

Oxford Wood Recycling

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

Stiles & Bates

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

Scadding Timber

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

St. Andrews Timber & Building Supplies

Tel: 01316 611 333
Web: www.standrewsttimbersupplies.co.uk
(Scotland)

Surrey Timbers Ltd

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

Sykes Timber

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

The Timber Mill

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

The Wood Recycling Store

Tel: 01273 570 500
Web: www.woodrecycling.org.uk
(East Sussex)

Thorogood Timber Ltd

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

Timberman

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

Waterloo Timber Ltd

Tel: 01200 423 263
Web: No website
(Lancs)

Wenban Smith

Tel: 01903 230 311
Web: www.wenbans.com
(Worthing)

W L West & Sons Ltd

Tel: 01798 861 611
Web: www.wlwest.co.uk
(Surrey)

Yandle & Sons Ltd

Tel: 01935 822 207
Web: www.yandles.co.uk
(Somerset)

**UK'S BIGGEST
SUPPLIER
OF IRONMONGERY
TO THE TRADE**

**ORDER BY 8PM
GET IT NEXT DAY!**

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

**ONLINE Shop 24/7!
IronmongeryDirect.com**



**CALL
TODAY
FOR YOUR FREE
CATALOGUE**

Hammer®

The obvious choice!

IF IN DOUBT USE A HAMMER

HAMMER - A range of over 20 machines
for the keen and professional woodworker.

FELDER-GROUP UK

Unit 2, Sovereign Business Park, Joplin Court
Crownhill, MK8 0JP MILTON KEYNES
Tel. 01908 635 000 info@ukfelder.co.uk

www.ukhammer.co.uk

📄 Request your free catalogue now!

Panel Saws



K4 perform



K3 winner comfort

Planer-thicknessers/Planers/Thicknessers



A3 41



A3 31



A3 41 A



A3 41 D

Saw Spindle Moulder



B3 perform



B3 winner

Bandsaw



N 3800
N 4400

Horizontal Mortiser



D3

Spindle Moulder



F3

Combination machines



C3 31 perform



C3 31

Mobile Dust Extractor



S01



2-5 OCTOBER

2016 • NEC

STAND E810 F810 F810

HAMMER,
Quality and
precision
from Austria

What's new from



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

NEW GENERATION OF ONE-HANDED SANDERS

MANUFACTURER: Festool
D&M GUIDE PRICE: £259.95

FESTOOL

Festool has launched a new generation of one-handed sanders: **RTS 400**, **DTS 400** and **ETS 125**. These sanders offer more power and feature an electronically controlled high constant speed that ensures you can work faster, plus improved ergonomics to save you energy, **PROTECTORS** to avoid reworking and two options for working dust-free using the **CLEANTEC** connecting system and mobile dust extractor, or long-life dust collector bag.

The new compact sanders come in three sizes: the DTS delta sander, RTS rectangular orbital sander or ETS 125 circular eccentric sander – three designs that are perfect for every task. Weighing only 1.2kg, they are perfect for smaller, vertical surfaces or overhead work. The new MMC control electronics ensure that the idle motor speed is the same as the working speed and transfers the power of 250W directly to the work surface. At 250W the new sanders are top of their class and make fast work of any task. They each have an attachable protector for smooth sanding along window surfaces, frames and panelling. They are reliably dust-free, whether using the standard long-life dust collector bag or a mobile dust extractor.



MILWAUKEE M18 FUEL™ FINISH NAILERS

MANUFACTURER: Milwaukee
D&M GUIDE PRICE: From £349.95 (body only)

The two new M18 FUEL™ finish nailers from Milwaukee (M18CN18GA 18-gauge brad nailer and M19CN16GA 16-gauge angled nailer) are the first cordless solutions on the market with the power to consistently seat nails sub-flush to hardwood surfaces with no ramp-up time and no gas cartridges.

With best-in-class power, the M18 FUEL™ finish nailers are able to consistently seat nails sub-flush to material surface in hardwoods, and feature 'Ready to Fire Technology', which completely eliminates ramp-up time. A faster nail rate not only delivers faster nail fires, but quick and accurate nail placement.

With no gas cartridges, a POWERSTATE™ brushless motor and no cleaning required, the new tools are designed to deliver durability and reliability to the most demanding users with very little maintenance. Coupled with the fact that the tools fire up to 1,200 nails on a single 2.0Ah battery pack, the user will greatly reduce downtime and maximise productivity.

The balanced and ergonomic design featuring reduced size and tool length ensures the user will also experience a better balance, feel and overall performance when compared to other competitive tools on the market today.

The two models are available as body only machines or as kits with 2 × 2.0Ah batteries – the M18CN16GA is also available with 2 × 5.0Ah batteries. Full details and specifications can be found on our website.



M18 FUEL





TOOLS REQUIRED

Basic set of hand tools

Planer

Mortiser

Bandsaw

Cross-cut saw

Peter Bishop undertakes another restoration job and this time transforms an old, worn out donkey cart back to its former glory

Donkey work

Friend and neighbour, Gwilym, has heavy horses for show and a soft spot for donkeys! For months, every time I saw him it seemed, he told me about this old donkey cart he'd bought from auction. An antique, nearly original cart with little restoration it had been made in London probably in the early part of the 20th century. Gwilym had bought the cart for the young donkey he had. "As soon as I can get it sorted, I'll start to train him in harness," was his usual refrain. "Sorted" meant that he wanted me to restore it. I resisted staunchly for nearly a year, then I



1 The cart on the trestles – you can see how badly damaged the side is

mentioned I'd semi-retired. A big mistake – I was doomed. Without any pressure, that you'd notice anyway, the fact that I had more time was noted. It wasn't long after that I gave in: "If you'll get the wheels 'sorted', then I'll do the rest," I relented.

Please note that although many of these images show machines unguarded for clarity, you should **ALWAYS** ensure that when operating equipment the appropriate guards are in place.

Initial prognosis

Gwilym unhitched the wheels and sent them off to his wheelwright. He then detached the axel and spring assembly and duly turned up at my place. The cart was on the front bucket of his tractor. Not too heavy we lifted it off into the A & E section of my workshop and plonked the axel to one side. I told Gwilym I'd take a look in a couple of days and then call him with my initial prognosis. When I got to it, I realised the prospect of a full recovery was remote. I reckoned there was enough

woodworm and rot to declare the cart terminal. I called Gwilym up to have a chat. "Look," I said, "I really think that if you want me to sort it, we'd better start again." I explained that the woodworm made it nigh on impossible to graft new bits of wood in and, anyway, some of it had already been 'got at'. One shaft was rather clunky and was an obvious replacement and some of the sub frame had pieces of softwood worked in. I tried to make a good case. "By the time I finish there won't be much of the original left. We'd be better off



2 The tail gate is there – just!



3 This outrider is so 'friable' that it falls apart at the touch



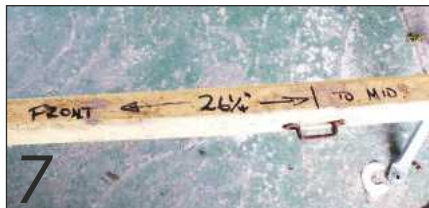
5 What's holding this corner together?



4 On one corner, the wood had rotted away around the metalwork



6 These brackets had to be cut off



7 It's a good idea to mark important measurements on the old components



8 Drawings of the crucial parts

building a new one from the bottom up." I thought he'd resist; after all, he'd waxed lyrical about the originality of the cart and how you'd not find another like it. However, and this is where I feel as though he got the better of me, he said: "Great, get on with it!" Having dug the hole, I had to sit in it. As I watched him go, I had this feeling that he'd wanted me to rebuild the cart from scratch right from the beginning. Well, there you go, it's often best not to try and out-think the opposition as they may already be one step or more ahead! Anyway, back to the project.



9 The metalwork was salvaged for cleaning up later on



10 Once apart, this is what the woodwork looked like

Rough cutting list

I spent some time making rough drawings of the cart and taking photos of all the sides and joining parts, etc. (photo 8). I worked out a rough cutting list. With this in hand I checked my stock of ash, all 25mm-thick, and ordered the 50mm stuff I needed from Whitney Sawmills. I bit the bullet one Saturday afternoon. I wanted to salvage as much of the shaped metalwork as I could (photo 9). Unfortunately, most of the nuts were ceased onto their threads. My old friend the angle grinder came to the rescue. Several hours later, I ended up with one workbench covered in bits of metal and a pile of old wood components in the other workshop. I made drawings of the unique pieces of ironwork; obviously some of these would need a little TLC. My pal Reece

down the road would sort that and the rest I'd replace with stainless steel as I went along. So now all I needed was some wood.

Cutting pieces to size

I collected the thicker ash from the sawmill (photo 11). As it was a bit tight, with little spare, I decided to cut the two, long shafts first. I worked out how I'd cut the first shape by laying an old shaft on the chosen board. I cut this initial profile out. I followed this by cutting the matching piece of the second shaft from the same board. I marked and cut the second face of each shaft by laying an old one on top. Each shaft was put through the thicknesser and planed both sides to size (photo 13). With these rough profiled pieces in the vice, I got to work cleaning up the edges with a spokeshave.

This took a while but was quite satisfying as the shapes were trimmed up and the shavings flew! I straightened the face that adjoins the sub frame by squaring it on the surfacer (photo 14). The main protruding part of the shafts were rounded with a quarter-round cutter set in the router (photo 17). With this done, it was a simple task to slightly round the points and sand them down to a finish.

Happy that I'd got the long pieces made and out of the way, I cut the other components and square planed them to their finished sizes. I had decided to make a few slight modifications, which involved increasing the cross-sections of some pieces. I felt this would improve the aesthetics and, hopefully, help the cart last another 100 years or so.



The thick stuff arriving from the sawmill



All the rough-sawn ash in the workshop



On this piece, I then marked out the full profile of both shafts and cut them out



The first side profile of the pair of shafts was cut on the bandsaw



As a pair, the shafts are shaped by hand

FIND
MORE
FREE
MAGAZINES

[HTTP://SOEK.IN](http://soek.in)

The sub frame was the first priority; I marked the joints and cut them on the saw and mortise machine (**photo 18**). The three 'show' tenons at the rear, which went straight through, were longer and bevel-edged to match the original. Once the sub frame was jointed, I checked that the shafts would fit as I'd hoped (**photo 20**).

I couldn't yet glue up the sub frame until I'd cut the mortise holes to take the front panel and side panels. These three were canted out from the base at a slight angle. They would each slot into their positions in the sub frame and be held in place by the rescued iron work. Another slight modification I made meant that these three panels could be removed for painting or repair if required. Some of the old iron work had been riveted over making a permanent joint, hence the use of the angle grinder earlier on.



18 Having planed the stuff up, the sub frame is marked out



16 The face of the shafts that adjoins the frame needed to be squared up



19 Working out the positions of the crossing piece



A large quarter-round cutter in the router shaped all the edges



20 Do the shafts fit the frame? Yes, they do



The thin stuff for the side panels needed to be jointed to make the width



22 The four panels are ready for gluing

Front, side & tail gate panels

The front, side and tail gate panels were made up of thin wood, finishing 12mm-thick, with a top shaped rail and supporting splayed lower framing pieces (**photo 21**). These near vertical framing pieces would protrude beyond the bottom edge of the panel thus forming tenons that slotted into the sub frame. I sorted enough of the thinner, panel stuff out first, jointed and glued it up ready for shaping, then I planed up the top rail pieces and the lower supports. The profile of each shaped top – the tail gate was straight – was marked onto the new wood directly from the old panels. That first profile was cut free-hand. I cut each to the parallel width using the 'single point' cutting technique (**photo 25**).

The sawn faces were cleaned up with a spokeshave (**photo 26**). The thinner, framing stuff was planed to size and, on the router, had a small detail groove run down both sides of the face.

Jointing

Jointing was interesting. The near vertical framing pieces, four each side and three in the front and rear, did not have shoulders on their tenons but needed to fit into the tops and bottoms at splayed angles. I marked out all the sub frame mortise holes first. I used a sliding bevel to best work out the angles in which the mortises would be cut. It was a bit of a calculated guess with packing pieces placed on the bed of the mortiser where I thought they should be (**photo 28**). I just needed to be consistent and remember that each panel was handed, etc. Once the sides had been cut, I popped the framing pieces into the joints, stood back and checked that the splays were about where I wanted them (**photo 29**). They were OK, so I marked the top rail mortise positions from this 'live' assembly. The rest of the joints were cut: top, bottom, front and back, etc. It was a bit of a fiddle but I got there in the end (**photo 30**).

Iron work

While all this had been going on, Reece had cleaned up and repaired the iron work as necessary. He hand-cut some new, square nuts to match the old ones and made some new pieces look old. A great job – thanks, Reece. My mods had caused a bit of extra work for him; we did need to shorten some pieces. Anyway, as the metalwork appeared, I cleaned it off, primed it and spray painted it with a black satin finish. Gwilym had originally thought all the metalwork would be black. I painted well in advance of needing the ironwork in the hope that it would be nice and hard when I came to assemble the whole cart.

Structural work

By now the main of the structural work was complete. The sub frame was made but not fixed, and the same for the sides and tail gate. The overlapping joints where the front panel fitted over the two sides had also been cut. It was now time to apply the fancy, decorative bevels between the joints on all the framing. Checking the angle of the bevels, I had nothing in my cutter box that matched. It didn't take long to find the right one. I ordered it from Wealden Tools and it came the next day. Once set in the router table, I got stuck in. It was all free-hand stuff. A pencil mark where to start and finish; slice a little off first, then finish tight on the roller. A bit of a fiddle on the ends but, with care, the bevels were applied and, dare I say it, looked good!

The sub frame was finally glued and squared up (**photo 32**). The side and front panels were also made and the tail gate followed. Out of the clamps, I turned the sub frame over and fitted the axel and spring assembly. These had gone off to be shot blasted to clean off all the old paint and muck. I'd primed and finished them in black as with the rest of the metalwork.

Eight large, stainless steel bolts held this lot on to the sub frame. Once fitted, I got a hand to turn everything over and placed it on a couple of trestles. I then slotted on the side and front panels.

Once Reece's iron work had been applied the structure became very rigid and strong. Now I could finally fit the tail gate to the splayed sides (**photo 36**). The hinges were fitted to the main panel using some spacers where necessary. The two hinge hooks on the sub frame needed to be let in slightly before they could be screwed in place. This done, I moved on to the cart's floor. The old one was softwood and shot all to pieces. I square planed the bulk of the remaining ash and cut the tongue & groove on the rip saw bench (**photo 37**). Once cut to length, these boards were screwed in place leaving expansion gaps in between (**photo 38**).

Outriders

At the top of each side, attached to metalwork and the crossing front rail, were a pair of outriders. These thin pieces curved to match the side, top profile and also had some fancy bevels applied. I'd about run out of ash so two of the four



All clamped up bar the tail gate panel



Each top face shape of the side panels was marked out from the originals



A bit of 'single point' cutting on the bandsaw finished the roughing out



The spokeshave again, which was used to finish the top rails to shape

pieces had to be made from sycamore. A near match but without too much grain character. Once they'd been square planed, I worked out where the bevels would be applied, on one edge only, and cut them. The idea was that I'd steam them into shape so the more wood cut off now would help that process (**photo 39**). I got my steam tunnel out. It was too short so I cut a couple of holes each end to take a pair of rails at a time. I fired it up, got the steam going and left the first couple of pieces to get pliable. After about 10 minutes or so, I took them out and placed them on blocks at each end. A large weight was then placed in the middle to create the curve and hold this shape while they cooled off (**photo 40**). The other pair followed. A bit later on, the ends were shaped and they were fitted in place.

As I'd gone along, I'd applied a deluge coat of clear preservative to all the wooden components. I hoped that this would give the cart a bit of protection that would help it survive even longer than the original.

Trestles

The cart had been built up on a pair of trestles; these allowed me to work at a comfortable height and was high enough



27 The sub frame is marked out to take the side and front panel stub tenons



28 The mortise holes are slightly canted by using packing



29 Side panel pieces are fitted



30 The front panel piece is jointed, and once again packed out to cant the mortise holes



31 Marking out the positions of the mortise holes in the front, top rail



32 With all the joints cut, the sub frame is glued up



33 Once all the joints are made, the fancy bevelling can be applied



34 Working on the tail gate. At this stage, the other panels are already fitted to their frames



35
The tail gate hinge pins needed to be recessed to fit

to fit the wheels, which were now back from the wheelwright. I had yet to finally fit the shafts so I cramped these in place, drilled the retaining bolt holes and got them sorted. Gwilym came with the hub covers and these I cleaned, along with the brass axel nuts and bolts, in white spirit. The one large washer was shot so I cut a couple more from some leather I had in stock. The axles were greased and oiled, the wheels presented and slid on. A cam piece was followed by two nuts – one a reverse thread to hold everything safe. I only finger-tightened these nuts and didn't spread the split pin that went through the end. The hub covers were screwed on and then we had lift off!

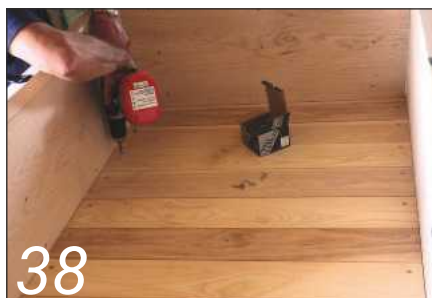
I'd covered the ends of the shafts to protect them. By releasing the trestle supports slowly, the cart dropped onto its wheels. I jiggled out the timber bearers and the cart was free for the first time. I lifted the shafts at their ends and was surprised at how light and balanced the cart was on its wheels. These old coach builders certainly knew what they were doing. It took no effort at all to move the cart around. I was really pleased with the outcome and hoped Gwilym would be too.



40
A weight just bends the outriders while they cool off



36
The tail gate is finally fitted



38
Each piece of flooring has an expansion gap left in between

End result

He came up the next day. I think he was slightly lost for words at the start. He'd seen the cart progress a couple of times, but this was the first time it was mobile. He's going to pay my bill, so I think that indicates he's happy with the result! The story's not quite over yet, though. The cart was originally painted but we both agreed that a natural, clear varnish finish to the woodwork would look really good.



37
Making the tongue & grooved flooring from square planed stuff



39
Steaming the outriders

However, it's been decided that some of the metalwork will now be painted green and fancy lining is to be applied. Gwilym is taking the whole cart off to Wiltshire. He's found a specialist who will do the final paint job. I can't wait to see it when it comes back and gets hitched up to Captain, the donkey that's going to pull it. Captain is now one of three, shortly to be four, donkeys that Gwilym has – I did tell you he liked them! **WW**



41
The completed donkey cart is a huge success



Woodworking & Furniture Making Courses

Learn to craft wood and make fine furniture on our long and short courses at purpose-built workshops in Worcestershire

Short Courses Include
French Polishing & Refinishing
Wood Machining
Dovetailing & Drawer Fitting
Veneering & Laminating
Routing
Sharpening
'Make a Box'
'Make a Table'
Beginners Course



Sam Carter
9 month student



Rick Howie
9 month student



Veneering & Laminating
4 day course



Paul Smith
9 month student

Call us on **01684 591014**

or find us online for information on all the courses

www.peterseftonfurniture.school.com

The Threshing Barn, Welland Road, Upton upon Severn, Worcestershire, WR8 0SN



The UK's Largest Joinery & Woodworking Centre

A vast range of specialist hardwoods,
from **Ash** to **Zebrano**!

- Bowl Blanks
- Carving Blocks
- Squares
- Rare & exotic species



Tel: 01765 640564



- Distinctive table tops
- Clearances
- Sale Packs
- Cash & Carry
- Free Coffee!!

Duffield
TIMBER

www.duffieldtimber.com

Duffield Timber, Green Lane, Melmerby, Ripon HG4 5JB

Saw Blades

It's what we do... for over forty years!

- Band Saw Blades
- Circular Saw Blades
- Multimaster & Multitool blades
- Planer Blades
- TCT Circs
- Router Cutters
- Power Tools
- Abrasives
- Turning Tools
- Servicing



- Made to order bandsaw blades, welded to any length
- With a range of TPI to suite any application

10% OFF
5 or more blades



FREE UK Delivery
on orders over £50 (excl. VAT)



Founder Member of the Saw Doctor Association

hamilton beverstock

CNC sharpening & metal cutting specialists

Hamilton Beverstock Ltd. Grange Industrial Estate,
Llanfrehfa Way, Cwmbran, Torfaen NP44 8HQ.

Tel: (01633) 838900 • Fax: (01633) 873803

email: sales@hamiltonbeverstock.com

www.hamiltonbeverstock.com

Clarke

TABLE
SAWS

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

LEG STAND KITS
FOR CTS100
AND CTS11
ONLY £27.59
INC.VAT

INCLUDES
LEFT & RIGHT
TABLE
EXTENSION

CTS100

MODEL	MOTOR	BLADE	EXC.VAT	INC.VAT
CTS800B	600W	200mm	£69.98	£83.98
CTS11	1500W	254mm	£149.98	£179.98
CTS100	1500W	254mm	£169.98	£203.98

Clarke

TABLE SAW WITH
EXTENSION
TABLES (250mm)

• 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°

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

Clarke

DUST EXTRACTOR/
CHIP COLLECTORS

FROM ONLY
£139.98
EXC.VAT
£167.98 INC.VAT

METABO
ALSO
AVAILABLE

• Powerful
750W motor
• 56 litre bag capacity
• Flow rate of 850M3/h

MODEL	MOTOR	FLOW RATE	BAG CAP.	EXC.VAT	INC.VAT
CDE35B	750W	450 M3/h	56Ltrs	£139.98	£167.98
CDE7B	750W	850 M3/h	114Ltrs	£149.98	£179.98

Clarke

POWER PLANERS

CEP1

• 82mm
cutting
width

FROM ONLY
£26.99
EXC.VAT
£32.99 INC.VAT

MODEL	DEPTH MOTOR OF CUT	EXC.VAT	INC.VAT
Clarke CEP1	650W 2mm	£26.99	£32.99
Einhell TE-PL850 850W	3mm	£49.98	£59.98
B&D KW750K - GB 750W	2mm	£54.99	£65.99

Clarke

STATIC PHASE
CONVERTERS

PC60

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

FROM ONLY
£229.00
EXC.VAT
£274.98 INC.VAT

MODEL	MAX. MOTOR HP	FUSE	EXC.VAT	INC.VAT
PC20	2HP	10Amps	£229.00	£274.98
PC40	3.5HP	20Amps	£269.00	£322.80
PC60	5.5HP	32Amps	£299.00	£362.80

Clarke

BOLTLESS
SHELVING BENCHES

CHB1500

• Simple fast assembly
in minutes using only a
hammer

FROM ONLY
£29.98
EXC.VAT
£35.98 INC.VAT

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

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

ALSO
EXTRA WIDE
INDUSTRIAL
UNITS
AVAILABLE

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

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

Machine Mart

NOW
65 SUPERSTORES
NATIONWIDE

WHERE QUALITY
COSTS LESS

Clarke

TABLE SAW

FURY5-S

• 1500W motor
• 0-60° mitre
gauge
• Cutting
depth: Steel 3mm,
Wood 85mm at
90° or 58mm
at 45°

FROM ONLY
£149.98
EXC.VAT
£179.98 INC.VAT

Clarke

CROSS 450W
RANDOM ORBITAL
SANDER

NEW

• Adjustable front handle
improves control
• 7000-14000rpm

FROM ONLY
£29.98
EXC.VAT
£35.98 INC.VAT

Clarke

DRILL BIT SHARPENER

CBS16

• Great for 3mm to
10mm HSS drill bits
• 70W motor • Drill
bit guide ensures
sharpening at the
correct angle • Saves
cost of new drills

FROM ONLY
£21.99
EXC.VAT
£26.99 INC.VAT

Clarke

WET & DRY
VACUUM
CLEANERS

SS - Stainless
Steel

• 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

Clarke

CLAMPS

HUGE CHOICE
OF SASH,
SPRING, SCREW,
SPREADER AND
G-CLAMPS

UP TO
1800mm
CAPACITY

Clarke

HARDWOOD
WORKBENCH

CHB1500

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

FROM ONLY
£139.98
EXC.VAT
£167.98 INC.VAT

Clarke

BELT SANDERS

CON185

• Ideal for surface removal,
sanding and finishing

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

Clarke

PLANERS &
THICKENERS

CPT800

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

FROM ONLY
£184.99
EXC.VAT
£221.99 INC.VAT

MODEL

PLANING
WIDTH

MAX THICK.
CAPACITY

EXC. VAT

INC. VAT

CPT600

6"

120mm

£184.99

£221.99

CPT800

8"

120mm

£209.98

£251.98

CPT1000

10"

120mm

£289.00

£346.80

Clarke

WOODWORKING
VICES

Record

FROM ONLY
£13.99
EXC.VAT
£16.79 INC.VAT

MODEL

MOUNTING

JAW
(WIDTH/OPENING
/DEPTH)mm

EXC. VAT

INC. VAT

Clarke

CHT152

Bolted

150/152/61

£13.99

£16.79

Stanley

Clamped

72/60/40

£16.99

£20.39

Record

TV75B

Clamped

75/50/32

£19.98

£23.98

Clarke

WV7

Bolted

180/205/78

£26.99

£32.39

Clarke

CORDLESS
DRILL/ DRIVERS

BOSCH

Power Tools

Clarke

CONTRACTOR

CON18LI

FROM ONLY
£39.99
EXC.VAT
£47.98 INC.VAT

PSR18

FROM ONLY
£21.99
EXC.VAT
£26.99 INC.VAT

MODEL

VOLTS

BATTS

EXC. VAT

INC. VAT

CCD180

18V

1

£39.98

£47.98

CCD240

24V

1

£47.99

£57.99

Bosch

PSR18

18V

1

£54.99

£65.99

CON18Ni

18V

2 x Ni-Cd

£69.98

£83.98

CON18Li

18V

2 x Li-Ion

£89.98

£107.98

Clarke

STAPLE/
NAIL GUNS

CON18LI

FROM ONLY
£21.99
EXC.VAT
£26.99 INC.VAT

MODEL

VOLTS

BATTS

EXC. VAT

INC. VAT

CCD180

18V

1

£39.98

£47.98

CCD240

24V

1

£47.99

£57.99

Bosch

PSR18

18V

1

£54.99

£65.99

CON18Ni

18V

2 x Ni-Cd

£69.98

£83.98

CON18Li

18V

2 x Li-Ion

£89.98

£107.98

Clarke

QUALITY CAST
IRON STOVES

POT
BELLY

OVER 23 QUALITY
STYLES ON DISPLAY

NEW

8kW

6.9kW

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

MODEL

POWER

EXC. VAT

INC. VAT

Clarke

BARREL II

8kW

£219.00

£262.80

Clarke

BUCKINGHAM

6kW

£199.00

£238.80

Clarke

FLUES, COWLS &
ACCESSORIES
IN STOCK

MODEL

POWER

EXC. VAT

INC. VAT

Clarke

BARREL II

8kW

£219.00

£262.80

Clarke

BUCKINGHAM

6kW

Clarke 10" (254MM) SLIDING COMPOUND MITRE SAW

For fast, accurate cross, bevel & mitre cutting in most hard & soft woods

- 1800W motor
- Laser guide
- 78mm max. depth of cut

£139.98 EXC.VAT
£167.98 INC.VAT
CMS10S2

BEST SELLER



EASY TO USE WEBSITE

NOW OVER 18,000 PRODUCTS ONLINE!

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



NEW 500 PAGE CATALOGUE

Over **1600** PRICE CUTS & NEW PRODUCTS



Machine Mart

65 YEARS OF GREAT SAVINGS & NEW PRODUCTS

CLICK & COLLECT

12,000+ PRO ONLINE



GET YOUR FREE COPY NOW!

- IN-STORE
- ONLINE
- PHONE

0844 880 1265

MITRE SAWS

TC-SM2131

EVOLUTION

FROM ONLY **£56.99** EXC.VAT
£68.99 INC.VAT

Quality Range of Mitre saws and blades in stock

MODEL	BLADE DIA/ BORE (mm)	MAX CUT DEPTH/CROSS	EXC. VAT	INC. VAT
Einhell TC-MS 2112 Evolution	210/30	55/120mm	£57.99	£69.99
Einhell TC-SM2131#	210/30	62/130mm	£119.98	£143.98
Einhell SM2534#	250/30	75/140mm	£159.98	£191.98

Laser Guide # Sliding Compound

Clarke MORTISING MACHINE

CBM1B

Accurately creates deep square recesses

- Table size 150 x 340mm
- Max. chisel stroke 76mm
- Robust cast iron base & column ensures stability & accuracy
- 95mm depth of cut

£169.98 EXC.VAT
£203.98 INC.VAT

CHISELS AVAILABLE FROM **£8.39** INC.VAT

"Just and accurate with a good solid feel... Excellent value for money." See www.machinemart.co.uk

Clarke BENCH BANDSAWS

TC-SB200

FROM ONLY **£99.98** EXC.VAT
£119.98 INC.VAT

Produce fast, precise mitre & longitudinal cuts

- Cuts in wood, plastic, etc.

MODEL	MOTOR	SIZE	EXC. VAT	INC. VAT
TC-SB200	180W	8"	£99.98	£119.98
CBS190	350W	7.5"	£124.99	£149.99

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

QUICK RELEASE FENCE
DRIVE-BELT TENSIONING
SOLID GROUND CAST IRON TABLE

FROM ONLY **£389.00** EXC.VAT
£466.80 INC.VAT

Clarke PROFESSIONAL BANDSAWS

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
CBS300	305mm/12"	165mm	115mm	£389.00	£466.80
CBS350	340mm/14"	225mm	160mm	£479.00	£574.80

Clarke ELECTRIC HEATERS

DEVIL 6003

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

DEVIL 7003

MODEL	VOLTAGE	HEAT OUTPUT KW	EXC. VAT	INC. VAT
DEVIL 6003	230V	1.5-3	£49.98	£59.98
DEVIL 7003	230V	3	£59.98	£71.98
DEVIL 6005	400V	2.5-5	£74.99	£89.99
DEVIL 7005	400V	5	£84.99	£101.99
DEVIL 6009	400V	4.5-9	£119.00	£142.80
DEVIL 7009	400V	9	£139.98	£167.98
DEVIL 6015	400V	5-10-15	£179.00	£214.80
DEVIL 7015	400V	15	£199.98	£239.98
DEVIL 6025	400V	22	£289.00	£346.80
DEVIL 7025	400V	22	£319.00	£382.80
DEVIL 7030	400V	30	£359.00	£430.80

Clarke MITRESAW STAND

CFMSS1

ONLY **£66.99** EXC.VAT
£80.39 INC.VAT

Suitable for most sizes/makes of saw

- Inc. outriggers & rollers

FOLDING MITRE SAW STAND IN STOCK - CONVM1 ONLY **£131.98** INC.VAT

Clarke CONTRACTOR JIGSAWS

CON750

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

*DIY #Professional

MODEL	POWER (W)	DEPTH OF CUT (WOOD/STEEL)	EXC. VAT	INC. VAT
Clarke CJS380*	420W	55/6mm	£14.99	£17.99
Clarke CON750#	750W	80/10mm	£27.99	£33.58
Bosch PST700C*	500W	70/4mm	£44.99	£53.99

Clarke ROUTER TABLE

CRT-1

Router not included

Converts your router into a stationary router table

- Suitable for most routers (up to 155mm dia. Base plate)

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

Clarke ELECTRIC POWER FILE

CPF13

Variable belt speed

- Tilting head

FROM ONLY **£44.98** EXC.VAT
£53.98 INC.VAT

was £71.98 inc.VAT

Clarke DETAIL SANDERS

CDS-1V

FROM ONLY **£19.98** EXC.VAT
£23.98 INC.VAT

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

MODEL	WATTS	EXC. VAT	INC. VAT
PS105	105W	£19.98	£23.98
RT-0S13	130W	£22.99	£27.99
CDS-1V	280W	£28.99	£34.79

Clarke 13" MINI WOOD LATHE

CWL325V

FROM ONLY **£149.98** EXC.VAT
£179.98 INC.VAT

Ideal for enthusiasts/hobbyists with small workshops

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

Clarke DRILL PRESSES

CDP152B

FROM ONLY **£66.99** EXC.VAT
£80.39 INC.VAT

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

B = Bench mounted F = Floor standing

MODEL	MOTOR (W)	SPEEDS	EXC. VAT	INC. VAT
CDP5FB	350 / 5	5	£66.99	£80.39
CDP102B	350 / 5	5	£79.98	£95.98
CDP152B	450 / 12	12	£134.99	£161.99
CDP202B	450 / 16	16	£179.98	£215.98
CDP10B	370 / 12	12	£194.99	£233.99
CDP352F	550 / 16	16	£219.00	£262.80
CDP502F	1100 / 12	12	£499.00	£598.80

Clarke ROUTERS

CR2

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

Powerful heavy duty machines ideal for trade and DIY use

CR2 INCLUDES 15 PIECE KIT WORTH OVER £20

Clarke GRINDERS & STANDS

FROM ONLY **£32.98** EXC.VAT
£39.59 INC.VAT

Stands come complete with bolt mountings and feet anchor holes

6" & 8" AVAILABLE WITH LIGHT

STANDS FROM ONLY **£47.98** INC.VAT

Clarke BISCUIT JOINTER

BT-BJ900

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

11000rpm Operating Speed

- 860W Motor
- 14mm Cutting Depth
- Inc. dust bag and storage case

Clarke SCROLL SAWS

CSS16VB

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

50mm max cut thickness

- Air-blower removes dust from cutting area
- Table tilts 0-45°

MODEL	MOTOR	SPEED RPM	EXC. VAT	INC. VAT
CSS400B	85W	1450	£79.98	£95.98
CSS16VB	90W	550-1600	£89.98	£107.98
CSS400C	90W	550-1600	£109.98	£131.98

Clarke DOVETAIL JIG

CDTJ12

FROM ONLY **£54.99** EXC.VAT
£65.99 INC.VAT

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

Clarke CR1C

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

CR1C

MODEL	MOTOR (W)	PLUNGE (mm)	EXC. VAT	INC. VAT
CR1C*	1200	0-50	£44.99	£53.99
Bosch	1400	0-55	£79.98	£95.98
PO1400ACE				
CR2	2100	0-60	£119.98	£143.98

Clarke POLISHING KITS

FROM ONLY **£27.59** INC.VAT

With sanding belt 6" whetstone & 6" drystone

MODEL	DUTY	WHEEL DIA.	EXC. VAT	INC. VAT
CBG6RP	DIY	150mm	£32.99	£39.99
CBG6RZ	PRO	150mm	£42.99	£51.99
CBG6RSC	HD	150mm	£34.99	£65.99
CBG6S8P	PRO	150mm	£34.99	£65.99
CBG6RWC	HD	150mm	£39.98	£71.98
CBG8W*	(wet)	150/200mm	£56.99	£68.99

VISIT YOUR LOCAL SUPERSTORE

BARNESLEY Pontefract Rd, Barnsley, S71 1EZ B'HAM GREAT BARR 4 Birmingham Rd. B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills BOLTON 1 Thynne St. BL3 6BD BRADFORD 105-107 Manningham Lane. BD1 3BN BRIGHTON 123 Lewes Rd. BN2 3QB BRISTOL 1-3 Church Rd, Lawrence Hill. BS5 9JJ BURTON UPON TRENT 12a Lichfield St. DE14 3QZ CAMBRIDGE 181-183 Histon Road, Cambridge. CB4 3HL CARDIFF 44-46 City Rd, CF24 3DN CARLISLE 85 London Rd, CA1 2LG CHELSEA 84 Fairview Road, GL52 2EH CHESTER 43-45 St. James Street, CH1 3EY COLCHESTER 4 North Station Rd. CO1 1RE COVENTRY Bishop St. CV1 1HT CROYDON 423-427 Brighton Rd, Sth Croydon DARLINGTON 214 Northgate, DL1 1RB DEAL (KENT) 182-186 High St. CT14 6BQ DERBY Derwent St. DE1 2ED DONCASTER Wheatley Hall Road DUNDEE 24-26 Trades Lane. DD1 3ET EDINBURGH 163-171 Piersfield Terrace	01226 732297 0121 356 7977 0121 771 3433 01204 365798 01274 390962 01273 915999 0117 935 1060 01283 564 708 01223 326275 029 2046 5424 01228 991666 01242 514 402 01244 311258 01206 762831 024 7622 4227 020 8763 0640 01325 380 841 01304 373 434 01332 290 931 01302 245 999 01382 225 140 0131 659 5919	EXETER 16 Trusham Rd, EX2 8QG GATESHEAD 50 Lobley Hill Rd, NE8 4YJ GLASGOW 280 Gt Western Rd, G4 9EJ GLOUCESTER 221A Barton St. GL1 4HY GRIMSBY ELLIS WAY, DN32 9BD HULL 8-10 Holderness Rd, HU9 1EG ILFORD 746-748 Eastern Ave. IG2 7HU IPSWICH Unit 1 Ipswich Trade Centre, Commercial Road LEEDS 227-229 Kirkstall Rd. LS4 2AS LEICESTER 69 Merton Rd, LE4 6PN LINCOLN Unit 5, The Pelham Centre, LN5 8HG LIVERPOOL 80-88 London Rd, L3 5NF LONDON CATFORD 289/291 Southend Lane SE6 3RS LONDON 6 Kendal Parade, Edmonton N18 LONDON 503-507 Leas Bridge Rd, Leyton, E10 LONDON 100 The Highway, Docklands LONDON Unit 1, 326 Dunstable Rd, London L4 8JS MAIDSTONE 57 Upper Stone St, ME15 6HE MANCHESTER ALTRINCHAM 71 Manchester Rd, Altrincham MANCHESTER CENTRAL 209 Bury New Road M8 8DU MANCHESTER OPENSHAW Unit 5, Tower Mill, Ashton Old Rd MANSFIELD 169 Chesterfield Rd, South	01392 256 744 0191 493 2520 0141 332 9231 01452 417 949 01472 354435 01482 223161 0208 518 4286 01473 221253 0113 231 0400 0116 261 0688 01522 543 036 0151 709 4484 0208 695 5684 0208 8803 0861 020 8558 8284 020 7488 2129 01582 728 063 01622 769 572 0161 942 666 0161 241 1851 01621 233 876 01623 622160	MIDDLESBROUGH Mandale Triangle, Thornaby NORWICH 282a Heigham St. NR2 4LZ NOTTINGHAM 211 Lower Parliament St. PETERBOROUGH 417 Lincoln Rd, Millfield PLYMOUTH 58-64 Embankment Rd, PL4 9HY POOLE 137-139 Bournemouth Rd, Parkstone PORTSMOUTH 277-283 Copnor Rd, Copnor PRESTON 53 Blackpool Rd, PR2 6BU SHEFFIELD 453 London Rd, Heeley, S2 4HJ SIDCUP 13 Blackcliff Parade, Blackcliff Rd. SOUTHAMPTON 516-518 Portsmouth Rd. SOUTHEAST 1139-1141 London Rd, Leigh on Sea STOKE-ON-TRENT 382-396 Waterloo Rd, Hanley SUNDERLAND 13-15 Ryhope Rd, Grangebottom SWANSEA 7 Samlet Rd, Llansamlet, SA7 9AG SWINDON 21 Victoria Rd, SN1 3AW TWICKENHAM 83-85 Heath Rd, TW1 4AW WARRINGTON Unit 3, Hawley's Trade Pk. WIGAN 2 Harrison Street, WN5 9AU WOLVERHAMPTON Parkfield Rd, Bilston WORCESTER 48a Upper Tything, WR1 1JZ	01642 677881 01603 766402 0115 956 1811 01733 311770 01752 254050 01202 719713 023 9265 4771 01772 703263 0114 258 0831 0208 3042089 023 8055 7788 01702 483 742 01782 287321 0191 510 8773 01792 792969 01793 491717 020 8892 9117 01925 630 937 01942 323 785 01902 494186 01905 723451
--	---	--	---	--	--

25669RH

Calls to the catalogue request number above (0844 880 1265) cost 7p per minute plus your telephone company's network access charge

For security reasons, calls may be monitored. All prices correct at time of going to press. We reserve the right to change products and prices at any time. All offers subject to availability, E&OE.

OPEN 7 DAYS

4 EASY WAYS TO BUY...

- IN-STORE 65 SUPERSTORES
- ONLINE www.machinemart.co.uk
- MAIL ORDER 0115 956 5555
- CLICK & COLLECT



INTERNATIONAL BOATBUILDING
TRAINING COLLEGE
— LOWESTOFT EST 1975 —

Boatbuilding - Joinery - Furniture
Professional instruction in a friendly working environment



International Boatbuilding Training College
Sea Lake Road, Oulton Broad, Lowestoft, Suffolk. NR32 3LQ
info@ibtc.co.uk | www.ibtc.co.uk | 01502-569663

Christmas Contemporary

Craft Fair



Craft
Fair ticket
also includes
admission to
the Garden



RHS Garden
WISLEY
23 - 27 November

9am - 6pm Daily Wednesday - Saturday
9am - 5pm Sunday

Free Craft fair entry for RHS members
Adults £10 • RHS member's guest £7

Book in advance and save!
See website for details



craft
IN FOCUS

www.craftinfocus.com T: 01622 747325

TOISHI OHISHI

SUPERIOR JAPANESE WATERSTONES

Favoured by Lie-Nielsen Toolworks in the USA for
edge preparation, honing and final polishing.

Available from *Classic Hand Tools Ltd*
and *G&S Specialist Timber*.

Single Grit Stones:

- 220 - £34.22 • 600 - £34.69 • 1000 - £43.09 • 3000 - £46.69
- 6000 - £59.89 • 8000 - £73.20 • 10000 - £93.60

Combination Stones:

- 1000/3000 - £39.49 • 1000/6000 - £57.49 • 1000/8000 - £64.50
- 3000/8000 - £64.69 • 3000/10000 - £81.00 • 6000/10000 - £82.50
- Nagura Stone - £13.09

Classic Hand Tools®

G&S Specialist Timber,
Penrith,
Tel: 01768 891445
www.toolsandtimber.co.uk



Tel: **01473 784983** • www.classichandtools.co.uk • sales@classichandtools.co.uk

Please note that all digital photos need to be greater than **1MB** in size to guarantee sufficiently good reproduction for the printed page

In your own write...

Here are just some of the latest letters we've received since the last issue. Drop us a line on paper or via screen and keyboard to add your voice to the woodworking crowd; you might be one of the lucky few who will manage to get their hands on a coveted *Woodworker* badge!

The Woodworker
& Woodturner

SNAIL MAIL OR EMAIL?

You can write to us at *The Woodworker*, MyTimeMedia Ltd, Suite 25, Eden House, Enterprise Way, Edenbridge, Kent TN8 6HF or send an email to editor.ww@mytimemedia.com

WHAT A COINCIDENCE!

Hi Mark, how's this for a coincidence. While on holiday in the Lake District recently we visited an antique emporium in Coniston. My son-in-law, knowing I subscribe to *The Woodworker*, drew my attention to three old copies of the magazine dating from the '50s sitting forlornly on a shelf. I snapped them up for a bargain £1 each and over the next few days they provided me with a trip down memory lane, to the time when I was a boy.

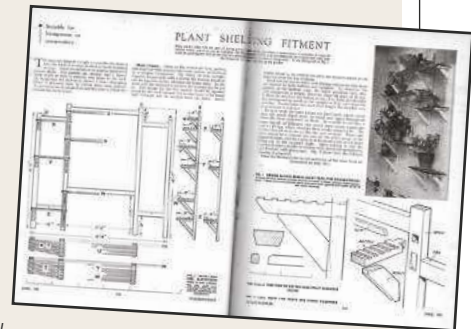
Imagine then my surprise on our return, when this month's issue of *The Woodworker* dropped through the letter box and, lo and behold, included a look back at an article on shelving 'suitable for the living room or conservatory' featured in the

June 1957 issue; one of the three I bought! What are the chances as they say! All the best, **Dennis Knight**

Hi Dennis,

Well that's great, and a very good example of the sort of happy coincidences that brighten up our lives. Fond memories play a large part in the continuing popularity of artefacts from the past; I always get wistful when I see G-Plan furniture and similar, as it reminds me of days spent working in the bedding and furniture department of a local department store as a Saturday boy.

Mark



Dennis' bargain selection of WW mags coincidentally included the wall bookshelf that was featured in the last issue

ADVERTISING SPACE VS EDITORIAL DEBATE

Hi Mark,

I don't normally whinge but I have to write and have my say about the October issue of *The Woodworker*, which I have just purchased. My gripe is that it is a total rip off as it appears that I have paid £4.50 for a load of adverts. This really annoys me because I buy these magazines to see woodworking and projects; I can get plenty of ads elsewhere for free. Best wishes, **Michael**

Hello Michael,

I'm sorry you felt that way and have to agree that there are quite a few ads in the mag. Print publishing is not really thriving at the moment, and the sad truth is that we need the advertising revenue to keep going. I'm optimistic that the situation will improve, however, and hope that you will be patient and perhaps pick up a copy again some day. In the mean time, if anyone has any ideas to help, we'd love to hear them. Write to me, Mark Cass, on my new email address: editor.ww@mytimemedia.com. Mark

EDUCATING OTHERS

Good Day, Mr. Cass,

I am writing to ask for permission to reproduce and display select articles from *The Woodworker* written by Mr. Charles Hayward. I am a member of a non-profit organisation called The Forge located in Greensboro, North Carolina. We are a community 'makerspace' and have recently completed an updated wood shop for our members' use. The figures and/or articles we would like to display would illustrate basic woodworking techniques and be used for educational purposes. These displays would only appear in our wood shop and not be distributed or sold. Our web presence is: www.forggreensboro.org.

Thank you for your time.

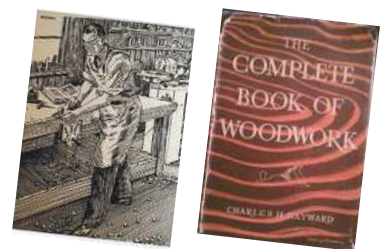
Stephen Klepper

Hi Stephen,

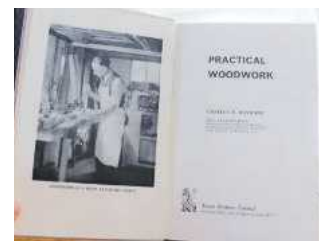
I'm only too glad to hear about your plans to help educate your members and workshop visitors, and I'm sure Charles Hayward would have been, too. He spent a large part of his life

and energies bringing woodworking knowledge and wisdom to the world, and it's great that he's still doing so. Good luck with the makerspace and all who work and create there.

Mark



The Books of Charles H. Hayward are still the definitive traditional reference source for English woodworking



As Charles rightly said: "woodwork is a most satisfying craft"

Photographs courtesy of www.sawdustandwoodchips.com

GET IN TOUCH!

Don't forget, we're always keen to see your photos, so please don't hesitate to send them in if you've snapped something of interest recently. Email me at the new address: editor.ww@mytimemedia.com

Froward & UPWARD

Beginning with a froe and ending with a smoother, Robin Gates converts an ash log in his quest to become more self-sufficient in timber



1 Ash from the log, planed flat, square and ready for use

I'm passionate about using hand tools but when it comes to buying timber at the local DIY store, my message of independence from machinery grows quiet as a solar-powered megaphone on the dark side of the moon.

Much as I would like to think otherwise, behind the racks of planed square-edged timber there is not an army of broad-shouldered carpenters beavering away with pit saw, axe and jack plane, but a sophisticated milling operation burning more watts per day than James Watt generated in his lifetime, and the timber isn't delivered here by horse-drawn wagon but diesel-driven truck. The noisy, dusty machinery-driven work we hand tool aficionados like to avoid has been done for us, out of sight and out of mind.

A relationship with trees

Now in an effort to rebalance my relationship with trees, I am on a quest to become at least partially self-sufficient in timber, and to convert it from the log using hand tools.

Aside from the sheer physical effort involved, the things which weigh most against me are impatience and the need to be organised. I've grown used to working



2 Sawing the forked end square using the big bench stop

out what timber I need and buying it the same day. If my quest is going to succeed, I'll have to convert timber today for things I want to make next year. But for small-scale amateurs like myself, I'm convinced it's feasible. It's like growing fruit and vegetables: a cycle of events. As a seasoning timber approaches readiness for use, so a new green log is split to maintain the supply, just as another crop must be planted to follow those flowering and bearing fruit. The timber rack takes on the dynamics of the allotment with several varieties at different stages of development maturing towards harvest.

I've been working with 'found' timber carried home as small logs and branches for years but until now I've used it in forms not far removed from its natural state – simply rounded to make tool handles, hollowed out to make pots, or split and roughly shaped as legs for tripod stools. The object now is to hone my technique and convert a log into regular PSE planks, which I might use for joinery.

Ash & carry

As luck would have it, the first log I carried home in autumn when this project crystallised was a piece of ash left over



from some roadside tree surgery, about 150mm diameter and 450mm long, and I couldn't have hoped for better. Larger pieces were there to be had but there's a limit to what I can carry while walking the dog.

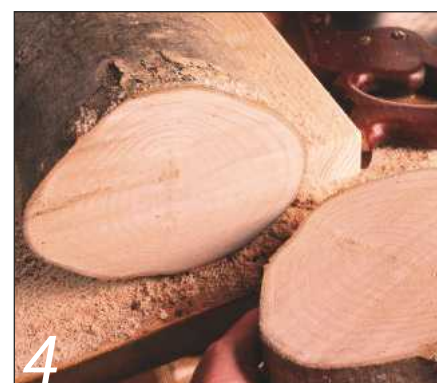
The resilient timber of our native ash (*Fraxinus excelsior*) has been a mainstay of rural industry for generations but now it is under threat of extinction from ash dieback caused by the microscopic fungus *Chalara fraxinea*. Let's hope a disease-resistant strain is found to keep this totem of the country carpenter alive. Meanwhile, if a healthy piece of ash comes to hand, it's worth making something from it while you still can.



Since the end of this log was forked and I needed to saw it square (**photo 2**), I used my long bench stop to support it – adding a new dog hole to the bench for the purpose (**photo 3**). Any excuse to have a twirl with my favourite Scotch iron brace and bit! The bench stop is attached by off-the-shelf door stops, which are a snug fit in 25mm holes. The sawn end displayed annual rings turning elliptical near the fork but neatly concentric, suggesting this part of the tree had grown vertically and that boded well for a tidy split (**photo 4**). But there were some scars of long-departed branches hinting at knots lying in wait.



3 Adding a dog hole to extend the range of the bench stop



4 Concentric growth rings of vertically-grown wood bode well for splitting



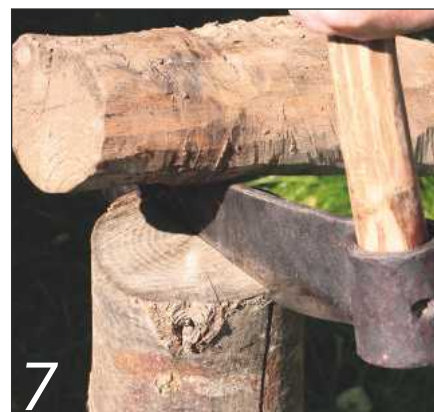
5

The Quirky Quercus froe is forged with a curved edge



6

A one-piece forging has no weak spot of a weld at the handle eye



7

A blow from the elm maul opens a split in the end-grain



8

Levering the handle to twist the blade and extend the split

Split-start

Froe struck me as an odd name for a tool and so I looked it up in Chambers Dictionary and found not only that it comes from 'froward' meaning 'in a direction away from' but a neat definition: 'a cutting tool with a blade at right angles to the handle, used especially for splitting wood.' No need to elaborate on that, then; it was just what I needed to split-start my log conversion project.



9

The ash log split into four...



10

... then eight, and finally 16

A bit of research led me to Quirky Quercus – www.quirkyquercus.co.uk – a blacksmith and green timber business in Devon. They make oak gates and hurdles using their own tools, so I reckoned they would know how to make a good froe, and I have not been disappointed (**photo 5**). Every hand-made tool is an individual but mine has a 270mm edge, and was forged from 8mm high-carbon spring steel. It has a bevel on one side and, unusually, a gentle curve, which helps with placing the edge and getting it started. Another good feature is the rolled eye for the handle, which avoids the potential weak spot of a weld (**photo 6**). Since buying mine direct from Quirky Quercus (current price £45 including

P&P) I've noticed they also supply Toolnut – www.toolnut.co.uk.

With its iron mass hanging to one side the balance of the L-shaped froe takes some getting used to. Green woodworkers use it almost horizontally when splitting poles supported by the cross-pieces of a brake, working it forwards (frowards) and with great skill to keep the split running true, but here it was convenient to stand the log on end and use the froe vertically – requiring little skill at all. Taking my cue from a pre-existing split in the end-grain, one smart blow from the maul on the back of the froe got the tool started (**photo 7**), a couple more blows pushed it along the weak planes of medullary ray, and a twist



Hewing away splinters with the carpenter's axe

of the blade using the handle as a lever divided the log in two (photo 8).

A froe is more user-friendly than an iron wedge and sledge hammer, and certainly less dramatic than swinging a heavy splitting axe through the air. The froe's edge is always resting on or in the wood while the maul lands well away from the worker.

The process was repeated to yield quarters (photo 9), eighths and finally sixteenths (photo 10) of the original log which, bounded by the sheets of medullary ray radiating like spokes in a wheel, had a wedge-shaped section. The only failure occurred where a hidden knot came to



Oops! Where grain swerved around a knot the split ran to the side



Sawing out awkward knots



Riven wood has a triangular cross-section

light, and the grain swerving around it sent the split out to the side (photo 12).

The great advantage of riving or cleaving over sawing is that it yields timber with end-to-end grain, preserving the natural strength developed in the tree. This gains significance when the timber is stressed, in which situation sawn timber is prone to split where the short grain comes to the surface. Riven timber taken from the log's radius is also more stable because it seasons with less shrinkage. Timber sawn tangentially tends to cup and warp as it dries.

The next step was to hew away the most threatening splinters with the carpenter's



Honing the drawknife using a carborundum oil stone



Using the drawknife on wood gripped by the grown ash holdfast



Convolute curls of a shaving from the drawknife



Ash stacked between sticks to dry for five months



Planing aslant on the wedge-shaped timber

axe (photo 12) and do some preliminary smoothing of rough faces with the drawknife. Wood fresh from the froe with its wedge-shaped section and uneven surfaces poses a clamping problem for fixed vices with large parallel jaws, but my grown ash holdfast made from a branched bough proved just the job, bearing down firmly on the work and being rapidly adjustable by a wallop here or there from the mallet (photo 16). Even so, the tear-out around knots in this green wood was a concern so, although it hurt to be wasting length at this stage, I sawed out the worst offenders after which the drawknife ran more smoothly.

I find the drawknife so addictive that I'm in danger of wasting a piece of timber to the thickness of a lolly stick. It's the shavings that do it, falling away in convoluted curls like old clock springs



The wood was clamped between dogs using thin ash wedges for initial planing

(photo 17). Reluctantly I rested the drawknife and put the wood aside to dry, stacking it between slats to let the air flow through (photo 18).

No plane, no gain

Taking a harsh view of progress thus far, until this wood was planed flat and square I hadn't gained more than a heap of kindling, so after five months seasoning in the shed, I decided to warm away the February frost with a spell of planing.

Although I thought I'd flattened a few faces with the drawknife, when it came to planing I found their flatness was only relative – like the South Downs are flatter than the Himalayas – because they lay on the bench rocking and rolling like stranded fish. If I was to turn these rough-faced wedges into little flat boards of usefulness, I needed to hold them still.

The pieces were too narrow to grip directly with a holdfast, which would get in the way of the plane, while the thin edge of their wedge-shaped section (photo 19) rendered my otherwise invincible Parry & Bott portable woodwork vice useless. Initially the solution was to improvise a system of short bench dogs and wedges (photo 20), using offcuts of a sweet



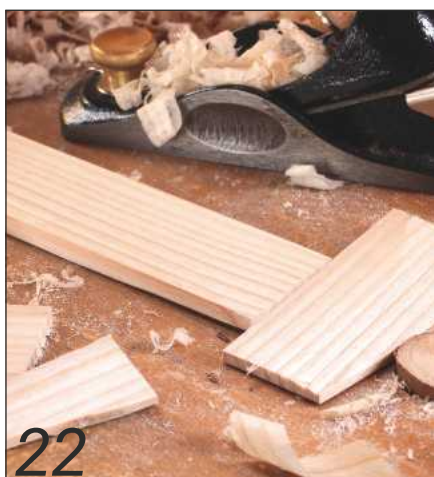
An approximately 6° slope gave the wedge good holding power

chestnut walking stick in the dog holes and thin wedges cut from the ash itself. With an approximately 6° slope (photo 21) on a wedge knocked into the gap between timber and dog, everything locked solidly. An advantage of this all-wood setup was that no damage was done when my over-enthusiasm with the plane sent a freshly-honed blade slicing into it.

I began with the jack plane which, at 420mm overall, was only marginally shorter than the longest wood being worked beneath it. With each pass the wood disappearing under the toe emerged from the heel a little flatter, but as the shavings piled up, so the piece also grew thinner and a new clamping problem was drawing nigh. With only 4 or 5mm of bench dog in play the narrow pieces of timber, as yet imperfectly flat, were popping out of captivity as the wedges gave way. A more secure system was needed.

Bird's mouth batten

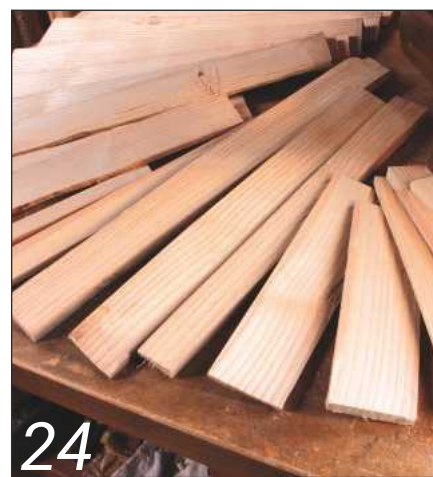
Once again, the timber itself came to the rescue as a piece of ash with excessive tear-out proved ideal for making a bird's mouth batten. With a 90° notch cut in one end, the bird's mouth batten takes the place of a tail vice in clamping the timber being



A short piece wedged between adjacent dog holes



A shorter piece held against a dog with one hand while using the block plane



The ash harvest after initial planing



25
Using one bird's mouth batten to make another, clamped by a 'walking stick' holdfast

planed; the opposite end of the timber butts against a bench dog as usual.

The batten was immobilised by another of my home-made holdfasts, this one being cut from the crook end of a sweet chestnut walking stick – a delightfully simple, cheap and effective tool (**photo 25**).

A refinement to the batten method was to cut a half-moon in the free end and butt this against the shank of the holdfast, so that it could pivot to find its best position yet be even more firmly anchored when the holdfast was knocked tight (**photo 26**). A softwood block between holdfast and batten made an 'auxiliary beak' spreading the down force more widely (**photo 27**).

After sawing out knots I had a range of lengths of timber to plane, but with one short and one long batten and several dog holes to locate the holdfast there were enough permutations to clamp everything firmly. Now I could get to work with the smoothing plane, and pretty soon the bench was flooded with an ocean of tissue-thin shavings.

With flat faces in its grip, the portable vice (**photo 30**) proved its worth when the edges were planed, because its L-shaped jaws



26
The planing setup of holdfast and pivoting bird's mouth batten used for thin, narrow timber

enabled the bench top to support the work. After so many manoeuvres with wedges and battens, it was a relief to clamp a piece of wood simply by turning a handle!

Possibilities

As the splintery edges grew smooth and straight beneath the plane, leaving ribbons of ash looping around the guide bars of the vice, I saw that converting logs into usable timber by hand tools alone has real possibilities.

A log of this diameter was never going to yield the timber to build a bookcase, and after the irregularities had been ironed out my best pieces had shrunk to 50mm wide × 8mm-thick – enough for a small box or two, I hope, but they are of a species unavailable anywhere in town and produced with a carbon footprint as small as home-grown spuds.

In practical terms, this ash has a strength and stability in its long grain that only comes from cleft timber, not to mention its own subtle beauty in the cappuccino stripes of the annual rings and the lustrous threads of ray running through them. Now I can't wait to repeat the process with larger logs from more of our native trees. [www](http://www.getwoodworking.com)



27
A softwood block spreads the down force of the holdfast beak, here being tightened with my branchwood mallet



28
The right-angled notch of the bird's mouth batten clamps the work



30
Edge planing with the Parry & Bott portable woodwork vice



29
View from the bench dog end

FURTHER INFORMATION

Quirky Quercus

Tel: 07896 876 088

Web: www.quirkyquercus.co.uk

Toolnut Limited

Tel: 01424 224 269

Web: www.toolnut.co.uk

In brief...



ERGONOMICALLY DESIGNED PRO COMFORT SCREWDRIVERS

This new range of Pro Comfort Screwdrivers from IRWIN Tools features a unique distinctive handle designed especially for an enhanced ergonomic grip, giving added comfort, performance and efficiency. They are available in a core range, covering the most popular tip types and sizes, including Phillips, Slotted, Pozidriv, Torx and Parallel heads. Available to purchase individually or as part of 10-, nine- and six-piece sets.

Each screwdriver features a dual material (polypropylene and rubber) covered trilobular handle for an ergonomic grip; Chrome-Vanadium (Cr-V) steel shaft with corrosion protection; a black phosphate finished magnetic tip for improved alignment, easy driving and extended life; a Hex bolster, which allows for increased torque when using with a wrench and there is also a Magnetiser/demagnetiser accessory available.

This new range of Pro Comfort Screwdrivers and VDE Insulated Screwdrivers, for electrical work up to 1,000V AC, are available at leading tool stockists. Prices start from £2.82 per screwdriver; see www.irwin.co.uk to find out more.

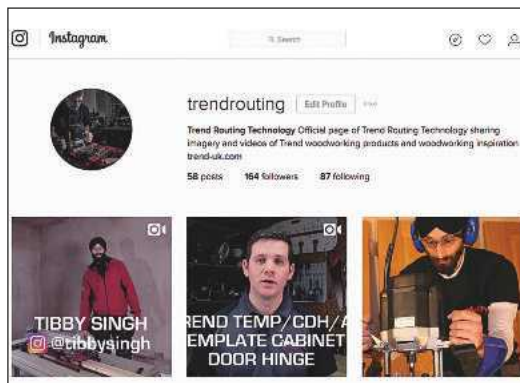
TREND LAUNCH INSTAGRAM PAGE

Trend Machinery and Cutting Tools Ltd are pleased to announce the launch of their official Instagram page. Head of Marketing, Luke Hulley, comments: "We have seen our Facebook page rise significantly over the last 18 months and we are always looking at other ways to engage with our customers. Trend's new Instagram page will share photos and videos and we look forward to using this platform to engage with our valued customers."

BBC Young Carpenter of the year Tibby Singh will also be sharing tips via the new page. Tibby adds: "I was delighted to support Trend's Instagram page; I look forward to

sharing my work and any handy tips I can come up with to help fellow woodworkers."

To follow the page, visit www.instagram.com and search for [@trendrouting](https://www.instagram.com/trendrouting).



ROUTING A CABINET DOOR ESSENTIAL!

Trend is excited to also be introducing a new Cabinet Door Hinge routing template. The template allows a plunge router to create a 26mm or 35mm diameter blind hole recess, for a circular cabinet door hinge. The hard-wearing 12mm-thick high-pressure laminate template has an adjustable alloy edge guide for adjustment of recess position from top or bottom of the door, which can be removed for middle hinge recess. Pin guides allow for 3mm and 5mm location holes to accurately position the recesses relative to the edge of the door, and are reversible for left- and right-hand doors and engraved centre sight lines allow for ease of positioning. The Cabinet Door Hinge Template is priced at £71.93 and is available from all Trend Routing Centres; see www.trend-uk.com.



N.E.J STEVENSON CREATES LUXURY OAK CASK FOR EXCLUSIVE WHISKY

Bespoke furniture company N.E.J Stevenson has completed its latest luxury commission, creating an exceptional oak box encased in emerald leather with a rare Indian goat skin interior, to house the final whisky in The Macallan in Lalique Six Pillars Collection.

The box is veneered in burr oak with inlaid mirror polished copper sheet. The interface

between the two materials proved an especially challenging element of the project, requiring the two sections to be made and fitted, then independently polished before being reassembled. Internally, the company has created a hinged section that holds a book.

N.E.J Stevenson has created 450 boxes in a complex process where the company's precise attention to detail and exceptional craftsmanship have shone through at every stage, from veneering to assembly, inlaying the copper and creating the interiors to be covered in leather. The copper has been polished and lacquered by Osprey and the leather work has been undertaken by Shepherds book binders.

The final decanter in this global sell out collection is named the 'Peerless Spirit',

which features a 65-year-old whisky from The Macallan – one of the oldest and rarest to be released from the distillery – and is housed in N.E.J Stevenson's green leather and oak box. "To be a part of such a renowned series is a great privilege and is the perfect platform for us to showcase our craftsmanship," says Neil Stevenson, Managing Director of N.E.J Stevenson. "After all, in the same way that the finest whisky is created with crucial attention to detail, we also believe that a bespoke commission such as this requires a great deal of skill, care and attention in its craftsmanship."

The decanter and cask is set to retail at approximately \$35,000 USD and only 450 individually numbered pieces have been created. For more information, see www.nejstevenson.co.uk.

BALANCE SYSTEMS INNOVATIONS

ARE PROUD TO INTRODUCE
OUR **NEW 120 SERIES**



The totally concealed balance system that fits into the sash!

FEATURES

- Totally concealed in sash
- Full sash travel (no need for stops)
- Innovative block and tackle system
- Easy to fit (only a screwdriver needed)
- Greater thermo-dynamic properties
- Specific for each window
- Pre-tensioned – no adjustment
- Carries sash weight up to 40 Kilos
- Smooth sash ride
- Competitively priced
- Maintenance free
- 10 year warranty
- No grease
- Available from stock



CALL US TODAY

**01234
712085**

info@sashbalance.co.uk

UNIT 15, STILEBROOK ROAD
YARDLEY INDUSTRIAL ESTATE
OLNEY, BUCKINGHAMSHIRE MK46 5EA

Quality Tools to match our Service



Mouldings



**Certified
Hardwoods**



Top quality
hand tools

Toishi-Ohishi
Japanese
Waterstones

Drilling Tools made to the
highest standard

COLT
PROFESSIONAL TOOLS

**G&S
Specialist
Timber**

TOOLS AND MACHINERY

www.toolsandtimber.co.uk

you can order online now



pfeil

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

G&S SPECIALIST TIMBER

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

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



**Wood
Workers
Workshop**



01684 594683

www.woodworkersworkshop.co.uk

The Threshing Barn, Welland Road,
Upton upon Severn, Worcestershire, WR8 0SN

INCAR

Woodpeckers

WoodRiver

WILCO
WOODWORKING TOOLS

WM
WOODWORKING MACHINERY ROUTER BITS

iGAGING

JessEm
Tool Company

EASY WOOD TOOLS

**Router
Technologies**

Ashley Iles

AUKtools

**THE VERY BEST
WOODWORKING TOOLS**

Sourced by woodworkers
for woodworkers

Quality tools from the finest
UK, US & Canadian manufacturers





For old folks at home

Tony 'Bodger' Scott devises two simple phone supports for his partially sighted mother-in-law

Macular degeneration – an illness which affects the retina, especially in old people – is gradually robbing Agnes of her sight. Agnes is my mother-in-law, a feisty Northumbrian who turned 95 this summer.

Two problems have bedevilled her in recent months; one was dropping the wallphone that opens the front door to her block of flats. She could see so little of the hook that she kept missing it when she was trying to hang up the handset. Another was that, even with a large-number keypad on her regular table top phone, she couldn't see the numbers unless the phone was close to her face. The solution in both cases turned out to be a little bodging.

T-shaped shelf

The first problem has been solved by a T-shaped shelf that butts directly against the wallphone's handset when the handset is in the right place. The shelf – which is notched to make space for the telephone cord –

is simply screwed to the wall and super-glued to the plastic wallplate behind the phone (photo 1).

Phone box with cubbyhole

The second problem took a little more time. Like most elderly folk, Agnes likes to have a variety of things to hand when she's sitting in her favourite chair: her TV remote, her pillbox, her glasses case, and space for a plate of biscuits and a cup of tea (or, just between you and me, a medicinal dram of Bailey's of an evening). So the support – designed to lift the phone about 200mm above the table – had to have a small footprint, but it also had to be stable, strong and light enough to be moved easily at need.

My approach involved tracing the base of the phone on to a piece of paper, and making an open-fronted box from thin pieces of the strongest hardwood I could find in my shed, which turned out to be some old Cuban mahogany.

A flat cutter in a hand-held plunge router



1 A discreet shelf, rebated below the wallplate and carved to funnel the phone cord into the right spot, means that Agnes can now hang up the phone without the risk of dropping it and getting it tangled up in her Zimmer frame



2 Machine-cut mitres on every edge except the front serve to hide all the end-grain. The substantial splines – 16 in all – mean that, although the sides are a mere 6mm-thick and held together only with glue, the box is completely rigid



3 The phone is held solidly into its recess by two bolts that fit through existing holes in the base of the phone. Agnes finds it much easier to use the phone now, and she likes the extra storage space created by the cubbyhole beneath

made short work of copying my traced outline to form a shallow recess in the box's top (photo 2). And to hide the end-grain, I used a 45° cutter on a table-mounted router to cut mitres into three sides of the base, top and sidewalls, and into all four sides of the back of the box. It was then merely a matter of gluing the five pieces together, holding them with masking tape while the glue dried, then reinforcing all the corners with a total of 16 dovetail splines, this time in ash.

Felt pads under the base and a little varnish all over completed the job (photo 3). Oh, and Agnes now has extra space for her bits and pieces, which she loves, thanks to the cubbyhole beneath the phone. **WWW**



Quality • Innovation • Performance

Beyond all expectation



P1CC

Revolutionary Precision Jigsaw

- 9 World patents
- Guaranteed 90 degree accuracy with Mafell CUnex blade
- Takes all standard bayonet fitting blades
- Works on Mafell guide rail system
- 114mm depth of cut
- Powerful 900w CUprex motor



N M A T O O L S . C O . U K
Email: info@nmauk.com Tel: 01484 400488

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

Win BIG with Felder



To celebrate their 60th anniversary, Felder are running a fantastic competition in conjunction with *The Woodworker* and *Good Woodworking* magazines to find three of the best furniture makers across the UK – there's also some great prizes up for grabs

FIRST PRIZE

A3-26 WITH SILENT-POWER® SPIRAL CUTTERBLOCK – WORTH OVER £3,000



Important information

- Due to email server size limitations, please ensure to send low resolution photos. For ease of judging, attach all photos and text to one email rather than sending multiple emails, which could potentially get lost
- Please outline your name, address, age and the piece of furniture you've entered at the start of the email (preferably in the subject heading)
- Please note that finalists must cover the costs of transport to the judging ceremony as well as any costs involved in transporting their piece of furniture
- Entry is open to UK residents with a permanent UK address
- The closing date for entries is 17 February 2017. Pieces will be judged on Friday 17 March 2017, so please ensure you are free on that date in case your entry is chosen as one of the final five
- All entries should be emailed to tegan.foley@mytimemedia.com and should be sent no later than 17 February 2017 – postal entries will not be accepted
- Only one entry per person; multiple entries will be discarded. Employees of MyTimeMedia Ltd and Felder Group UK are not eligible to enter this competition
- To view our competition terms and conditions in full, please visit www.getwoodworking.com/competitions

Over the next three months, we will be running this fantastic competition in conjunction with Felder Group UK to discover who can make the best piece of furniture. The competition is open to anyone over the age of 18, regardless of skill level. The piece you enter can be any size, from a small bedside cabinet up to a large wardrobe – the choice is yours! Simply decide on the piece you'd like to make, document the process, then submit it by following the entry details below.

SECOND PRIZE

FAT 300 AND FELDER WORKTOP SURFACE MULTIPLEX – WORTH OVER £1,200



THIRD PRIZE

£100 TOOLING CREDIT

ENTRY DETAILS

To enter the competition, you must email a selection of step-by-step and process photos of your hand-made piece of furniture, which documents its build from start to finish (no more than eight photos, please), along with a short description of the piece and the processes used to make it (no more than 500 words, please).

Expert judges

Felder Group UK will select five finalists from all those who enter, each of whom will be invited to bring their piece to the Milton Keynes showroom on Friday 17 March 2017 to be judged by an expert panel, consisting of master craftsman and furniture maker, Peter Sefton; award-winning furniture and cabinetmaking expert, John Lloyd; Felder Group UK director, Matthew Applegarth; and *Good Woodworking* editor, Tegan Foley



No other classic circular sawbench comes close when compared to the Scheppach Precisa 6.0. This ultimate circular sawbench boasts a massive solid cast iron table: accuracy to within 1/10th mm: 110 mm depth of cut on solid timbers: up to 1100 mm cutting width and 1400 mm length of cutting stroke with appropriate optional attachments. An adjustable 8-15 mm grooving cutterhead and pre-scoring with integral motor unit is also available on request. Scheppach Precisa Series circular sawbenches are simply the best investment you can make in a classic circular sawbench if quality, precision and performance are included in your priority list. Why would you even consider compromising?

Precisa 6.0
c/w optional Sliding Table Carriage
& Table Width Extension
Professional Series

110 mm
cutting
height

New
increased
prices from
1st December
2017.

SCHIEPPACH
4
YEAR WARRANTY

Simply state
Order
Online
Preferred Supplier



Optional 8-15mm adjustable grooving cutter. (PRO-DUO twin guard assa required for grooving. Part no. 5460 1100).



2 separate hand wheels for precise height & angle settings.



Micro fence setting scale to within 1/10th mm calibrations.



Optional pre-scoring unit with integral motor. Precisa 6.0VR model only. Cannot be retro-fitted.



Upgrade to sliding table carriage with articulated arm. Add £300.00 Ex VAT if ordered with the machine.

What they say:

"I looked at a number of other machines & seriously considered a ** which was £1000.00 cheaper but which is made in China. After considering all the quality & performance issues I chose the Precisa 6.0 & can assure you it is one of the best decisions I have ever made. It is worth every extra penny - and I mean that!"

Mr AC. Wilts.

** Well known respected British brand name quoted but withheld by NMA.

Deutsche
Qualitätsprodukte
seit 1927



Precisa 4.0-P-2
Professional Series



Precisa 3.0-P-1
Workshop Series

Model	Product Group Series	Specification includes (as per quoted price)	HP 240V / 415V	Depth of cut & Length of stroke	Price Exc VAT Plus Carriage	Price Inc VAT Plus Carriage
Precisa 3.0 P-1	Workshop	Inc STC + TWE + TLE (see below for explanation)	3.5 / N/A	90 mm x 1400 mm	£1,208.33	£1,450.00
Precisa 4.0 P-1	Professional	Inc 1.4m STC + TLE (ditto)	3.5 / 5.2	87 mm x 800 mm	£1,800.00	£2,160.00
Precisa 4.0 P-2	Professional	Inc 1.4m STC + TWE + TLE (ditto)	3.5 / 5.2	87 mm x 800 mm	£2,025.00	£2,430.00
Precisa 6.0 P-1	Professional	Inc 2m STC + TLE (ditto)	4.0 / 6.5	110 mm x 1400 mm	£2,400.00	£2,880.00
Precisa 6.0 P-2	Professional	Inc 2m STC + TWE + TLE (ditto)	4.0 / 6.5	110 mm x 1400 mm	£2,600.00	£3,120.00
Precisa VR P-1	Professional	Inc 2m STC + TWE + TLE + scorer (ditto)	4.0 / 6.5 + HP scorer	110 mm x 1400 mm	£2,950.00	£3,540.00

STC = Sliding Table Carriage. TWE = Table Width Extension. TLE = Table Length Extension.

Scheppach Precisa 3.0 is designed by Scheppach in Germany but made in China where Scheppach resident engineers oversee manufacturing quality control. Precisa 3.0 has the same warranty as Professional Series. Scheppach machines have been sold and serviced in the UK by NMA since 1972. Go to nmatools.co.uk and see what users say about NMA inprecedented service.

A quiz from the past **PART 1**

In this excerpt from *The Woodworker* of October 1935, can you guess the 12 tool operations shown that represent the hands of a woodworker engaged in everyday workshop operations? It's not as easy as it looks – good luck!



Since the current *Woodworker* prize fund dried up some years ago, we've not had much in the way of reader competitions, so when I saw this one the other day, I felt it was a good opportunity for a chance to test the mettle of all us woodworkers out there. Originally published in October 1935, this competition would have likely attracted a decent reader response, especially as the prizes offered – Stanley 'Bailey' planes –

were, at the time, highly sought after. Most woodworkers at this time were still using wooden-bodied planes (often home-made) and a top-branded state-of-the-art engineered steel version was a real prize indeed.

Careful handwork

With fewer power tools and technological work aids available, woodworking back then was more disciplined, and careful

handwork was everything. See if you can identify the 12 operations shown above; in lieu of a proper prize I can offer a *Woodworker* badge to anyone who gets the lot, or at least makes a good show and gets close. For the record, my score was an embarrassing five... Email your answers to editor.ww@mytimemedia.com to be sure of submitting them in time.

Mark

Keep a clean sheet

Never has clean been so small.



You'll never work alone.

SERVICE
all-inclusive



Compact, lightweight, mobile. The new CLEANTEC CTL SYS combines all the benefits of Festool SYSTAINERS and mobile dust extractors. Perfectly integrated into the Festool system, the mobile CTL SYS offers a large number of functions and is both easy to use and quiet (67 dB) – ensures maximum cleanliness in dust extraction and final cleaning. It thus not only contributes to high customer satisfaction, but also to keeping you healthy. Never has clean been so mobile. The new CLEANTEC CTL SYS in SYSTAINER format.

Discover it now! Visit your specialist dealer or www.festool.co.uk/CTLSYS

FESTOOL
Tools for the toughest demands

www.festool.co.uk

BOXING clever

In this article I will explain to those who have just discovered woodturning how to turn a box with a lid. I always find turning boxes interesting and enjoyable; it is not too expensive on timber and the equipment required is fairly basic; however, it does require concentration and skill to produce a good, satisfactory result. I will describe and illustrate step-by-step the method I use to turn a basic, parallel-sided box. You are looking for pleasing proportions and one-third lid to two-thirds body usually works well; however, there is also a balance between diameter and height to avoid clumsiness. **WW**

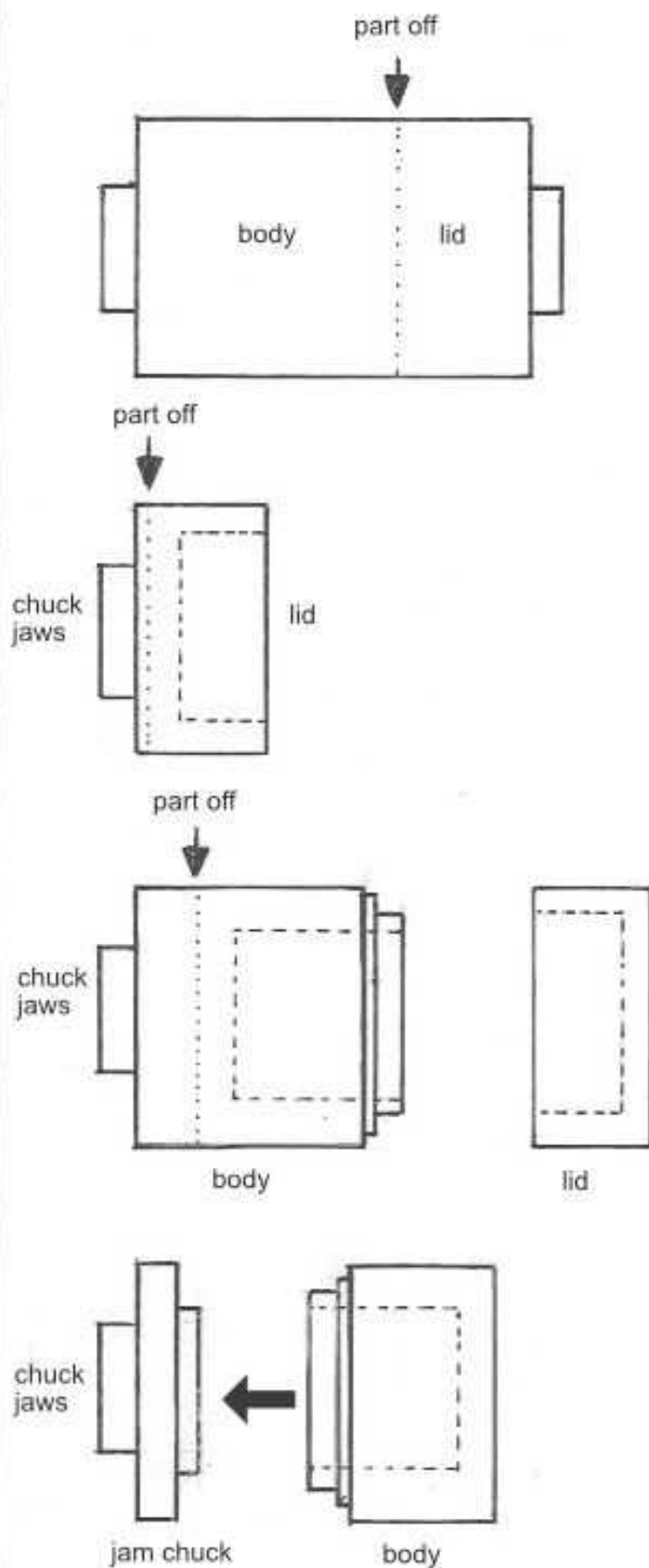
Ian Wilkie takes you through the steps for producing a well-turned box with a lid



I have used boxwood for the example here but most timbers will be suitable as long as the wood is well-seasoned. Here, I am considering buying some beech spindle blanks. Try to avoid knots and faults although sometimes these are not revealed until turning is well under way. I place a good deal of emphasis on finish because when you look at a box the lid is the first thing you notice and any turning marks or blemishes will be obvious; when the lid is removed the inside must also be smooth and attractive. The lid must fit well but not be too tight. Even well-seasoned wood will move and an allowance has to be made for this tendency



For this exercise I am using a Jet Midi lathe with a Record 2000 chuck. This chuck has proved to be excellent. The maximum box diameter I am able to turn on this lathe is in the region of 90mm. I keep my turning tools sharp using the Robert Sorby sharpening system and I always use eye protection and wear a disposable mask when turning



STEP 1

turn to a cylinder with spigots at each end

part off lid

STEP 2

hollow out lid

5mm wall thickness

STEP 3

hollow out body

form a spigot

push on lid

finish top surface

part off body

STEP 4

make jam chuck

push on body & finish underside

DRAWING: TURNING A BOX

ian Wilkie (c) 2016

Fig.1 Steps for turning a basic box



3

Mount a suitably prepared blank or section of branchwood between centres; Steb centres are ideal for this task and grip the wood very firmly. I have a revolving Steb centre in the tailstock and a solid Steb in the headstock. These centres are expensive but they are a good long-term investment. Turn the blank to the round to produce a cylinder



4

Measure the diameter in at least three places to make sure the work is parallel



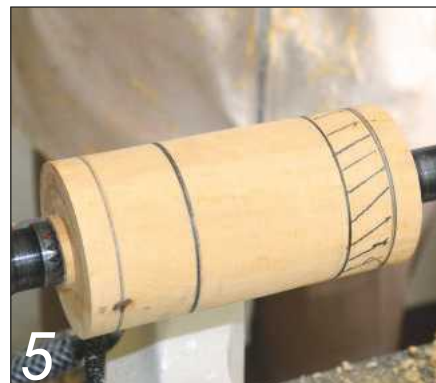
7

Part off along the line to separate the lid from the body



8

Remove the body blank from the chuck and mount the lid



5

Draw lines to indicate the length of the spigot required at each end, the length of the body and the lid; a ratio of one-third lid to two-thirds body looks pleasing. The cross-hatched area in the photo indicates waste wood



6

Turn a spigot at either end to suit the chuck jaws you intend to use. I always keep a gauge with my chuck so that I can quickly check that the diameter and length is correct. This accuracy is important because there is an optimum size for each chuck, which ensures concentricity and a firm grip. Note that this Record 2000 chuck does not need a dovetail form of spigot but many chucks do



9

Measure a wall thickness of 5mm and draw a line



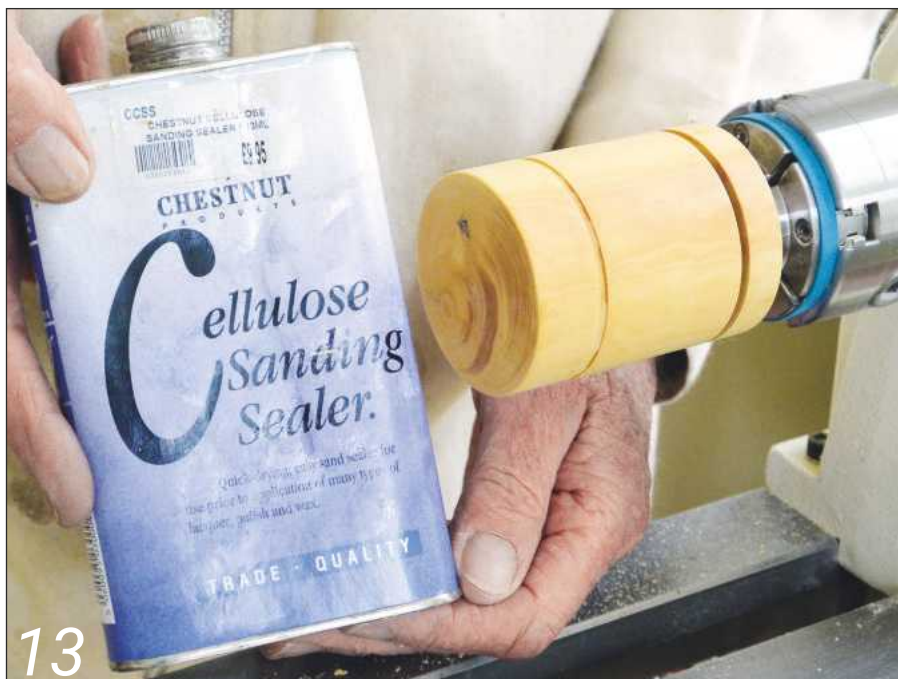
10 Hollow out the lid. A depth gauge is useful to judge how deep to go



11 Remount the body blank and again, mark off the wall thickness



12 Hollow out the body and make a spigot to fit inside the lid. Take very delicate cuts to adjust the diameter of the spigot to produce a satisfactory fit for the lid – this is a matter of judgement. Cut a second very small shoulder on the outer edge of the body. When the lid is in position on the completed box, this secondary recess disguises the fact that the grain does not match up precisely because some of the wood has been removed during parting off



13 Take time to sand the body and lid carefully working through a range of grits and removing any turning marks or blemishes. Examine the work in a good light and when you are satisfied, apply a finish. Cellulose sanding sealer works well to fill the grain but do use it in a well-ventilated workshop as the vapours are strong. Apply one coat and when dry, de-nib gently with 600 grit abrasive and then repeat the action with a second coat



14 Two coats of friction polish applied to the rotating wood will produce a good, lasting shine



15 Part off the box at the base



16 Using the remaining wood left in the jaws, form a spigot to produce a jam chuck



17

Reverse the body on to the jam chuck and turn the base slightly concave so that the box sits firmly on its outside rim. You may wish to add some decorative rings. Sand and apply a finish to match the rest of the box. Note that the blue rubber band shown in the photo does not come with the chuck; it is there to protect my fingers!



18

Give the box a thin coat of wax and buff it up to finish off the job



19

The completed box

VARIATIONS

Once you have mastered the basics, the shape of the box and variations on the lid can be experimented with and here are some examples:



A yew box with a slightly domed lid. This shows the pattern of the grain to its advantage. Yew is exciting to turn because it is full of surprises! On this box, you can clearly see that when the lid and body are lined up, how the small shoulder helps to fool the eye



A box in spalted beech



If a recess is cut in the top surface of a lid, then a contrasting disc of wood, veneer or artificial material, can be inserted to good effect. If you wish to do this, remember to leave more wood in the top when hollowing out. The insert shown here is artificial tortoiseshell



A recessed lid with a frame can take a photograph, a picture, commemorative coin or a miniature embroidery, for example



A collection of boxes. Please pay particular attention to *The Woodworker* Silver Medal in one box lid – those were the days!



**Union Graduate
Long Bed Wood Lathe**

FOR SALE

- Variable Speed - 54" Centres
- Bowl Turning rest and faceplates

£650
Tel: (01449) 612785

TOOLS FOR SALE *Currently in storage in Stevenage*

Would accept an offer for the lot or as individual pieces



*Preferably
buyers
collect*



1. Arcoy Dovetail
2. Plane no 4 1/2 (UK)
3. Plane (record)
4. Drills x 2 (1X Stanley)
5. Buck and Ryan x 2 Hillka x1 s/drivers
6. Sans x 2 Eclipse No 60E & 7CP
7. Draper Vernier
8. Dohm Vice
9. Grinding Wheel
10. Wolf Bandsaw and Drill Plinth
11. Clamps x 2
12. Parmo NO 34 Vice x 3
13. Millers Falls Electric Drill
14. Drill Electric
15. Drill boxed
16. Wolf Grinder Drill/Mill Clamp
17. Ball Pane Hammer x 4
18. Claw Hammer x 2
19. Mallets x 2
20. Rubber Mallets x 2
21. Mallets x 2
22. Mallets x 2
23. Panel Hammers x 4
24. Axes x 2
25. Hammers x2
26. Tin snips
27. Spanners Various
28. G Clamps Various
29. Table Vice Clamps x 4
30. G Clamps x 2 (red)
31. Eclipse Saw abd Blades Boxed
32. Junior Hacksaw x 2
33. Surf Form Shave
34. Woolf Junior Drill Stand
35. Sentry Circular Saw attachment
36. Golden Dog Jigsaw Attachment
37. Hammers x 3
38. Marple Chisels X12 (Set)
39. Chisels x 3
40. Saws x 2
41. Saws
42. Gouges x 6
43. Chisels x 2 Gouges x 2
44. Chisels x 3
45. Gouges x 3 Chisels x 5
46. Chisels x 1
47. Chisels + Scraper
48. File + Surfform x 2 Blades
49. 49 Vernier boxed KANPON
50. Stanley Spoke + Surf
51. Die Handle
52. Large 1/2" Screwdriver
53. Thomas Flinn Tenon saw
54. Saw Kit (6 Blades) Myford Lathe



judithquiney@btinternet.com

mobile no: 07768 778182

**MORE
THAN JUST
A RESIN**



GPS

For more information please contact

sales@gpsagencies.co.uk

+44 (0) 1730 233366

www.gpsagencies.co.uk

Unit 5 Parkers Trade Park,
Bedford Road, Petersfield,
Hampshire GU32 3QN

Hot off the press

Ian Wilkie looks at two brand-new woodturning books from Mark Baker

WOOD FOR WOODTURNERS (Revised edition)

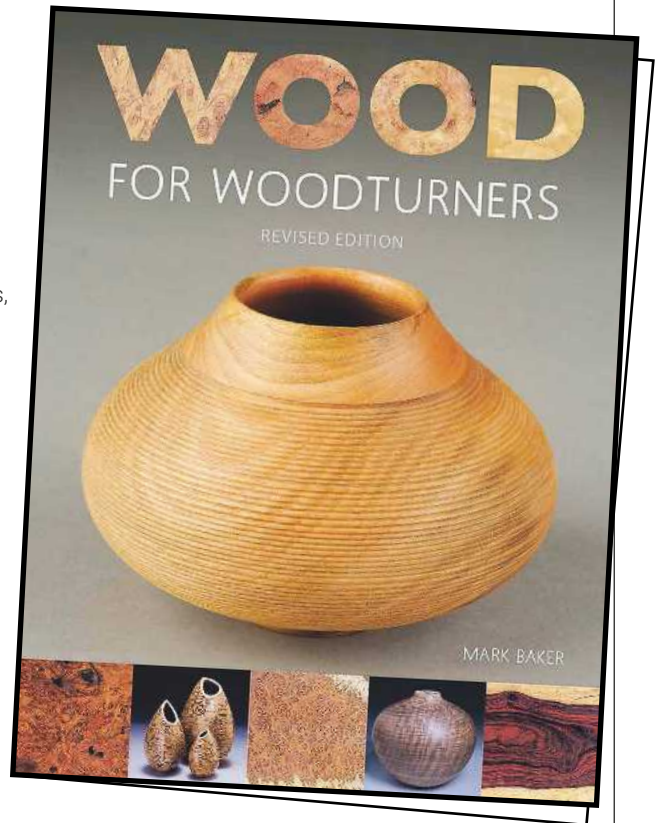
Woodturners will welcome this revised edition of Mark Baker's book, which is a useful source of reference for a very wide range of timbers, both home-grown and exotic. Each wood is fully described in detail, with its characteristics, conservation status, seasoning and working qualities all clearly explained. There is a good photograph of each example to show the colour and grain and this should help the turner to identify their wood. In many cases there are excellent examples of turned work by Mark himself and other well-known woodturners illustrating what can be achieved with a particular wood. The text is clear and easy to read with sensible advice on technique. Advice is offered on possible health risks without over-playing the issue. Basically, if a particular wood affects your skin, eyes or breathing, then it is only sensible not to use it! There is also a section on sourcing, buying and storing wood. I am confident that any woodturner whether beginner or experienced would benefit from having this book on their shelf and I highly recommend it.

DETAILS

Published by: GMC Publications

Price: £16.99

Web: www.thegmcgroup.com



TURNED TOYS

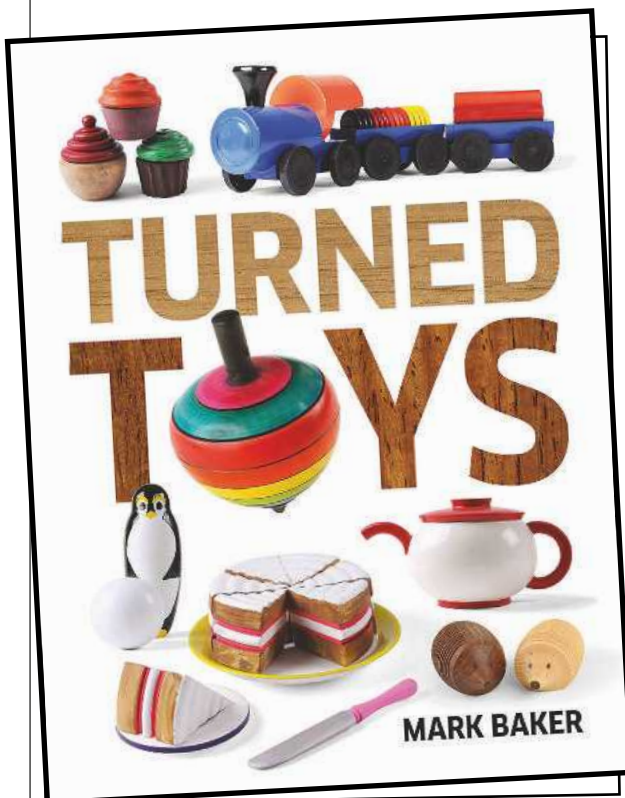
Wooden turned toys have an appeal to the older generation and they are fun for woodturners to make. This book with its 20 projects gives ideas, clear instructions and excellent drawings with lots of step-by-step colour photographs. I would single out the tea party project in particular because I have personally written about turning cakes, tarts and tea sets in the past and I know the results are popular with the 2-5 year old age group and it is fun to turn them. Other projects include a pull-along train, a stacking toy, top and money box. The book is written with the midi-sized lathe in mind and equipment which the hobby turner will probably already have. Some basic guidance is given on wood and turning tools and the importance of safety when it comes to toys is rightly stressed. Most of the toys are painted, which makes them colourful and attractive to children; however, I would have liked to have seen a whole chapter written about techniques for gaining a fine, smooth surface with crisp demarcation between colours. Preparing wood and painting to a high standard is time consuming whereas the actual turning is quick. This book will probably appeal in particular to grandparents who will get great enjoyment from making some of the projects, which are well within the scope of the hobby turner. Alas, the toy will be outgrown quite quickly but that does not detract from the pleasure of making it!

DETAILS

Published by: GMC Publications

Price: £16.99

Web: www.thegmcgroup.com



Little Sister

Big on Performance

Little Sister is a mini hollowing tool based upon the highly successful Brother System 2 range

Talk with your Hamlet Stockist today

Compact fixing screw
Hollow through 13mm
openings with ease!

Tapered Stem
for maximum rigidity

Proudly
Made in the UK

DVD
VIDEO

Free DVD
included

hamlet
CRAFT TOOLS

sales@hamletcrafttools.com

www.hamletcrafttools.com

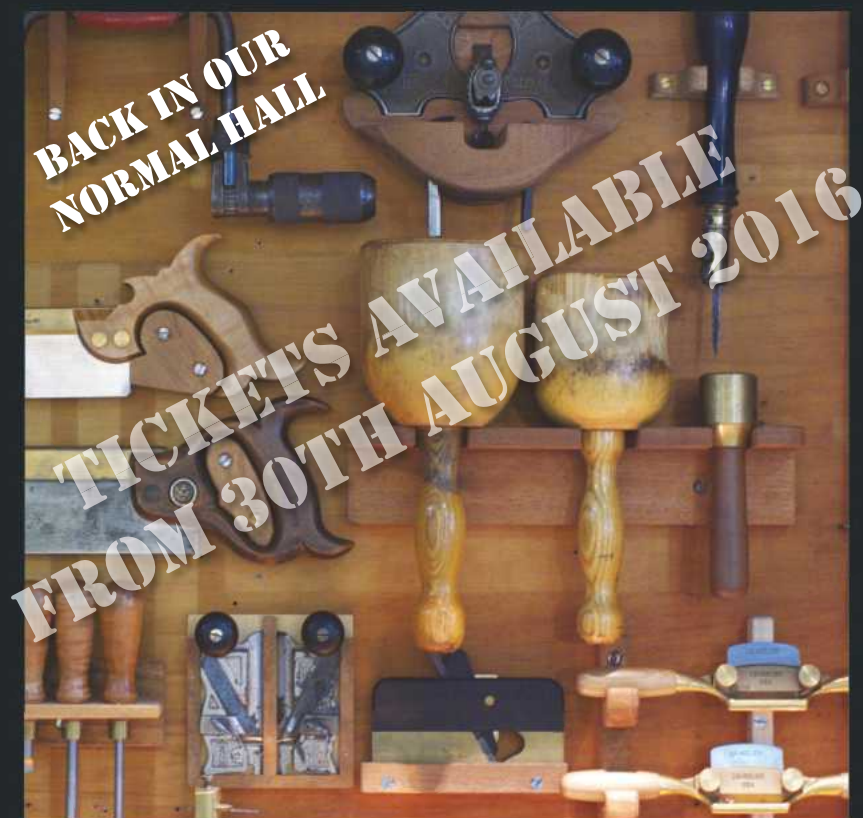
+44(0)1142321338

3 configurations available



Ask about the interchangeable scraper - Ref HS187B

The North of England Woodworking & Power Tool Show



Gt Yorkshire Showground Harrogate (HG2 8QZ)

18 November 2016 10am - 5pm
19 November 2016 10am - 5pm
20 November 2016 10am - 4pm

SK Promotions

www.skpromotions.co.uk • T: 01474 536535

Make life easy and pre-book your tickets.

Telephone **01749 813899** or write to SK Promotions,
The Old Sun, Crete Hall Road, Northfleet Kent, DA11 9AA

Name: _____

Address: _____

Post Code: _____

No of adult tickets ~~£11.00~~ @ £9.00 _____

No of concession tickets ~~£10.00~~ @ £8.00 _____

Cheque / P.O. to SK Promotions £ _____

PLEASE ENCLOSE A STAMPED ADDRESSED ENVELOPE.

For show details either visit www.skpromotions.co.uk
or phone 01474 536535.

Should you not wish to receive further information
on our woodworking shows please tick ☐

Drawers ON SHOW

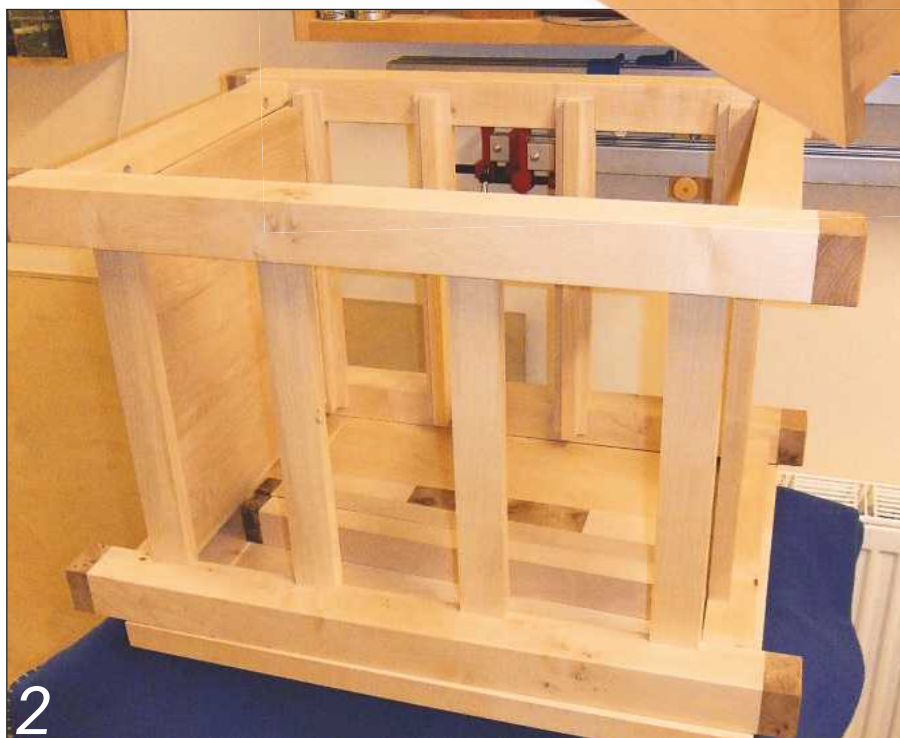
Brian Barber uses his own open frame construction design to build this heirloom chest of drawers



All of the joints were cut by hand

I'm a professional chemical engineer with a serious interest in woodworking. This stemmed from my carpenter father, and my preference is still for the traditional methods of woodworking, using mainly hand tools. I've never been keen on working to plans, and have always adapted them to suit my own personal tastes. These days I start with a basic design concept and gradually evolve the project with sketches on pieces of paper, adding the detail as I go along; this can create problems but I find it rewarding to solve them.

So what about this particular project, then? Well, as a wedding present for my eldest daughter, I had the idea of making her something that would be useful, and a functional set of designer drawers seemed like a good move. As usual, an organic approach was the order of the day – after a few preliminary sketches, I went for a completely open structure with all joints exposed and a floating top. With open sides and back, construction was very simple, the chest sides being formed by the sides of the drawers. I had available



The frame has a simple open construction. The elm blocks provided some interesting detail

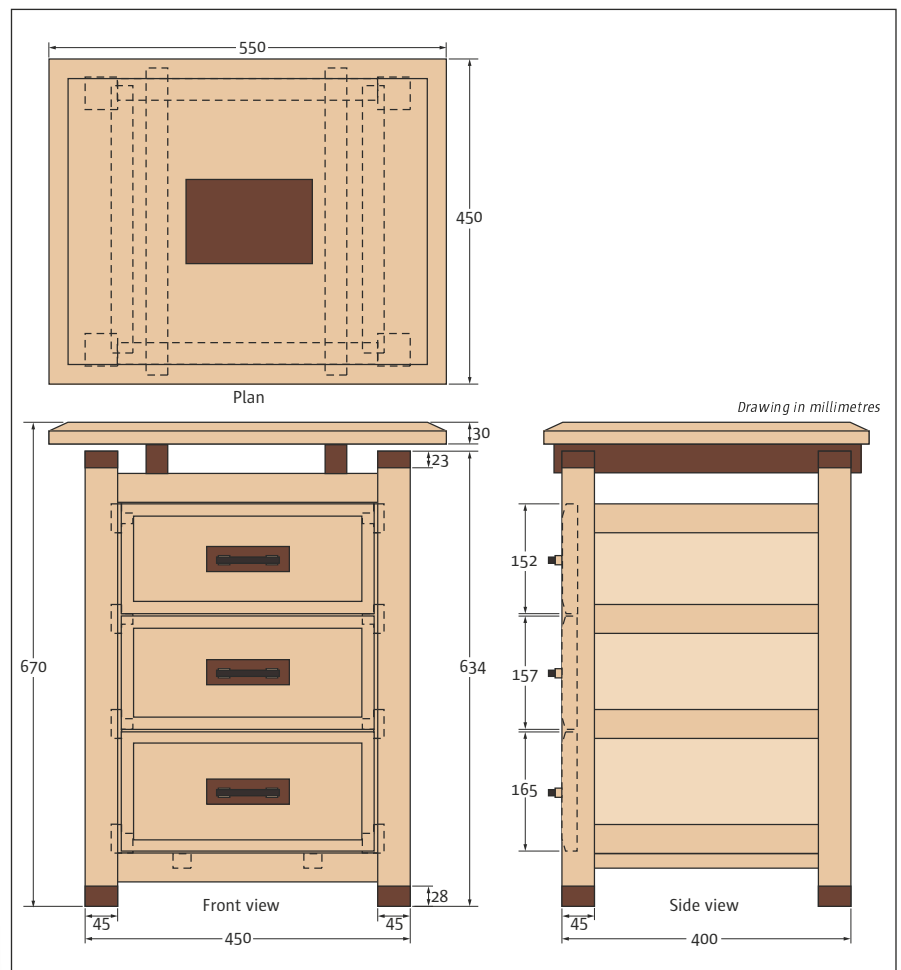


Fig.1 Details of the chest of drawers

some good quality sycamore and some burr elm so these seemed a nice combination; I elected to use the burr elm as decorative inlay for the top and drawer fronts. The plans-free approach and simple construction enabled me to develop the design as the project progressed, adjusting it as it started to come to life.

Frame construction

The basic structure of the drawers comprises an open frame made up of four pieces of 45 × 45mm sycamore – the corner posts, held together by the drawer runners on each side with top and bottom rails on the front and back. Each of the drawer runners is equally spaced to give a nice side view for the chest of drawers. I do not think it would have worked if they had been unequal as is the case for the drawer fronts, which get progressively larger as they go downwards.

I have to say that I experimented quite a lot with proportions for this piece, with lots of laying out of corner posts and

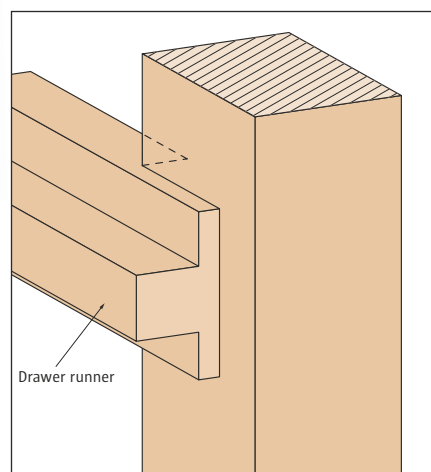


Fig.2 Detail of drawer runner

drawer runners on the floor until it looked just right. I always use the rule 'if it looks right then it is right'; this means that you have to be prepared for change and to start again when things don't work out, but most of the time only minor modifications are needed. The top and bottom of each corner post were capped with burr elm as



3 The top floats on the frame, sitting on two supports. Note cross-rails at bottom



4 The drawers slot nicely onto the runners, and have elm inlays to match the top

a decorative feature and also to hide the end-grain on the top of each post. This took a little extra time but was really worth the effort. Each drawer runner was jointed into the corner posts and the top and bottom rails were jointed with mortise & tenons. To increase corner-to-corner stability, I positioned additional cross-rails on the bottom between the front and back bottom rails, tenoned as usual. In order to give cover to the top drawer, since there is a floating top, an inner top panel was positioned on the top drawer rails. This top panel has rebated edges to fit neatly over the top drawer rails.



5 One of the drawers – note handle detail in sycamore and African blackwood

The drawers

I made the drawers in the traditional manner, using hand-cut lapped dovetails at the front, through dovetails at the rear and the base sliding into grooves routed into the sides and front. The fronts were a little tricky since I wanted them to be progressively deeper from top to bottom. With the equally-spaced drawer runners this meant some juggling of sizes and positions for the dovetails; again, when it looked right it was right. Originally the drawers were going to be plain with square edges (and so was the top) but this didn't look right, so some nice deep chamfers were added, planed by hand.

By now, I had also constructed a basic top with a central piece of burr elm, so I went for matching burr elm inlays in the centre of each drawer. Using a jig with my router, I cut 4mm deep rectangular trenches in the centre of each drawer front, squared off at the corners by chisel, and I glued in the inlays. They were then finished off with a razor-sharp hand plane – in fact all of my hand-planed work generally requires very little sanding before final finishing.

Choosing drawer handles is always a problem with a piece like this, I find. Traditional brassware just didn't seem right as I felt they were likely to spoil the overall look of the design, so I decided to



6 The chest shows interest from every face



7 Detail of floating top and corner post

make the handles by, erm, hand. As usual this gave me some problems and I attempted a few different designs before I was happy with the result. Eventually I came up with the final design using sycamore and African blackwood, which worked really well, I think, and complemented the piece as a whole.

Main attraction

The top was intended to be the focal point of the piece and, as mentioned above, I decided to set a central piece of burr elm in it. Rather than inlay the elm, I used a solid piece joined initially to two pieces of sycamore using biscuits. The edges were then planed true and square, and two pieces of sycamore were joined on each side to construct the top. Again, deep chamfers were made to the edges to match the drawers.



The top was made up in five pieces



The finished job in the workshop, completed

The top was then fastened to two runners located onto the front top rails to create the appearance of a floating top. For this I used captive nuts buried into the runners and a bolt through the top front and back rails, with each runner previously screwed to the underside of the top – my only concession to using anything other than glue for jointing (sometimes you just cannot avoid using pieces of metal). Each of the runners has burr elm on the ends to match the corner posts and also to hide the end-grain.

Bringing it to life

The completed chest of drawers was lightly sanded using 320 grit abrasive and finished with Osmo Polyx oil. This has the consistency of thin treacle, so is a bit sticky, but is easily applied. It's best left to dry for a day or so between coats to give it a chance to harden off. I always use a rag for applying any finish, which avoids unsightly brush marks and runs, though it can be a bit messy on the hands. If you must use a brush then wipe off with a rag afterwards.

Three to four coats were applied with a light sanding in between each coat. The first coat tends to sink deep into the grain but after that it comes into its own. It is really important to realise that a good finish depends entirely on the way the piece is prepared before polishing. Hand finishing with a sharp plane is my preferred method followed by a very light sanding. I have little or no time for belt sanders and even orbital sanders can sometimes spoil a well-planned surface. This stuff does give

a nice finish and allows the grain to show through. It is very much like a traditional oil finish, but with a little more body. Finally, a wax finish was applied to give a nice sheen.

All in all, then, these 'designer drawers' were fairly simple to build and everything went smoothly in its making, apart from a few basic design changes along the way. It's a testament, you could say, to allowing your imagination to exert itself over a project, instead of following a rigid set of plans. **WW**



10

The completed set of drawers



ADD A NEW DIMENSION TO YOUR WORK WITH

Visit our
Online Store
Today!

(web address at bottom
of this advert)

metalcraft™

Easy to use tools that do
not require heat or power



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

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

Call today for our free Catalogue and if you quote the promo code "MTW16"
we will send you our new demo DVD free of charge

J & C R Wood Ltd, Dept MTW16, 66 Clough Road, HULL HU5 1SR
01482 345067 | info@jandcrwood.co.uk

www.metal-craft.co.uk

Create the extraordinary.



The machine for model
builders.



Customised projects with the Desktop 3D System

- CNC router
- 3D printer
- Foam cutter

- CNC plotter
- Vinyl cutter

**All you need
to CNC from
£1000**



Visit www.stoneycnc.co.uk and
watch the machine in action!

Distributed exclusively
in the UK by

STONEYCNC

Happy to help at all times:
+44 (0) 1432 607 908

info@stoneycnc.co.uk
www.stoneycnc.co.uk

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



Table designed and built by Jim Sharples Furniture



treatex®
Naturally superior wood finishes

Treatex Hardwax Oil

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

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

tel: 01844 260416
www.treatex.co.uk

In brief...

CHECK YOUR CHESTNUTS!

The Forestry Commission is appealing to the owners and managers of sweet chestnut trees to step up their vigilance for sweet chestnut blight following the discovery of a tree with the disease this summer.

A single sweet chestnut tree (*Castanea sativa*) infected by the fungus *Cryphonectria parasitica* was confirmed on a property near Maidstone, Kent after the owner spotted and reported suspicious symptoms to the Commission with its Tree Alert online reporting tool. The tree has been destroyed and a survey of trees within 5km carried out, with no further cases detected. The disease had been recorded only twice before in the UK, in 2011.

The Forestry Commission website – www.forestry.gov.uk/chestnutblight – provides links to a fact sheet and Pest Alert with photographs of symptoms to help owners know what to look for, and there is a link to Tree Alert on the same page.



OLD-FASHIONED MILK PAINT

For over 40 years, The Old-Fashioned Milk Paint Company has been producing genuine milk paint using milk protein, lime and earth pigments. The authentic formula produces the same look and feel as found on colonial era furniture. Supplied in a powder form, just mix milk paint with water to the desired consistency and you're ready to go. Often imitated but never equaled, Old-Fashioned Milk Paint Company paints are guaranteed to provide you with the timeless look and feel of genuine milk paint that your valued projects deserve. Instructions included; makes 568ml and available in 11 different colours. Priced at £9 per tin, see www.woodturnerscatalog.com for more details.



AMAZING WOODEN VOLKSWAGEN BEETLE

Truly a labour of love, this wonderful wooden Volkswagen Beetle was handcrafted by 71-year-old Bosnian pensioner, Momir Bojić. This creation was made from over 50,000 separate pieces of oak and took two years to build, which is pretty good going all things considered!

An avid VW Beetle fan, Momir covered the bodywork of the existing vehicle in thousands of oak tiles, each one of which required no fewer than 23 separate procedures. All of the wooden fittings were made by hand, including the steering wheel,

gearstick, hubcaps and radio, all in his garden workshop. Perfectly roadworthy, unsurprisingly the car draws crowds wherever it goes. We absolutely love it and we hope it's made you all smile as much as it has us!

Momir Bojić and his fantastic creation



The tens of thousands of tiny shingles extend throughout the interior



For Momir, keeping his pride and joy in pristine condition is not a chore

CHARNWOOD UPGRADES HEAVY-DUTY ROUTER TABLE

Charnwood has added some additional features to its popular W020 heavy-duty router table: the rigid steel floorstand provides a comfortable working height for handling large panels and the table top is hinged to the floorstand and can be raised up using the lifting handles provided, making the router more accessible when adjustments are needed. The table aperture is 100mm diameter with insert rings provided to reduce this size when using smaller diameter cutters.



Secure clamping of the workpiece is achieved by setting the two fence-mounted feather boards, which hold the work down against the table top and the front feather board to hold the work up against the fence. Using this method, edge mouldings can safely be cut onto small pieces, such as beading or picture frames. There is also a scale mounted into the table to act as a guide when setting the fence.

The new centralising jig allows you to set your router accurately into the middle of the aperture within seconds; it also holds the router in place while you set the clamps underneath the table so you no longer need two pairs of hands!

The new design of router clamp is ideal for users who want to regularly remove the router and then refit it without losing the settings, saving both time and effort.

For the odd job where the whole face is being removed, a set of shims are supplied that can be added to the outfeed fence to step it out and provide support to the workpiece. Four shims are supplied allowing up to a 4.5mm step in 0.5mm increments.

The cast metal mitre fence runs in a T-slot and is particularly accurate on this model. The clamping system, used to attach the router to the table, is universal allowing any sized router from any manufacturer to be used. Supplied with four rubber feet, mitre guide, 68mm extraction outlet and insert rings for 60mm and 30mm diameters. Priced from £299; see www.charnwood.net for more information.

THE PERFECT CHRISTMAS GIFT

JUST £19.99

Avoid the long queues and treat your loved one with a gift subscription to their favourite magazine. You get to save money, and they get their magazine delivered direct to their door! You could even treat yourself... Don't miss out - subscribe today!

GREAT SAVINGS!
UK Print offer

🎄 CHOOSE FROM A RANGE OF MAGAZINES 🎄 GREAT SAVINGS
🎄 DOWNLOADABLE GREETINGS CARD WITH GIFT SUBSCRIPTIONS 🎄



HURRY!
LIMITED
TIME ONLY

SUBSCRIBE SECURELY ONLINE: www.mymagazineoffers.co.uk/X361

CALL: 0344 243 9023* AND QUOTE X361

BY POST: PLEASE COMPLETE THE FORM AND POST IT TO THE ADDRESS PROVIDED.

YOUR DETAILS: (This section must be completed)

YOUR DETAILS: (This section must be completed)

Mr/Mrs/Miss/Ms..... Name.....

Surname.....

Address.....

Postcode..... Country.....

Tel/Mob.....

Email.....

D.O.B.....

Magazine..... Price.....

GIFT RECIPIENT (Complete 'Your details' first)

(Complete if you are buying a gift subscription)

Mr/Mrs/Miss/Ms..... Name.....

Surname.....

Address.....

Postcode..... Country.....

Tel/Mob.....

Email.....

D.O.B.....

Magazine..... Price.....

PAYMENT DETAILS

Please make cheques payable to MyTimeMedia Ltd and write code **X361** and magazine title on the back.

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro (Maestro)

Card no:

Cardholder's name:

Valid from Expiry date..... Maestro issue no.....

Signature Date

**SEND TO: MY TIME MEDIA LTD, SUBSCRIPTIONS,
3 Queensbridge, The Lakes, Northampton NN4 7BF**

TERMS & CONDITIONS: UK Print offer only. Offer ends 15th December 2016. All subscriptions will begin with the first available issue of 2017. For full terms & conditions visit www.mytimemedia.co.uk/terms. From time to time, your chosen magazine & MyTimeMedia Ltd may contact you regarding your subscription, or with details of its products and services. Your details will be processed in full accordance with all relevant UK and EU data protection legislation. If you DO NOT wish to be contacted by MyTimeMedia Ltd & your magazine please tick here: ☐ Email ☐ Post ☐ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Post ☐ Phone. If you DO wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Email

* Lines open Mon - Fri - 8.00am - 8.00pm GMT & Sat - 9.30am - 3.30pm GMT. Calls are charged at the same rate as standard UK landlines and are included as part of any inclusive or free minutes allowances. There are no additional charges with this number. Overseas calls will cost more.

In brief...



STUDENTS PLAY A SUPPORTING ROLE IN SHAKESPEARE'S NEW PLACE TRANSFORMATION

Royal Leamington Spa College furniture crafts students played a supporting role in the spectacular transformation of Shakespeare's New Place, Stratford-upon Avon, as they helped deliver a stunning oak

bench, which will be a central feature of the dramatic new garden on the site of Shakespeare's house.

The circular oak bench – which is over 25 metres long – was commissioned by the Shakespeare

Birthplace Trust from craftsman Armando Magnino, who is also a lecturer at the college. Student Philipp Stummer has worked with Armando on the bench, which has taken over six months to complete. The bench envelopes the area representing the heart of the Shakespeare family home, providing the perfect spot to contemplate

the pivotal sculpture, 'His Mind's Eye', a monumental bronze tree representing the power of Shakespeare's imagination.

13 students transported the bench onto a long loader so it could make the journey from Armando's workshop in Warwick to Shakespeare's New Place in Stratford-upon-Avon. As the bench was so large, it was made in six smaller pieces ranging from 6-9m. They then transferred the bench into the contemporary new garden, where Philipp and Armando secured the seating in place.

Visitors to Shakespeare's New Place will walk in Shakespeare's footsteps through a new threshold on the site of his gatehouse and trace the footprint of his family home in a contemporary landscape setting. For more information, see www.shakespeare.org.uk and www.warwickshire.ac.uk/courses.

MAKITA EXTENDS JOB SITE SPEAKER RANGE

With the release of two new models, Makita's job site radios can now be powered by the full range of Lithium-ion batteries found in the Makita power tool range, including the latest 10.8V CXT slide battery. The Makita DMR107 job site radio has full AM and FM frequency ranges, twin 76mm diameter speakers with a maximum output when using an 18V battery of 3.5W from both speakers. This rugged IP64 protection



rated dust and shower proof radio has elastomer bump protector casing, digital display, auxiliary device connection and AC adaptor.

The new 'Bluetooth' Makita DMR108 job site radio is now equipped with Bluetooth Class 2 to wirelessly play music from a mobile device, such as phone, MP3 player or tablet with a range of up to 10 metres.

The ultimate site sound system may now be the Makita DMR200 job site Bluetooth

speaker. This is a compact and lightweight speaker powered by either the Makita LXT or CXT Li-ion battery range or from an AC supply, which delivers a massive 7.0 10.0W output from the two-way speaker system, and features a 100mm diameter woofer and 36mm tweeter with a Bluetooth range of up to 10 metres. Features include AUX-IN jack; USB port for charging the mobile device; LED indicators to show power supply, maximum volume, and Bluetooth pairing/connectivity; IP64 protection rating and flat-top, anti-slip surface for the portable device. For more information on the range, see www.makita.com.



FORGEFAST SCREWS

ForgeFix is setting a new standard in fastening performance and has just launched its new range of ForgeFast screws. In independent tests, the new screws outperformed most other premium screws on the market in areas such as drive-speed, cam-out reduction, corrosion resistance, shear prevention

and even environmental protection.

The new ForgeFast screws feature reinforced countersunk necks, angled or inset lobes, double cutting or sharp points, and anti-friction or self-drilling threads. They are also coated with ForgeFix's proprietary Elementech 400 coating, which has been salt spray tested to 400 hours to give these screws exceptional weather resistance, which lasts up to six times longer than more commonplace zinc coatings. Both Pozi and Torx head screws are available under the ForgeFast brand and in sizes ranging from 3.0 x 12 to 6.0 x 240. To find out more, see www.forgefix.co.uk.

NEW COVING TOOL MAKES AWKWARD JOB EASY FOR THE TRADES

As any professional plasterer, joiner or keen DIY-er knows, installing coving or skirting board in old, irregular houses is an awkward job, especially if you're out to get a precise, high-quality finish. Or at least it was an awkward job before TrigJig, a British-designed tool that makes the perfect finish quick and easy – and it fits in the palm of your hand.

With a TrigJig and just a hand saw, any tradesman can be sure to get a perfect fit for coving and skirting boards every time. It's a simple solution to a complex, age-old problem.

The TrigJig is robust, finished in stainless steel and comes with a three-year guarantee. It's simple, convenient, durable and dependable – it really is built to last. To find out more, see www.trigjig.com.



Welcome to THE TURNERS WORKSHOP

*The Company
with Traditional Values*

Our aim is to provide
quality items at a fair price.

THE TURNERS WORKSHOP

*The Company with
Traditional Values*

Vincent Coates - proprietor

*In the hussle-bussle
and impersonal world we
live in today, I want to turn
back the clock and provide
a good old fashioned,
personal, professional and
friendly service to all my
customers.*



- Pen Kits
- Woodturning Tools
- Abrasives • Adhesives
- Bushing Sets
- Finishing Products
- Books & DVDs
- Pen Making Accessories
- Workshop Furniture
- Knife Making Sets
- Turning Projects



*The Turners Workshop will appeal to all Woodturners, Pen Makers,
Pen Collectors, Craftsmen and Craft-ladies! Visit our comprehensive shop at:*

www.theturnersworkshop.co.uk • Tel: 07870 587615 • email: mail@theturnersworkshop.co.uk

WAREHOUSE/VISITING - UNIT 13, MORGAN BUSINESS PARK, MYLORD CRES,
CAMPERDOWN IND. EST, NEWCASTLE UPON TYNE, NE12 5UJ



Visitors by prior appointment to our warehouse

Flexidisc Sander/Grinder

The Flexidisc sander gives a superb finish on wood, metal, fibreglass,
car body filler and all hard materials.

Its fast rotation speed achieves sensational results in a fraction of the
time normally taken by conventional sanders.

This versatile tool also sharpens chisels, plane blades, lathe tools, axes and
garden tools without the rapid overheating of normal abrasive wheels.

This is the ideal tool to prepare your timber prior to varnishing with
Le Tonkinois varnish.

www.flexidiscsander.co.uk

Tel: 01628 548840



Le Tonkinois Varnish

Le Tonkinois is a natural oil based yacht varnish.
Perfect for outdoor, indoor and marine use. With Le Tonkinois varnish the options really are endless.

Combining unrivalled protection on materials including cork flooring, stone, metal and wood and brilliant
permanent penetration, Le Tonkinois varnish leaves absolutely no brush marks and will
restore the natural beauty of timber whilst removing your brush marks.

Flexible enough to move with the timber and able to withstand abrasion and
impact, Le Tonkinois varnish is resistant to boiling water, UV, petrol, diesel
and sea water. It won't crack, chip or peel off, making it perfect for
all outside purposes as well as indoor.



www.letonkinoisvarnish.co.uk

Tel: 01628 548840

Getting decorative

Making use of a banksia nut, Colin Simpson shows you how to turn a decorative pomander complete with top cap and finial in a contrasting timber – or why not adapt the design to make a festive decoration for your tree?

The banksia nut turns easily, although it is brittle so don't expect to get long shavings from it. Just below the surface is a layer of tiny 'hairs' that feel and look like velvet. These hairs are an irritant so be sure to wear a dust mask and eye protection during turning. If you have an ambient air filter in your workshop, it's a very good idea to have it turned on all the time you're working. That said, they are fun to turn and produce unusual pieces that are sure to be a talking point.

Shaping the banksia nut

This project makes use of the natural holes in the banksia nut, but you could just as easily use solid wood and pierce shapes in the side wall using a Dremel or similar. Alternatively, you could use the lathe's indexing system to drill a series of holes around the perimeter of the body. The design of this pomander could easily be adapted to make Christmas decorations, so get turning for some unique festive ornaments!

Start by cutting a length of banksia nut about 80mm long on the bandsaw (**photo 1**), then mount the piece between centres. Use a spindle roughing gouge to turn the nut to a cylinder (**photo 2**), then use a skew chisel to cut a spigot on one end to fit your chuck (**photo 3**).

Next, remove the piece from the lathe, mount your chuck and load the banksia nut in it using the spigot you have just cut. It is not strictly necessary to bring the tailstock up, but I did for extra support while shaping the piece. Use a spindle gouge to cut a pear shape (**photo 4**). Don't reduce the diameter of the bottom



1 Cut a length of banksia nut on the bandsaw



2 Rough it down to a cylinder...



3 ... then cut a spigot for your chuck



4 Initial shaping with the spindle gouge



5 At this stage, keep the diameter large



6 Bore a hole into the end, ready for hollowing



7 My Robert Sorby Hollowmaster



8 Open up the inside by scraping the internal wall

THE BANKSIA NUT

The banksia nut is the seed pod from the banksia tree, which is found in Western Australia. There are many different species of banksia but it is only the *Banksia grandis* that grows its seed pods large enough to be of any commercial value to the woodturner. Named after Sir Joseph Banks, the botanist on Captain Cook's ship HMS *Endeavour*, the banksia tree grows to a maximum height of about 15m



9

A small spindle gouge can do almost as good a job



10

Clear out the seeds from the holes using a pair of tweezers



11

Sand down to 400 grit



Turn a spigot on a scrap piece to fit the hole in the nut

too much at this stage (**photo 5**) – you will need strength here to allow for the hollowing,

When you are happy with the outside shape, remove the revolving centre from the tailstock and load a Jacobs chuck. Use a 28mm Forstner bit to drill a hole down the centre of the piece to within about 10mm from the bottom (**photo 6**), then replace the 28mm bit for a 12mm one and drill all the way through the piece.



Lemon oil gives the piece a nice aroma



Mount the nut on this spigot and complete the bottom

Steps for hollowing

Photo 7 shows the tip of my Robert Sorby swan-neck hollowing tool with a HSS scraper bit that I used to open out the inside of the nut. When using swan-necked tools like this, the straight part of the tool's shaft must be on the toolrest, so move the rest back further than normal (**photo 8**). Gently scrape the inside of the banksia nut, cutting at 9 o'clock. The nut is starting to get fragile at this stage, so don't make the walls too thin. Aim for a thickness of about 5mm. If you do not own a hollowing tool, you can achieve a very good result using just a spindle gouge. Point the flute to about 9:30 and use the bottom wing of the gouge

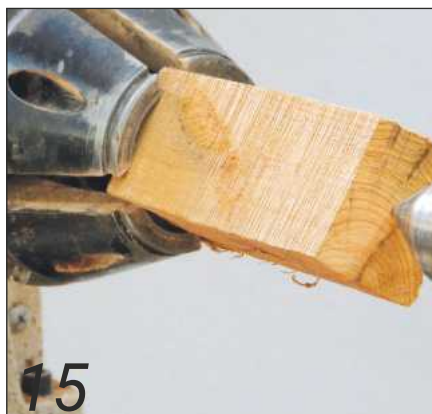
as a scraper (**photo 9**). If your banksia nut has any remains of the seeds in its holes, remove them with tweezers (**photo 10**), then sand down to 400 grit (**photo 11**).

Remove from the lathe

Remove the piece from the chuck and mount a scrap piece of wood to turn a tenon on to fit snugly into the top of the hollow (**photo 12**). Mount the nut on this tenon and bring the tailstock up to fit in the 12mm hole in the bottom. This mounting gives access to the bottom and original spigot. Turn this away using a spindle gouge (**photo 13**), sand this area to blend in with the rest, then oil the piece. I used Chestnut Products' lemon oil (**photo 14**).

Bottom finial

Mount a close-grained blank in your chuck. I used a piece of yew about 80mm long x 25mm square. For these small pieces, I don't bother turning a spigot to fit the chuck; instead I just load the square into the jaws as shown (**photo 15**). Turn the blank to a cylinder using a spindle roughing gouge. Turn the gouge right over on its side when cutting near the chuck to avoid damaging it (**photo 16**). Starting at the



Small squares can be mounted like this...



... but ensure to keep the tool away from the chuck



Start at the tailstock end and work from right to left



Use a spindle gouge to shape the finial

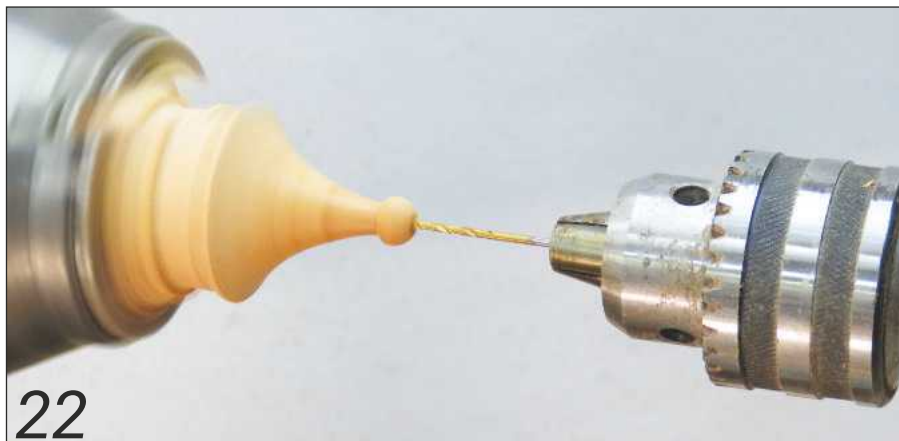


Cut both sides of the cove alternately



20

Part off using a narrow parting tool



22

Drill a 2mm hole through the top cap



21

Screw an eye hook into the end of the finial



23

Finish the shaping using a spindle gouge



24

Sand the underside of the cap using a power sanding arbor



25

Thread the hanging cord through all pieces and tie it to the eye hook

tailstock end and working towards the headstock, shape the finial using a 10mm spindle gouge. I cut a half cove (photo 17) and a small ball at the end (photo 18).

Next, I cut a cove (photo 19) before cutting a 12mm tenon to fit the hole in the bottom of the banksia nut. Sand and polish the finial – I used sanding sealer and paste wax – then part it off at the tenon using a narrow parting tool (photo 20). Screw a small eye hook into the end of the tenon (photo 21) to capture the hanging cord.

Top cap

The cap for the top of the pomander is made in exactly the same way as the finial. Mount a square in the chuck jaws, turn to

a cylinder and shape it. Drill a 2mm hole all the way through the cap (photo 22) and turn a tenon a fraction less than the size of the hole at the top of the banksia nut. Cut a bevel just above this tenon so that the cap meets the banksia nut nicely (photo 23). Sand, polish and part the cap from the waste. Clean up the underside of the cap by mounting a power sanding arbor in the chuck and use the edge of the sanding disc to finish the underneath (photo 24).

Run a cord through the hole in the cap, right the way through the banksia nut body and tie it off at the eye hook in the finial (photo 25). Finally, fill the pomander with potpourri, hang it up and enjoy your new creation. [www](http://www.getwoodworking.com)



26

The completed pomander should look something like this

The Woodworker & Woodturner SUBSCRIPTION ORDER FORM

- ☐ GIFT SUBSCRIPTION – will start with the first issue published in 2017
- ☐ PERSONAL SUBSCRIPTION – will start with the next available issue

YOUR DETAILS MUST BE COMPLETED

Mr/Mrs/Miss/Ms Initial Surname

Address

Postcode Country

Tel Mobile

Email D.O.B

GIFT RECIPIENT DETAILS (if applicable)

Mr/Mrs/Miss/Ms Initial Surname

Address

Postcode Country

INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY

Originator's reference 422562

Name of bank.....

Address of bank

Postcode

Account holder

Signature..... Date



Sort code Account number

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.

Reference Number (official use only)

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

DIRECT DEBIT SUBSCRIPTIONS (UK ONLY)

- Yes, I would like to subscribe to *The Woodworker*,**
- ☐ **Print Subscription: £7.30 every 3 months (SAVE 50% on shop price)**

CARD PAYMENTS & OVERSEAS

- Yes, I would like to subscribe to *The Woodworker*, for 1 year (13 issues) with a one-off payment**

UK ONLY: ☐ Print subscription: £29.25 (SAVE 50% on shop price)

EUROPE: ☐ EU Print: £62.00

ROW: ☐ ROW Print: £62.00

PAYMENT DETAILS

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro

Please make cheques payable to MyTimeMedia Ltd and write code V964 on the back

Cardholder's name.....

Card no: (Maestro)

Valid from..... Expiry date..... Maestro issue no.....

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

TERMS & CONDITIONS: Offer ends 25th November 2016. MyTimeMedia Ltd & The Woodworker may contact you with information about our other products and services. If you DO NOT wish to be contacted by MyTimeMedia Ltd & The Woodworker please tick here: ☐ Email ☐ Post ☐ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Post ☐ Phone. If you wish to be contacted by email by carefully chosen 3rd parties, please tick here: ☐ Email

POST THIS FORM TO: THE WOODWORKER SUBSCRIPTIONS, MY TIME MEDIA LTD, 3 QUEENSBIDGE, THE LAKES, NORTHAMPTON, NN4 7BF



PRINT SUBSCRIPTION

- **Great gift idea** for Christmas
- **Save up to 50%** on the price in shops
- 13 Issues **delivered to your door**

SUBSCRIBE TODAY

DIGITAL
SUBSCRIPTIONS
AVAILABLE ONLINE!

HALF PRICE OFFER

save 50% when
you subscribe today *



Pay less than
£2.25*
per issue

**GREAT
GIFT IDEA!**

TERMS & CONDITIONS: Offer ends 25th November 2016.

*Discounts may vary dependent on payment method selected. Please see www.getwoodworking.co.uk/terms for full terms & conditions.

SUBSCRIBE SECURELY ONLINE

 www.getwoodworking.co.uk/subscribe

CALL OUR ORDER LINE

 **0344 243 9023**

Lines open Mon - Fri - 8.00am - 8.00pm GMT & Sat - 9.30am - 3.30pm GMT

Quote ref: V997

UK Calls costs 7p per minute plus your phone company's access charge. Overseas calls will cost more.

OBSERVER'S GUIDE

When preparing timber, Andy King says you should read what's written in the grain's small print

If you're to work your timber successfully, it's essential that you get into the habit of 'reading' the grain, which can tell you a great deal about its character.

Most woodworkers will already be practiced in reading the grain when it comes to edge-jointing timber: it's usual to examine the growth rings on the ends of the boards, and arrange them so that they alternate – one board heart-side up, the next heart-side down, and so forth (see 'choosing the best face'). The problem this anticipates is a slight cupping that may occur due to shrinkage along the growth rings; the expectation is that, by alternating the growth rings, any movement will give a gently undulating surface that'll be more pleasing to the eye than the pronounced ridges that can occur in boards laid with their growth rings in the same orientation.

The ability to read what's written in the grain will also help you to anticipate how it's likely to respond to tools, especially when it comes to preparing timber with a power or hand plane.

Is the grain legible?

The first problem, mind you, is actually being able to see the grain. It's very clear in planed timber, of course, but buying materials in this form can make them prohibitively expensive – it's often twice as costly as sawn timber, and with no guarantee that the stock is straight and true, either. Sawn boards, on the other hand, aren't especially easy to judge if you're trying to select them in a yard, where dust and dirt can make the grain

very difficult to read, especially in darker hardwoods. In order to examine an area that looks problematic, then, or to test the colour of a batch of selected boards, you might find it handy to carry a small block plane so that you can remove a discreet shaving or two to expose the grain and colour. Of course, you have to do this either with permission or with great discretion...!

Selection: in the yard...

When buying sawn timber from a yard, the aim is to select the boards that not only contain the least waste in terms of sapwood and waney edge, but will give you the least problems in prepping – that's to say boards with straight-grain, and as free of knots, resin pockets, splits, shakes and warp as possible. If you're planning a piece that calls for different stock thicknesses, this may well play a part in your selection process: when sorting boards of the right dimension for a top or panel, for example, you should not only be looking for those with as few faults as possible, but also with the qualities that will work well when they're made up into panels or wide boards.

If the yard isn't geared to letting you choose your own boards, of course, you'll have to rely on the staff to make the choices for you. Either way, though, no matter how carefully your timber is picked, it's likely to have some flaws somewhere within it.

... and back at the workshop

Once you've got the timber home, you need to decide how you want it to be used, and this is where your reading skills come into play. If you didn't select your material to fulfil specific roles back in the yard, then now's the time to sort it by making a rudimentary check of the grain and putting to one side those pieces with the potential to make a feature within the piece. In general, the cleanest, most blemish-free face is regarded as the best face. Don't forget, though, that wild grain patterns often offer more interest, especially if



they're incorporated into panels or tops; the price you have to pay, of course, is the extra work involved in working and finishing difficult grain.

With that done, it's good practice to cut stock roughly to size so as to avoid handling larger pieces than is necessary. For example, if a long board is bowed or twisted, it doesn't make sense to try planing its entirety to a uniform thickness; this can lead to huge amounts of waste if the twist or bow is very pronounced, and in trying to achieve a flat face you may even end up reducing the timber beyond your required thickness. Instead, you should remove as much of the problem area as possible by cutting the board roughly to size – and this is where a cutting list is invaluable. Knowing the size (with an allowance for waste) and number of pieces that you need will allow you to plan your requirements onto the stock so as to minimise any potential problems from twisting or bow; to cut out any bad areas; and to work any remaining flaws into areas where they'll be less conspicuous – unless, as we've said, you're going to make a feature of them in a 'character' piece.

Cleaning up

The usual sequence of events now is to clean up the timber, and then select the face and edge that you want the finished piece to show to the world. Whether you're planing by hand or machine, the first step is to look at the edge of the timber to see which way the grain runs; ideally it will lie

TIP

When buying sawn timber, you should add an extra 10% to your requirements to allow for wastage caused by general flaws. You may need to increase this margin considerably if you're buying waney-edged timber, or a species with, say, excessive sapwood, such as American cherry



NATURAL BALANCE



When edge-jointing boards, the conventional 'heart up, heart down' approach won't always give the composite panel a natural appearance, and may result in glue lines that draw the eye



By experimenting with the orientation of the boards, however, you'll find combinations that allow the grains to sit comfortably against one another, even if the growth ring orientation doesn't alternate in the textbook fashion

FLAWS: KNOW YOUR ENEMY!



Unless you're making a feature of them, waney edges and sapwood will need to be removed



Colour variations such as this can be used as a feature too, but if you need a uniform colour, it will have to be removed



Mark out your cuts; don't forget that the ends of boards are susceptible to end-grain flaws, so it's best to allow wastage here



A live knot such as this can be left in for character, but can make planing difficult. You can mark it to be removed – as I've done here – to create short wide boards, or rip either side of it to produce narrower pieces

parallel or very nearly parallel to the face. If the grain is rising to the surface (see 'lie of the land'), you'll need to determine the direction in which it needs to be worked because, just as when you're stroking a cat's fur, if you work with the grain it will lie smoothly, but if you work against it, the grain will lift and tear. When you're planing, then, any rising grain should point away from you.

That's the theory...

Unfortunately, the reality is often more complicated! If you look at the edge of a board, for example, you'll often find that the grain has a wave-like pattern. Where these undulations break the surface of the face side, they produce grain patterns that

can look like the contour lines on an ordnance survey map, with rings and figuring whose grain runs in different directions. Knots, or rather the areas of timber around them, will show similar characteristics, with grain that can run at an angle, or in different directions.

In all cases, getting these areas of timber smooth can be tricky, but the plan of attack is the same: start flattening the boards with a long plane, and use progressively shorter planes, ensuring that the irons are razor-sharp. To achieve the final finish and avoid tear-out, you'll need a finely set blade coupled – if you have the option – with a tightly set mouth; thicker irons also help as they're less prone to chatter than thinner blades.

When tackling knots or particularly wild

THE LIE OF THE LAND



Looking at this board you can see the grain running upwards, as shown by the chalk arrows; this gives you a clear indication of the direction in which you should plane the edge to prevent the grain from lifting



When it comes to planing the face, meanwhile, this looping grain pattern can act as a pointer, indicating the direction in which the plane should work. However, you can't read the face and edge in isolation...



... as these examples show. In this board, the loops on the face indicate that it may plane well from right to left, and the edge grain, which runs upwards in the same direction, agrees. However...



... while the looping face-grain here suggests that you work from left to right, the upwards slope of the edge grain from right to left shows the way that the face should actually be planed to prevent tear-out...



... as this photo shows. It looks wrong, but it's right!

grain, you can make the most of your well set-up plane by making small, circular cuts that will slice across the grain, thereby reducing the risk of the tearing that can occur when a straight pass encounters changing grain directions.

Having said all that, even the sharpest plane can only do so much to prevent tear-out. If you're happy to invest in specialist hand tools, however, you can further minimise the risk by using a bevel-up plane, whose cutting iron has a steeper pitch, and so gives more of a scraping than a paring action.

An alternative approach is to modify a standard iron using a sharpening technique advocated by David Charlesworth, and which is becoming commonly known as 'the ruler trick'. By laying a thin steel rule on the stone so as to lift the flat back of the blade while it's being honed, it is possible to introduce a small back bevel on the iron. This effectively alters the cutting pitch on a standard bevel-down plane, and helps when dealing with difficult grains. The advantage of this approach is that you can experiment with the technique for the price of a spare iron.

Using machines

Power tools may be the fastest way to prepare timber, but machines can't make allowances for tricky grain: even if, after reading the board, you plane your stock in the best overall direction, the cutters are likely to tear any interlocked or reversed grain that they meet. You can improve matters by exploiting the precision in feed speed and pressure offered by a thicknesser to take one or two final skimming cuts off the faces to remove any minor flaws and tears that the initial machining may have caused.

The small print...

As you can see, the devil in reading timber is in the detail. Even if you use your cutting list to cut out many of your timber's flaws in the initial dimensioning; even if you remember that what you see on the edge determines how you plane the face, and vice versa; and even if the way you should work the timber is writ large in the grain, you will almost always encounter a section of small print, a piece of contrary grain, that needs to be worked in a different direction

to the surrounding timber – and that won't change until trees get their act together and start growing straight and flaw-free!

... and the final resort

The most difficult of these sections won't succumb to planing, no matter how sharp or fine-set the iron. In these cases, you can fall back on two very simple tools. The first is the card scraper, which costs next to nothing in comparison to a specialist plane, especially if you make your own out of old handsaw blades. (If you don't get on with hand scrapers or want more consistent settings, try a scraper plane). Because the scraper has no cutting edge to get under the grain and lift it, it has no problems with wild grain, and allows you to shave rough areas until they're smooth.

Your final recourse is to use good old abrasive. Its effect may be more like erasing the grain than reading what's written in it, but when an awkward patch is giving you a real headache, it can sometimes be the best and only answer. [www](http://www.getwoodworking.com)

NEXT MONTH

In part 2 of this series, Andy King continues his helpful guide to working timber with a collection of potential problems to look out for when selecting timber at your local yard

WORKING WITH TRICKY GRAIN



Where the timber has knots or flaws, the loops can change direction, meaning that to minimise tear-out the direction of planing will change as you work different areas



Skewing the plane to make a slicing cut helps to minimise tear-out when cleaning up grains that don't run in a constant direction



The grain around this knot runs in opposite directions. The best option here...



... is to plane in a circular motion with a finely-set iron



Man-made problems: gluing up these boards to give the best pattern meant that their grains run in different directions, which also makes the final clean-up more difficult



FURNITURE ON THE QUICK

Rick Wheaton's bookcase and round table can be made using only basic kit and the addition of eye-catching colours really makes them stand out from the crowd

Strong colours will always lend visual impact to a job, no matter how simple



1 The free-standing shelves are made stable by their tapering design, which creates a low centre of gravity

Regular reader Rick Wheaton sent in these photos of a couple of items he made for the home recently. Very achievable by anyone with even the most basic kit, the apparently simple designs and executions belie the use of standard carpentry fundamentals, and the eye-catching colours unify both shelves and table to great effect. All in all, both pieces clearly show that speedy results can be obtained with ease, and underline the satisfaction gleaned from upcycling odds, ends and leftovers.

On the shelf

I wanted to throw this bookcase together quickly so there are no proper joints; the frame is glued, dowels added later for strength, but mostly for show. The planks – 400mm wide × 25mm thick – are hardwood, too nice to be called scrap, except they'd been kicking around in my workshop for years, waiting for a project. Then we needed a tall, slim standalone bookcase, and they fitted the bill. The frame was not only scrap, but free – I'd bought some mail order curtain rails and they came taped to lengths of 45 × 20mm planed, so this couldn't be better.

I drew the planks on a bit of squared paper, working out how to cut them to avoid waste. The final dimensions were pretty much suggested because of what I had – a common solution in most workshops I would think.

For stability purposes, it had to be wider



2 Detail of shelf supports – the dowels protrude on both sides for decoration

at the bottom than the top, and I wanted the height to be just short of the ceiling. It ended up being 2,014mm high × 820mm wide, the bottom shelf was 400mm deep, and the top shelf 150mm deep.

I started by laying the pairs of uprights on my bench, and gluing the two small wedges at the top. The clamps accidentally pushed the first wedge up out of line, but I liked the detail and made the other the same.

The shelf supports were laid across and glued in place, a straightedge making sure each pair was the same height, and after the glue had set, the holes were drilled and the dowels tapped into place. After the shelves were cut to width, I used the scrap to make small uprights at the back of each shelf. These were screwed into the back of the frame, helping to keep the whole thing rigid and to stop anything from sliding off.

Round table

Having decided a circular table best fitted the room, I thought six legs would look a bit different, perhaps a little more delicate, and this arrangement would echo the circular shape of the top. Again, I used some planks I'd had for years, these were 220 × 27 planed softwood. I cut four pieces 880mm long and biscuit jointed them, and then cut them into a circle. For this I drilled a 15mm hole in the centre planks, and cut them on my bandsaw using a simple jig clamped to the saw table. A 15mm dowel at the end of the jig allowed the planks to turn and cut out a perfect circle of 870mm diameter. I could have marked the circle with a trammel and used a jigsaw, but I think a bandsaw does a better job.

The frame was more of the 45 ×



3 By using the same constructional methods and similar materials, the two pieces are instantly united

Show us your projects

Many thanks to Rick for sending these photos in, and if you'd like to see your own work published in the magazine, please don't hesitate to get in touch with me, Mark, here: editor.ww@mytimemedia.com

20mm – again glued and dowelled – with some heavier 70 × 30mm for the legs. Only two bits of geometry were needed: to mark out a hexagon on the underside of the top; and to work out the bevel on the ends of the six horizontal supports.

A hexagon is easy with a compass and I think everyone can do this if they remember their lessons learned in school. This gave the location of each leg, and 360 divided by 12 gave the 30° of bevel needed on the end of each cross piece (six pieces, 12 ends).

As with the shelf unit, all the joints were glued and left to set (I use a 10-minute PVA) before the dowels were drilled and fitted. The dowels were also glued, and in this case are mostly decorative; an additional touch of decoration was to plug the jig hole in the centre of the top with a scrap of blue painted dowel.

By the way, the edge of the table, where it had been cut with the bandsaw, needed cleaning up. Fortunately the cut was square and it only needed one of the offcut pieces lined with glued-down abrasive to make the perfect sanding block.

My last job was to sand the whole table, then stain the top and screw the painted frame to its lower surface. The table came in at a useful 870mm dia. × 560mm high. [www](http://www.getwoodworking.com)

In brief...

A SERIOUS PILLAR DRILL

The Jet JDP-17 is a floor standing pillar drill especially designed for woodworking. As a trade classified machine, it is suitable for professional furniture makers and ultra keen amateur woodworkers in their home workshops.

Key features include a full 127mm of quill travel with one turn of the handle, with an integrated depth stop for repeat accuracy of drilling depth. Efficient, Poly-V drive belts give smooth, vibration-free running with maximum power transmission. There is also a one-handed, tool-free belt tensioning system which allows simple and easy speed changing. The ABS top belt guard is held magnetically and has an interlocking switch for safety.

The table is extra large, surface ground cast-iron with ample clamping slots and also a sacrificial insert. The precision ground table easily tilts to 90° both left and right and also has an adjustment to ensure the squareness of the chuck centreline. The table height is adjusted by a smooth rack and pinion system, with the control handle being canted away from the table for hand clearance.

The 0.55kW induction motor is firmly bolted to the headstock, avoiding flexing and vibration. A bright, tiltable LED work light is recessed into the headstock casting, plus there is a cross hair laser system for centre finding. A comprehensive depth stop system allows precision blind hole drilling and is accurate every time.



This machine has been designed to do more to meet the demands of the woodworker, with ample work support, drilling depth and size capacities. Smooth running and with many unique features, this is a really nice pillar drill, designed to perform. Currently priced at £738.96, see www.axminster.co.uk for more information.



A TRIO OF JAPANESE BEAUTIES

Japanese saw design and quality meet western preferences for a solid wooden handle and a weightier, yet well balanced feel in this outstanding range of saws from Gyokucho in Japan, available from Workshop Heaven.

At first glance two dozuki and a kataba make a rather unusual set, but when you consider western dovetail, carcass and panel saws, the roles are very similar.

The kataba will size panels with remarkable accuracy and efficiency, the dozuki super hard is a dedicated cross-cut saw used for cutting components to length, halving joints, tenon shoulders, etc. and the universal dozuki is a fine, smooth cutting saw for dovetails and intricate joinery. All three saws feature selected quartersawn beech handles, heavier spines for balance, and a smooth, positive folding mechanism with a locking lever to hold the blade in the extended position. The word 'Fugaku' is another name for Mount Fuji, a cultural and spiritual icon recognised throughout Japan and the world. Priced at £95, see www.workshopheaven.com.



HITACHI POWER TOOLS FACILITATE SERBIAN CAVE EXPEDITION

A caving expedition from the University of Sheffield was supplied with tougher, faster and more advanced DH18DSL 18V SDS power tools by Hitachi, with spectacular results, both for the expedition team and Hitachi Power Tools.

The expedition to Serbia had a primary objective: to join a local Serbian caving club in surveying the area north of the Montenegrin/Serbian border on the Pešter plateau to try and locate a potential entrance that runs from Montenegro to the Serbian side of the border.

"The main advantage of the Hitachi drills is the battery life – we were able to drill 14 good anchor-holes on a single battery," explains Will Burn from the University of Sheffield's Speleological Society. "This is a huge advantage as it allows maximum exploration on a single battery, as charging is impossible once you're in a cave. The drills

were also light enough to be used overhead, and easy to carry long distances, where teams were walking up to 30km per day."

Over the 12 days spent on the plateau, of the 185 potential sites, 100 were surveyed, recorded, GPS tagged and photographed. The expedition also discovered many new pits not spotted from the aerial analysis.

The team found numerous notable sites on the plateau, including 'Dead Cow Cave' – a 60m deep shaft filled with fallen cattle; 'Area 51' – an enormous chamber with a daylight shaft inhabited by interesting biology and unspoiled calcite formations tucked away beneath boulders in the floor; and 'The Grave Cave' – a 20m deep shaft located next to an isolated tomb. Translations of the Cyrillic script found on the gravestone revealed it to be of an 'Ili-Petri Dubrovsky' who was a local hero in Pešter during the 1800s.

For more information on Hitachi Power Tools, visit www.hitachi-powertools.co.uk.

Antex Craft Products

Heated Tools for Pyrography

The art or craft
of decorating
wood or leather
with heated
tools

NEW



Antex Electronics Limited
2 Westbridge Industrial Estate
Tavistock
Devon PL19 8DE

Tel: 01822 613728
Fax: 01822 617598
Email: deborah@antexcrafter.com
www.antexcrafter.com

Cellulose Sanding
Sealer

Finishing Oil

Lemon Oil

Acrylic Gloss
Lacquer

Acrylic Sanding
Sealer

Safety Cloth

Spirit Stain

Acrylic Lacquer

Burnishing Cream

Cellulose Thinners

End Seal

Friction Polish

French Polish

Melamine Lacquer

Wood Wax 22

Steel Wool

Polishing Brushes

Shellac Sanding
Sealer



CHESTNUT
P R O D U C T S
first for finishes



Used by woodturners of all abilities throughout the UK and the world, the Chestnut Products range of top quality finishes gives outstanding results every time; whatever you are making and whatever your preferred finishing system there is bound to be something in our range to meet your needs.

See your local stockist for more information or for a catalogue/price list contact us at:

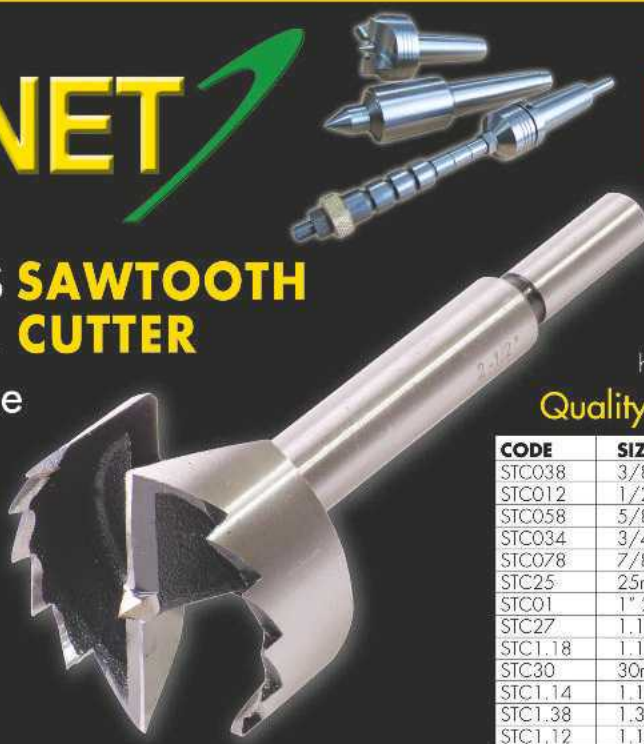
Chestnut Products,
PO Box 260, Stowmarket, IP14 9BX
Tel: 01473 890 118 • Fax: 01473 206 522

www.chestnutproducts.co.uk
mailroom@chestnutproducts.co.uk
Stockist enquiries welcome.

PLANET

LONG SERIES SAWTOOTH FORSTNER CUTTER

Excellent Value



CALL NOW FOR YOUR NEAREST STOCKIST.

rotur
specialist woodturning products

Sawtooth pattern, particularly suited for cutting down the grain. Long series - all sizes are a minimum of 150mm long, will produce over-lapping holes, re-sharpenable.

Quality Steel - **SIZES AVAILABLE**

CODE	SIZE	CODE	SIZE
STC038	3/8" 9.5mm	STC43	43mm
STC012	1/2" 12.7mm	STC1.34	1.3/4" 44.5mm
STC058	5/8" 15.9mm	STC1.78	1.7/8" 47.6mm
STC034	3/4" 19mm	STC50	50mm
STC078	7/8" 22.2mm	STC02	2" 50.8mm
STC25	25mm	STC2.14	2.1/4" 57.2mm
STC01	1" 25.4mm	STC60	60mm
STC27	1.1/16" 27mm	STC2.12	2.1/2" 63.5mm
STC1.18	1.1/8" 28.6mm	STC2.34	2.3/4" 69.9mm
STC30	30mm	STC03	3" 76.2mm
STC1.14	1.1/4" 31.75mm	STC80	80mm
STC1.38	1.3/8" 35mm	STC3.14	3.1/4" 82.6mm
STC1.12	1.1/2" 38.1mm	STC3.12	3.1/2" 88.9mm
STC40	40mm	STC90	90mm
STC1.58	1.5/8" 41.3mm	STC04	4"

PLANET PLUS LTD UNIT 3 SPEEDWELL CLOSE, CHANDLER'S FORD, EASTLEIGH, HAMPSHIRE SO53 4BT
TEL: +44(0)23 8026 6444 FAX: +44(0)23 8026 6446 EMAIL: sales@planetplusltd.com

www.planetplusltd.com



Relaxing, ***American style***

Having discovered the Adirondack chair on a recent road trip across the USA and Canada, on arriving home Chris Finch set about finding his own plans and the outcome is this fantastic pair



1
Painting of a pair of Adirondack chairs

My wife and I recently shipped our two motorcycles to the east coast of Canada and spent three and a half months riding 12,000 miles across Canada, then down to the southern states of the USA, before turning north-east over the Appalachian Mountains, and back to Canada through New York State's High Adirondack region. Throughout this part of the trip we frequently saw, and used, the Adirondack garden chairs native to this part of north America. These simple wooden chairs are extremely comfortable and created a lasting impression on us both. Indeed, they created sufficient impression to persuade us to buy a painting of the chairs by a local artist before we returned home. This now adorns our lounge (**photo 1**).

Chair plans

Shortly after returning home I surfed the internet to find plans for these chairs and found what I was looking for at www.stapeley1.plus.com/AbramPremium_final.pdf. This free download provides a dimensioned cutting list, scale drawings of the shaped parts, plus instructions for the build. I decided to use western red cedar for the construction of a pair of chairs and purchased eight 3.6m PSE planks measuring 150 x 25mm

from Yandles and trailed them home to south Wales on my motorbike trailer.

Plywood templates

After transferring the dimensions from the scale drawings in the article, I made a set of plywood templates for all of the shaped chair parts (**photo 2**). The next job was to pass the timber across the planer to establish a face side and edge and then through the thicknesser to reduce it all to 19mm.

The templates were laid out on the timber in the most economical way to ensure that sufficient timber remained so that the straight sections (seat slats, side members, front legs and front crosspiece) could be cut to the dimensions given in the cutting list. Once marked out, all the shaped parts were cut out on the bandsaw and then planed and sanded to final size. Similarly, all the straight sections were cut to length and width and then sanded. The only slightly tricky element encountered so far was the freehand curve on each of the two rear crosspieces, which needed to be cut with a bevel on the curved edge, to match the angle of the sloping back

slats. This was achieved by tilting the bandsaw table before cutting the freehand curves. Once cut, the concave surface was finished with a spokeshave. With all parts cut and finished to size, the top surface edges of the seat slats, back slats and arms were rounded over using a small hand-held router. I now had a complete set of chair parts.

Chair assembly

All of the parts are glued and screwed together – there are no joints to cut. I used Cascamite powdered resin structural and weatherproof wood glue and stainless steel 5.0 × 40mm countersunk head screws throughout. Additionally, each arm is secured to the rear upper crosspiece with two 6mm diameter × 50mm long stainless steel carriage bolts, and each front leg is secured to its adjacent side member in a similar fashion using three carriage bolts.

The first assembly task is to position the two side members on the bench and attach the lower rear crosspiece and then the front crosspiece, ensuring that the assembly is kept square (**photo 3**). All of the screw

holes were counterbored to recess the heads of the screws and then later filled with wooden plugs after the chairs were fully assembled. The two front legs were glued to the front end of the side members and secured using carriage bolts, penny washers and nyloc nuts (**photo 4**). The two arm brackets were then glued and screwed centrally on the outside of each front leg, flush with the top of each leg. Then the two arms were positioned in accordance with the dimensioned diagram included in the downloaded article and glued and screwed to the arm brackets and the top of each front leg (**photo 5**). Before drilling the screw holes in the arms, remember that rounding over the top surface edges of each arm has effectively made the arms 'handed', so mark and drill the screw holes accordingly! Next, the upper rear crosspiece was clamped in place beneath the rear of each chair arm and then drilled through to accept two 6mm diameter carriage bolts, penny washers and nyloc nuts. The rear crosspiece was then glued and bolted beneath the two arms (**photo 6**).



2 Templates for shaped components



3 Side members, lower rear crosspiece and front crosspiece assembled



4 Attach the two front legs



5 Attach the arm brackets and arms



6 Secure the upper rear crosspiece beneath the arms with coach bolts

Clamp the central (longest) back slat centrally to each of the lower and upper crosspieces, ensuring that it is perpendicular. Use four screws per slat (two in the upper crosspiece and two in the lower crosspiece), but be careful when drilling the holes in the back slats for attachment to the upper crosspiece as these need to be drilled at an angle to ensure that the screws do not break out through the bottom surface of the upper crosspiece. Once the central back slat has been installed, position the two outer (shortest) back slats touching the inside edges of the chair arms, but with the lower ends positioned 25mm away from the inside edge of the side members; this ensures that the chair will have the 'fantail' back that is characteristic of these chairs. Glue and screw the outer back slats in place

and then install the two intermediate back slats, ensuring they are equally spaced between their adjacent slats (**photo 7**).

Secure the seat slats, using glue and one screw centrally in each end of each slat. Start at the front and secure the front slat, but use two additional screws equally spaced attaching it to the front crosspiece. Add the remaining seat slats, allowing equal gaps between each, finishing with the curved rear seat slat, which nestles into the curve formed by the back slats. Do not butt the rear seat slat too close to the back slats, otherwise rainwater will not escape freely.

All that remains now is to cut sufficient wood plugs from an offcut of cedar to fill all the screw holes (**photo 8**) and glue them in position. Cut off the excess with a flush-cutting saw and sand to a smooth finish.

Finishing touches

I chose to apply three coats of Ronseal Garden Furniture Protector to each chair. It brought out the beautiful colour of the western red cedar and showed off the grain to good effect. Once fully dry, the seats were pressed into service in the garden, where they continue to remind us of our epic motorcycle trip across north America (**photo 9**). [www](http://www.getwoodworking.com)



7 Assemble the back slats to give an evenly distributed fantail



8 I cut lots of plugs using an offcut of cedar and then passed them through the bandsaw



9 The finished chairs are pressed into service in the garden. Compare this photo with the painting above and notice the similarities!

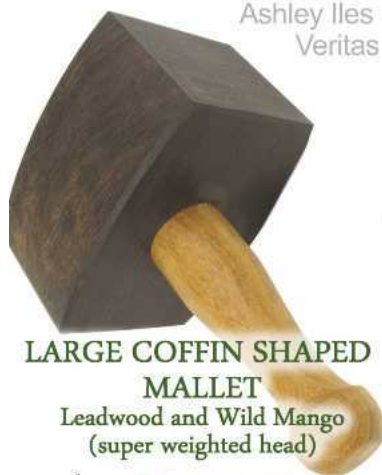
hand tools and wood chisels specialist

Ashley Iles - Henry Taylor - Robert Sorby - Joseph Marples
Veritas - Clifton - Thomas Flinn - Flexcut - Ice Bear...

All items in stock, ready for dispatch..
*unless marked otherwise all prices inclusive of VAT



saw horses



**LARGE COFFIN SHAPED
MALLET**

Leadwood and Wild Mango
(super weighted head)

only

New £35.00



sharpening
Tormek T4's & T8's



chisels



plane blades

measuring and marking



Order online today at
www.toolnut.co.uk

or call to order on 01424 224269



tool storage

punches



Please ask about our
box making weekends!

t: 01768 899895

The Wood Workshop

2017

course dates are now
on our website!

Woodworking Courses in the beautiful Lake District

Woodwork Course 1 (Tools and Things)

A self-interest woodwork course where the aim is to give you the confidence and the knowledge to use basic hand tools and some of the more common power tools.

You will be able to pick from a list of projects before you arrive that I believe you can complete in 5 days or less so that you will go home with one of them and you can proudly say "I made that".

I cover the teaching of how to handle tools by getting you started on your project and, as you need to use a new piece of equipment, I show you how. This means that the instruction is fresh in your mind and you do the task there and then.

On all courses there will only be a maximum of 4 at a time, this will mean that I will be available when you need help and advice.

Woodwork Course 2 (Wood and Things)

This is a continuation of course 1 (tools and things) with the emphases on timber, what are acceptable defects in timber and what isn't, how do you write out a cutting list that means something to your supplier, what to look for when buying wood and what to avoid.

You will ideally have done course 1 (tools and things) or have a good working knowledge of how to use hand tools and have used hand held power tools.

The projects for you to pick from will be more complicated and will involve the use of the more sophisticated hand tools and hand held power tools and will include using some of the static power tools in the workshop. We will also be looking at buying timber, making cutting lists and drawing plans.

Woodwork Course 3 (Project Days)

The advanced course is rather different from the previous two.

To come on this course you will need to have done both the other courses and have used your skill at home on your own projects and be ready to take on something more difficult.

WoodRat Courses

This course will teach you all the principles that you need to know!

Visit our website for more information & updates on 2017 course information:

www.woodworkshop.co.uk

t: 01768 899895

e: enquiries@woodworkshop.co.uk

The Wood Workshop

7-8 Redhills Business Park, Penrith,
Cumbria CA11 0DT

www.woodworkshop.co.uk

In brief...

EASY, TIGER!

This range of great value air compressors from Machine Mart are ideal for DIY and semi-professional garage or home workshop use for any job involving spraying, nailing, stapling, inflating and more. All models in this range feature fully automatic stop/start controls, twin outlets with outlet pressure regulator/gauges and efficient intake air filters, protecting the compressor and maximising output purity. Larger models also include an efficient 'V' twin pump for high output.

These compressors feature an impressive air displacement of up to 14.5cfm, a maximum working pressure of 8Bar and tank sizes of up to 100 litres. Prices start from £95.98; see www.machinemart.co.uk.



GREATART OPEN FOR BUSINESS

GreatArt has recently opened its first UK store on Kingsland Road, in the heart of Shoreditch, London. After trading online for almost 15 years, and supplying artists and craftspeople all over the UK with their range of 50,000 products, the new store showcases materials for all techniques from traditional fine art to sculpture, printmaking, woodcarving and model making. To find out more, see the website: www.greatart.co.uk.

NEW PROFESSIONAL SCREWDRIVER RANGE

Bosch is launching a new generation of 18V cordless screwdrivers – a new 'dynamicseries' and a 'robustseries'. All four models have new functions, which offer a higher level of comfort for professional users.

The 'dynamicseries' range of tools combines compact design with high performance and covers the GSR 18 V-EC Professional cordless screwdrivers and GSB 18 V-EC Professional cordless combi drills.

The 'robustseries' consists of particularly durable, high-performance tools, and features the GSR 18 VE-EC Professional and GSB 18 VE-EC Professional models. These are the first Bosch cordless screwdrivers or combi drills of this class to have brushless motor technology.

Increased comfort, reduced wear-and-tear

These cordless screwdrivers and combi drills have a newly designed precision coupling. An electronic control system detects when this coupling is overloaded and stops the motor in order to avoid over-tightening when fastening screws.

All screwdrivers also come equipped with a robust 13mm solid metal drill chuck.

The Softgrip handle has a grooved structure meaning that it is easier to hold, especially when working overhead or in tight, hard-to-reach spaces. Two LEDs alert you when the tool stops: a white LED

to show that the tool has a blockage and a red LED when the tool is overheating.

The proven 'KickBack Control' function, an exclusive feature of the 'dynamicseries', gives users full control, even for the toughest screwdriving and drilling jobs. The integrated sensor detects sudden tool blockages and shuts down the motor within a fraction of a second, preventing unexpected kickback of the tool.

The perfect tool for every job

All models are fitted with a brushless EC motor and are maintenance-free. EC technology enables compact design – the head length of the 'dynamicseries' screwdriver matches that of the cordless screwdriver and combi drill from the 10.8V class, which makes it well-suited for most applications. The 'robustseries' models are particularly powerful with a maximum torque of up to 75Nm and are suitable for the toughest jobs.

The additional hand grip gives users optimum control even when dealing with great forces from heavy screwdriving, drilling and impact drilling. Thanks to the new locking mechanism, it is also quick and easy to affix.

Both the 'dynamicseries' and 'robustseries' screwdrivers are now available to buy and all tools are delivered in an L-Boxx with two 4.0 or 5.0Ah batteries and a quick charger. To find out more, see www.bosch-professional.com.



AMAZING HUMAN-POWERED LATHE

The American Association of Woodturners (AAW) has joined forces with the GreenWood organisation to build a human-powered lathe and use it to bring the craft of woodturning to artisans in a remote area of Honduras.

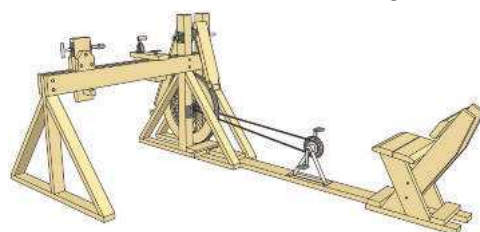
The designers of the lathe, Scott Lewis and Manuel Suarez, will travel to Honduras for about two weeks. There, they will assemble the lathe and transport it to two remote communities.

They will spend seven days training the locals, then return to La Ceiba for five days to help the Hondurans launch a project to make and sell wooden mallets, turned from well-managed tropical hardwoods, on the global market.

Scott Lewis developed the lathe as part of his teacher training. It has a frame made from thick construction timber, held together with bolts and metal brackets that he welded together. The pedals and chain were scavenged from a bicycle drive and the flywheel was made from a bicycle wheel. Surrounding the wheel is a wooden ring weighted down with sand. As one person pedals, another uses turning tools to shape the wood. You can see the lathe in action here: <https://vimeo.com/130475634>.

Until the 19th century, many lathes were

human-powered, typically with the help of a springy tree limb. The turner would wrap a rope around the wood to be turned, then up and around the limb and down to a foot treadle. Pumping the treadle moved the limb and made the wood spin. Alternatively, some woodworking shops also used a water wheel to drive belts that powered the lathe, while others had an apprentice run in the equivalent of a big hamster wheel to provide power. To find out more, see www.woodturner.org.



Thomas Flinn & Co.

Saw & Hand Tool Manufacturer
Sheffield, England



The UK's last remaining traditional saw manufacturers.
**Now also manufacturing Clifton Planes
including a NEW Block Plane!**

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

This two-stage workshop air filter from Record Power provides filtration down to 1 micron, has three speeds, a timer function and remote control, and most importantly, is ideal for removing dust quickly and efficiently

Record Power AC400 workshop air filter



£169.99

While we all enjoy our woodworking, there's no escaping the fact that there are certain risks and dangers attached to the work that we do. Most of these we can avoid or protect ourselves from by use of personal protective equipment (or PPE as it's known in the trade) and by adhering to sensible working practices, but some others are harder to avoid.

The importance of dust extraction

The Health and Safety Executive have been stressing the importance of dust extraction of late, and have established levels of filter protection that extractors must now meet to be used in a commercial or public environment. While these implementations are necessary and represent another step towards a safer working world, in the confines of a small- to medium-sized workshop, not all dust can be dealt with this way.

It's inevitable that there will be dust – especially the finer particles – created or recycled, which will remain suspended in the air for long periods of time. If you're fortunate enough to have a door or window at each end of your workshop, then opening both will create a through draught that will generally clear things out. Sadly this isn't always an option, and no one I know wants to work wearing a dust mask all day, either.

Dedicated workshop air filter

Probably the most satisfactory solution is to employ a dedicated workshop air filter. This model, from the ever popular Record Power, is aimed at the smaller workshop and is designed to run quietly in the background whenever things threaten to get a bit



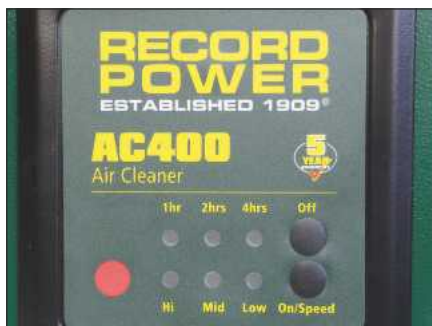
The hooks are readily fitted and provide a firm anchor



Suspended from the workshop ceiling; make sure your fixings are sound



The cardboard-framed primary filter is clipped in place



The control panel – note timer delay options



Both filters are easily removed for maintenance

dusty. By steadily recycling the air through two separate filters, the finer dust that is often missed by regular extractors – especially if they're a bit on the old side – is cleared safely away leaving a healthier and more pleasant working environment. It's also a boon for those days when you need to get a good finish on a completed project; paint and varnish will never achieve their best results in a dust-laden atmosphere.

Ceiling-mounted

The AC400 is a simple machine, based around a smooth-running 1/8 horse power (93W) induction motor, and seems content to just hum along quietly all day. The 'dirty' air is sucked in through a two-stage filter and then passed out the front in a gentle cooling breeze. I found this aspect of the machine a pleasant surprise, although it may be less so when winter takes hold. It comes with four rubber feet for mounting on a suitable plinth somewhere, but this sort of machine works best when stationed high up; certainly it will be out of harm's way there and not inconveniencing anyone.

Probably the best thing to do is to hang it from the ceiling, and the kit comes with four stout hooks, which are easily fitted to the top of the body and locked into place with Nyloc locking nuts. There are also four short chains supplied and some big hooks. Fixing anything to a ceiling can be a tricky job at the best of times, and especially when the item concerned weighs a considerable 14kg. Fixings should always be made with care, and even more so in a case like this; anything less solid than a joist and you're asking for trouble. I had a lucky break at the Neon Saw workshop where there is a large hook bolted into one of the steel beams forming the roof; the perfect anchoring point. Despite one or two awkward moments, I was single-handedly able to hang the filter from the ceiling, balancing on a sawn board between two step ladders. The AC400 comes with a standard three-pin plug attached and so I just ran a 10m single extension lead along the beam edge and plugged it in out of sight on top of the machine.

Remote control

Remote control is a part of our lives now, but the inclusion of a simple RC device with this extractor is a very good thing indeed. While it may be possible to switch the extractor on and off with a broom handle, having the remote is a real boon. Unlike TV controllers, and with no sofa in the workshop to lose things down, the air extraction unit remote control has yet to be mislaid, and I for one will do all I can to keep things this way.

Three speeds

The machine has three speeds, so you should be covered for any dust-related contingency imaginable, and what's really good is the timer delay function. Rather than just switch everything off and walk away at the end of the day leaving the airborne dust to settle – and still be there tomorrow waiting to be stirred up again – the three option timer will leave the extractor running for a set period, thus ensuring the workshop always stays clean.

In summary

A simple machine, but of unquestionable value in the workshop. I will be assessing its performance over the coming months and will report back with my findings in due course. **MC**



The all important remote control – batteries supplied

SPECIFICATION

FILTRATION RATE	409CFM/min
FILTRATION	1 Micron
CAPACITY	193 litre
POWER OUTPUT	100W
VOLTAGE	230V
HEIGHT	258mm
LENGTH	514mm
WIDTH	431mm
WEIGHT	14kg

VERDICT

The AC400 workshop air filter benefits from a range of useful features, is competitively priced and ideal for reducing nuisance dust, especially in small workshops

PROS ■ Quiet running
■ Fine filters
■ Timer delay

CONS ■ Heavy
■ Requires solid fixings to the ceiling

VALUE FOR MONEY
PERFORMANCE



FURTHER INFORMATION

- Record Power
- 01246 571 020
- www.recordpower.co.uk

Wireless charging is definitely the way forward and this clever base system and battery from Bosch are fantastic examples of this popular innovation

Bosch wireless charging platform & battery

The wireless charger: simple and efficient...



It's entirely possible that many readers will already be aware of this recent innovation, and some indeed may even be using it this very minute. I was greatly impressed with the original 18V setup when I first encountered it, and the 10.8V shows every sign of being just as successful.

A technological step forward

With sales of 14.4V tools showing signs of lethargy across all of the big

manufacturers, it was a shrewd move to bring the new wireless charging technology straight to the young pretender – the compact 10.8V. Beloved of anyone who wants a smaller and lighter power tool, the efficiency and performance of this range is equal – if not superior to – many of the 14.4V equivalents of just a few years ago.

Despite the months (and years?) of research and development that's gone into this technological step forward, the product itself seems simple and nothing more than a logical progression towards a better product. For me, though, the best thing is the compatibility with the 18V system; both battery sizes use the same charger and this somewhat appeases my ongoing desire for the widespread standardisation of power tools and batteries.

Future innovations

Although it's little hardship to change a battery and slot the flat one into a charger the existing way, it inevitably means that

FROM
£40

there will now be a pause while charging takes place. I think the biggest plus of the new wireless charging system is the way you can keep it topping up between uses, especially if your charging station is right there on the bench next to you.

One or two other manufacturers are offering beefed up versions of their 10.8V batteries, and there is certainly room for both 'regular' and 'super' in this market. An enhanced 10.8V battery inevitably means a larger base to accommodate improved electronics and such, and this makes for a much more stable base for a drill or driver. Keep the future coming, I say.

In summary

Quite possibly the way forward; one day all batteries will charge like this. **MC**

SPECIFICATION

BOSCH 1600A00J0E GBA 10.8V WIRELESS CHARGING BATTERY

VOLTAGE	10.8V
CAPACITY	2.5Ah
WEIGHT	0.42kg

SPECIFICATION

BOSCH PROFESSIONAL GAL 1830 W WIRELESS CHARGING PLATFORM

CHARGE CURRENT	3.0A
WEIGHT	600g
SIZE	165 x 115 x 40mm

VERDICT

PROS ■ Quick
■ Easy
■ Convenient

CONS ■ Slight care required when placing tool on charging base

VALUE FOR MONEY
PERFORMANCE



FURTHER INFORMATION

- Bosch Professional
- 03447 360 109
- www.bosch-professional.com



... and with plastic frame fitted



The new wireless charging battery and the conventional one it can replace



The tool is simply placed onto the charging pad. It must sit on the central disc, but can be orientated in any direction

The frame ensures optimum charging position and protects the tool from accidental displacement



Both 18V and 10.8V batteries can use the same charger

Putting the Bosch Net abrasives & Bosch backing pad to the test, Andy King finds that both work in perfect harmony with the other, producing increased efficiency and dust control

Net abrasives
pack of 5
£9.33

Backing pad
from
£28.20



Bosch M480 Net abrasives & backing pad

If you sand regularly you will know that hook-and-loop-backed abrasives are a better option than paper-backed for both durability and performance. In the case of random orbit models you have no choice; the round base dictates a hook-and-loop system to retain the abrasives and there's a raft of options out there.

Despite the benefits hook-and-loop offers, on a standard backing pad with traditionally punched abrasive, the build-up of dust on any machine sander can cause localised clogging, so the introduction of mesh abrasives was certainly welcome.

Bosch have developed their own version of the mesh abrasive with a complete range of sizes for orbital sheet sanders along with random orbit and multi-tool profiles, as well as 5m rolls in a range of grits for basic prep and stripping back through to final finishing tasks.

Having a woven open construction means the entire surface can lift the dust away with far better efficiency than a standard disc and doesn't require alignment to the holes in the base, so you don't have to match the discs to your pad as on a traditional 6, 8 or 10 hole base.

M480 Net abrasives

This pad is a hollow chamber construction with an upper surface of 12 holes that pulls the dust up from the hook-and-loop base, and it's the base configuration that makes it all the more efficient. Instead of standard holes to suit standard pads, this pad has a series of holes in five concentric circles to pick up the dust more efficiently across the entire surface – to increase speed and performance against the traditional option. This particular option of replacement pad works well if you want to try out both the pad and the abrasives, as Bosch have designed this product to fit most common brands, including DeWalt and Festool.

Clearing my bench for a free run I divided it in three and started with the standard abrasive on the standard base and I was pleased with the speed and results, but shifting to the M480 allowed me to cut through the surface finish back to the beech in double quick time and relying only on the sander's collection box, the dust pick up seemed to be more efficient as well.

Backing pad

So now over to the new backing pad and

M480 combination to see if the efficiency is increased further. With the huge increase in base holes for extracting the dust, the pick up rate, and therefore the cutting ability, should again step it up further. The finish cannot be faulted and it was evident that the combination of the new backing pad and M480 abrasive offers a more efficient method of sanding as well as removing the dust. Bosch have a very good dust collection system on their machines but I did notice that once the abrasive was peeled from the backing pad, just how effective this new offering is when combined with the M480 disc.

In summary

The dust that remains in the hook-and-loop is minimal in comparison to the standard base, and the residual dust left from a standard disc in comparison to the M480 is again, markedly different – it is a very efficient abrasive. Connect the sander to an extractor and the dust collection is that much better again, but if you don't have extraction available, then the new pad and M480 combination is undoubtedly a winner, as is the abrasive in its own right. **AK**



The multiple perforations on this new backing pad allows for increased dust collection



I tested a standard abrasive and pad alongside the new options



Fitting an M480 disc to the standard base, I proceeded to sand the top of my beech bench



The final section of my bench was sanded with the new base and the M480 fitted



As you can see, the residual dust left on the surface was negligible

SPECIFICATION

BACKING PAD

DIAMETERS 150 & 125mm

ABRASIVE GRIT SIZE 80-400 grit

PROS ■ Very efficient
■ Increased dust control
■ Durable

CONS ■ Ideally works best with the additional backing pad

VALUE FOR MONEY

PERFORMANCE



FURTHER INFORMATION

- Bosch Power Tools
- 03447 360 109
- www.bosch-pt.com

This range of three cordless tools from Proxxon are excellent performers and ideal for a wide range of woodworking and model making tasks, although the high cost of the battery and charger does let them down a little

Proxxon cordless tools range



- The bearings at the end of the machine are housed in precision aluminium heads
- The DC motors are powerful and quiet and rated to run for long periods
- The drive shafts are supported by precision bearings
- The single on/off and variable-speed control is combined in one dial, which is positioned on top of the machine.

The advantages of cordless tools

Cordless tools have a distinct advantage over their mains wire equivalents: there is no cable trailing over the working area, which could get in the way and cause damage; they are more manoeuvrable; they are easier to store when not in use, therefore taking up less room; and they can be used away from the workshop in areas where mains power may not be available.

Disadvantages of cordless tools

Cordless tools are considerably more expensive than their mains counterparts when the cost of the battery and charger is added. However, you do only need one battery and one charger and it is possible that, in time, other cordless machines may be added to the range, which may be a consideration.

The battery does increase the overall weight of the tool and you need to remember to charge up the battery ready for its next use. Yet another battery and charger system to find room for; if only the manufacturers would get together and standardise!

Proxxon of Germany have recently introduced a cordless range of three of their popular bench tools: a drill grinder, belt sander and long-neck angle grinder. These are industrially-rated and are intended for small-scale work. Each tool can be purchased in a fitted case with battery and charger included or they can be bought as separate units.

The system uses a Lithium-ion, 10.8V battery, which is interchangeable with all three tools and clicks into the end of the body. It takes one hour to charge and holds its power when not in use. The charger is neat and compact and has two indicator lights showing when the battery is charging up and when it is totally charged. The built-in circuitry protects against overheating.

Features common to all tools

- They can all take the same battery
- The body is made in reinforced glass fibre polyamide with soft finger grip inserts



The battery costs £42.84 and the charger costs £47.41



The system uses a Lithium-ion, 10.8V battery, which is interchangeable with all three tools and clicks into the end of the body

PROXXON DRILL GRINDER IBS/A

In the body-only version, this machine is supplied with six steel collets – 1-3.2mm diameter – and a tightening key; note that it will NOT take a keyless chuck. The variable-speed range goes from 7,000-23,000rpm, and the overall length, with the battery in position, is 270mm while the weight is 700g.

The aluminium collar has a diameter of 20mm, which means the drill can be held securely in the Proxxon drill stand or the bench holder.

When changing collets, ensure the battery is removed and the collets can be tightened with the spanner provided.

The collets take a wide range of accessories, including the flexible drive shaft for drilling, grinding and polishing.

The drill can be held by hand, as shown, for many operations. For more precise and accurate work, it is best used in the drill stand and shown here with the x/y table and small machine vice, which makes for a very effective work centre.

Battery or mains?

The mains version costs £65.76 and the boxed battery version costs £151.60. You may or may not be able to justify the difference in price of £85.93, which is considerable! This is a very accurate, well designed and finished drill/grinder with a wide range of uses. It will be of particular interest to the model maker, jewellery maker, toy maker and restorer. Out of the three machines tested, this is the one I would use the most. I do have the corded version but the cordless battery model has many advantages. Not everyone has the luxury of a dedicated workshop for their hobby and a portable workstation like this can be used very satisfactorily on the kitchen table or in a shed without a power source.

From
£76.76
(body only)



The collets are tightened using the spanner provided



This machine, in the body-only version, comes with six steel collets from 1-3.2mm diameter and a tightening key



For more precise and accurate work, it is best used in the drill stand, shown here with the x/y table and small machine vice



The collets take a wide range of accessories, including the flexible drive shaft for drilling, grinding and polishing



You have to remove the battery when changing collets

PROXXON LONG-NECK ANGLE GRINDER LHW/A

In the body-only package you get the grinder plus a 60 grit corundum sanding disc, a cutting disc and a 100 grit aluminium oxide fan sander. Arbortech mini cutters will fit this machine but they cost extra.

The machine has a long, slim gear head on to which the appropriate 50mm disc is attached at right-angles by means of a single hex screw. The disc has a 10mm bore; the guard is made of steel and is adjustable. With the battery in place the overall length is 320mm and the weight 800g. The variable-speed runs from 500rpm up to 1,600rpm.

When changing discs, you must remove the battery. It is imperative that personal protection is worn: it may be a small angle grinder but great care should be taken when operating this tool. The cordless version scores over the mains version as one does not have to worry about possibly slicing through the cable in a careless moment and greater manoeuvrability is also possible.

A variety of applications

The machine works well: it is strong, well made and balanced, but I must admit that I do find angle grinders intimidating! The tool can be used for grinding down wood and metal and it has useful DIY applications, as shown here where I am grinding off the end of a protruding screw – you may be able to see the sparks flying! The angle grinder is likely to be of more interest to those woodturners who like to decorate their turned work with random patterns to achieve interesting results, or to carvers wanting to remove wood quickly using Arbortech mini cutters.



The guard is made of steel and is adjustable



In the body-only package you get the grinder plus a 60 grit corundum sanding disc, a cutting disc and a 100 grit aluminium oxide fan sander

From
£93.28
(body only)



The tool can be used for grinding down wood and metal and has useful DIY applications



The machine has a long, slim gear head on to which the appropriate 50mm disc is attached at right-angles by means of a single hex screw

PROXXON BELT SANDER BS/A

The Proxxon belt sander is a narrow, 10mm wide, hand-held belt sander. The body-only version is supplied with four replacement belts: 2 x 80 grit and 2 x 180 grit. It also comes with an effective device to fit a standard dust extractor hose. This does immediately mean that you do have a restrictive hose but the alternative is wood dust everywhere. With the battery fitted, the overall length of the tool is 380mm and the weight is 900g. The machine has an adjustable arm, which can be rotated up to 60° from the horizontal and tracking for the belt can be adjusted to the right or left and locked by a screw.

The belts are easily changed by pressing the end of the spring-loaded arm and they last a long time and can be de-clogged. The sander also handily operates between fast and slow speeds.

Great for difficult sanding

The sander is easy to hold and control and allows sanding in difficult areas, such as on wood, plastics and metals. This is not an essential item but it is useful to have, particularly if you make toys or models.

From
£107.62
(body only)



In summary

The three tools, the battery and charger, are all well made and robust. The Proxxon range of small machines is designed for those woodworkers and modellers who wish to make smaller projects and with their industrially rated motors, they should give many years of use. They each merit full marks for performance. It is more difficult to assess value for money, however, because, as already discussed, the battery and charger costing £90 do add considerably to the overall cost and when compared to the mains corded versions, the increase in price is rather off-putting. However, these cordless versions are convenient and it is probable that other items will arrive in the future; the jigsaw, for instance, would be a good addition. In the end, it is always a matter of personal choice, how often one is likely to use the tool, and what the budget will allow. **IW**

SPECIFICATION

PROXXON DRILL GRINDER IBS/A

BATTERY NO/CAPACITY	1 x 2.6Ah
BATTERY VOLTAGE	10.8V Li-ion
COLLETS SUPPLIES	1, 1.5, 2, 2.4, 3 and 3.2mm
SPEED	7,000-23,000rpm

PROXXON LONG-NECK ANGLE GRINDER LHW/A

BATTERY NO/CAPACITY	1 x 2.6Ah
BATTERY VOLTAGE	10.8V Li-ion
DISC DIA./BORE	50/10mm
SPEED	5,000-16,000rpm

PROXXON BELT SANDER BS/A

BATTERY NO/CAPACITY	1 x 2.6Ah
BATTERY VOLTAGE	10.8V Li-ion
SPEED	200-700rpm

VERDICT

All tools tested were well made and I was impressed by the results achieved using them. The high price of the battery and charger is off-putting but if you have the budget, you won't be disappointed with performance

PROS ■ Convenience
■ Manoeuvrability

PROS ■ High cost of battery and charger

VALUE FOR MONEY



PERFORMANCE



FURTHER INFORMATION

■ BriMarc Tools & Machinery
■ 03332 406 967
■ www.brimarc.com



This is a narrow, 10mm wide, hand-held belt sander



It also comes with an effective device to fit a standard dust extractor hose



The machine has an adjustable arm, which can be rotated up to 60° from the horizontal



Tracking for the belt can be adjusted to the right or left and locked by a screw



The belts are easily changed by pressing the end of the spring-loaded arm. They last a long time and can be de-clogged



The sander is easy to hold and control and allows sanding in difficult areas, such as on wood, plastics and metals

COURSES, TIMBER SUPPLIES & SPECIALIST EQUIPMENT

Allan Calder's Ltd Sandpaper Supplies

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



We are supplying top quality brands of sanding abrasives for all types of Wood Turners, Joiners & Cabinet Makers.

Web: www.sandpapersupplies.co.uk

email: sandpapersupplies@yahoo.co.uk

Tel: **01538 387738**

Mike Watts | Woodworking Courses

Tailored courses - Beginners or experienced welcome

In Beautiful North Devon

Max 2-3 students

Why not Learn from a degree qualified Tutor with more than 40 years' experience whilst combining your course with a break in our breathtaking coastal area?



We have comfortable self-catering accommodation on site with materials and Hardwood provided so that you can...
...take your completed project home with you!



t: 01271 813994 • e: info@mikewattswoodworking.co.uk

www.mikewattswoodworking.co.uk

Basic Woodworking • Furniture & Cabinetmaking • Picture Framing

Richard Maguire "WORKHORSE" workbench

FOR SALE

American White Ash - **AS NEW** - never used!



- Length: 78" • Width: 24"
- Height: 34"
- Top thickness: 3 1/2"
- Leg thickness: 5 1/4" x 3 1/2"

Wood screw leg vice - Maguire wagon vice - sliding board jack - full length flip stop - base shelf for tools - 2 brass bench dogs.

A great bargain at **£1,950** • **COLLECTION ONLY**

Contact Dave on: **01509 730025** - Loughborough, Leicestershire.

Genuine reason for sale - emigrating in new year!

Unloved? Unuseable? RESTORE IT!



Stanley No.5 'before & after' photo courtesy Peter Hemsley - The ToolPost

Restore Rust Remover & Restore Rust Remover Gel

Remove only the rust leaving sound metal unaffected. Cleans and brightens brass and nickel plating. See more stunning 'before & after' examples on our website photo galleries. Find local and international stockists on the website.

Shield Technology Limited.
Unit 69, Grimsby Business Centre
King Edward Street,
Grimsby, DN31 3JH

Tel: +44 (0)1472 360699
Fax: +44 (0)1472 324685
Email: info@shieldtechnology.co.uk
www.shieldtechnology.co.uk

Distributor enquiries welcome

SHIELD TECHNOLOGY
Guarding Against Corrosion

SURREY TIMBERS Ltd

Your One-Stop Wood Shop

Hardwood Timber Merchant
stocking local & Imported Timber



Buy one piece or one pack!

Please come & select from our range:

OAK, YEW, WALNUT, SAPELE, APPLE, MAPLE, SYCAMORE & More!

All welcome
• Woodturners • Joiners,
• Cabinetmakers

Call in and see
our huge range at: Loseley
Park, Guildford GU3 1HS

01483 457826 or 07795 663792

www.surreytimbers.co.uk

COURSES, SPECIALIST TOOLS & EQUIPMENT

**MAIL ORDER
NARROW BANDSAW
BLADES
MANUFACTURED TO
ANY LENGTH
PHONE NOW FOR QUOTATION
OR PRICE LIST**

TRUCUT
Spurside Saw Works, The Downs,
Ross-On-Wye, Herefordshire HR9 7TJ
www.trucutbandsaws.co.uk
Tel: 01989 769371
Fax: 01989 567360

TOP QUALITY - LOW PRICES!
VSM VITEX ABRASIVES
KK532F Starter Pack (4 Metres) £14.00
Inc.VAT & UK post. ½ metre each of grit
80, 120, 150, 180, 240, 320, 400 and 600.
***GRIP-A-DISC* Power Sanding System**
50mm Starter Kit - £32.00 Inc.VAT
& post. Contains 50 Discs and Holder.
*We also stock: Sorby Tools, Chestnut
Products, Pacer Super Glues & VSM belts.*

SAE for Catalogue
Jill Piers Woodturning Supplies
2 Kimberley Villas, Southmill Road,
BISHOP'S STORTFORD, HERTS. CM23 3DW
Tel/Fax: 01279 653760

IAN PARKER
furniture school



01892 861009
long and short courses in fine furniture making
www.ianparkerfurniture.co.uk / near Tunbridge Wells

the WoodRat®
**is not just here for the
dovetailing**



WoodRat's Mortise Rail MR4 clocks in the length
and position of any number of mortises. Each pair
exactly placed on opposing stiles – simple, accurate
and very quick!

see it in action - www.woodrat.com

Dowelmax

Tables, chairs, stools, kitchens,
bedrooms, desks, bookcases,
sideboards, beds, benches, doors,
windows, steps, cabinets,
**make them all and more with the
Dowelmax Doweling Jig**

Dowelmax Doweling Jig -
No need for biscuit jointers, tenoners,
morticers, screws, loose tenons etc,
**make joints faster, more
accurately and stronger with
Dowelmax**

The ultimate doweling jig for woodworkers!

See us on **YouTube** and visit:
www.dowelmax.co.uk
for more info, video and ordering.

Dowelmax
Tel: **01352 781168** or **07773 718758**

ANDREW CRAWFORD
BOX MAKING COURSES

What an adventure!
Andrew is a true master
of the craft, and expertly
shared and showed us
how to reach new levels
of craftsmanship!



- weekend courses
- 'gold' 5 day courses
- one-to-one tuition

www.box-making.com  **01694 781318**



BLACK ISLE WOODTURNING



The UK's exclusive agent for Vicmarc machinery



- Lathes
- Chucks
- Jaws
- Accessories & Spares
- RP4000 Chuck Spares & Jaws

Woodturning supplies, tools & tuition

Tel: 07842 189 743

f e: info@blackislewoodturning.com

www.blackislewoodturning.com

NATURAL WOOD FINISHES YOU CAN RELY ON

osmo

01296 481220 | osmouk.com



DECKING-OIL: Highest quality colour and protection for wood

✓ MICROPOROUS | ✓ DURABLE | ✓ UV-RESISTANT | ✓ OIL-BASED | ✓ HIGH COVERAGE

TREE STATION

Quality English Sawn Timber:

- » Rough sawn or planed
- » Wide variety of species and thicknesses
- » Sustainably grown and kilned



Please get in touch or visit our website
www.treestation.co.uk - 0161 2313333

Contemporary

Craft & Design Fair

Purchase direct from the very best artists and craftsmakers in the UK



Wellington College
CROWTHORNE
28 - 30 October

12 noon to 6pm Fri • 10am to 5pm Sat
10am to 4.30pm Sun • Admission £4.50
4 miles from M4 J10 or M3 J3/J4
AA Signposted • RG45 6DY

craft
IN FOCUS



www.craftinfocus.com T: 01622 747325

SHOP GUIDES

HOBBY'S
Annual 2017 • Number 47
£3.25 P&P Free
NOW 324 pages

NEW: A range from Dolls House Emporium, useful work and storage stations, and amazing laser-cut plywood mechanical models. Also colourful music box kits, a Matchcraft motorbike and quick-assembly doll's houses.

Available from WH Smith & leading newsagents, or directly from Hobby's.

New articles about pyrography, railway architecture, and George Duckett's review of Constructo's Cutty Sark kit

Hobby's, Knight's Hill Square, London SE27 0HH. 020 8761 4244. Mail@hobby.uk.com Visit us at www.hobby.uk.com

FREE PLAN COUPON for a working matchstick timepiece

THE MODELMAKER'S YEARBOOK

TOP QUALITY - LOW PRICES!
VSM VITEX ABRASIVES
KK532F Starter Pack (4 Metres) £14.00
Inc. VAT & UK post. ½ metre each of grit 80, 120, 150, 180, 240, 320, 400 and 600.

***GRIP-A-DISC* Power Sanding System**
50mm Starter Kit - £32.00 Inc. VAT & post. Contains 50 Discs and Holder.

We also stock: Sorby Tools, Chestnut Products, Pacer Super Glues & VSM belts.

SAE for Catalogue
Jill Piers Woodturning Supplies
2 Kimberley Villas, Southmill Road, BISHOP'S STORTFORD, HERTS. CM23 3DW
Tel/Fax: 01279 653760

BERKSHIRE
WOKINGHAM TOOL COMPANY LTD
97-99 Wokingham Road
Reading, Berkshire RG6 1LH
Tel: 0118 966 1511
www.wokinghamtools.co.uk
H. P. W. CS. BS. A. D. MO.

LEEDS
D.B. KEIGHLEY MACHINERY LTD
Vickers Place, Stanningley, Leeds, LS28 6LZ
Tel: (0113) 257 4736
Fax: (0113) 257 4293
www.dbkeighley.co.uk
P. A. CS. BC. MO.

JET **OSIP** **SEDGWICK**

WEB GUIDE

WEALDEN TOOL COMPANY
Router cutters
Spindle tooling
Bandsaw, jigsaw & circular sawblades
Online catalogue & ordering
www.wealdentool.com

www.getwoodworking.com

MUSICAL INSTRUMENT MAKERS

Musical Instrument Makers' & Repairers' Supplies



Largest selection of tonewoods, tools & parts in the country. Visit our website or order our catalogue. Callers welcome

Touchstone Tonewoods, Albert Road North, Reigate, RH2 9EZ

Tel: 01737 221064 Fax: 01737 242748

www.touchstonetonewoods.co.uk

CLOCKS

Woodworking Materials
Large selection of products!

- ✓ Clocks & Accessories (Quartz and Mechanical) ✓ Barometers ✓ Thermometers
- ✓ Cabinet furniture ✓ Screws ✓ Plans ✓ Kits
- ✓ Polishes ✓ Adhesives ✓ Abrasives etc.

For **FREE** catalogue please contact:

Chris Milner Woodworking Supplies

(Dept. TW) Beresford Lane, Woolley Moor, Nr. Alfreton Derbyshire DE55 6FH

Tel/fax: (01246) 590 062

Email: milnerwoodwork@aol.com

To advertise here...
...call David on **01689 869 867**
david.holden@mytimemedia.com

WANTED

TOOLS WANTED

Top Prices Paid For Quality Hand Tools

carving tools, chisels, turning tools
norris planes (and similar), metal planes
green tools, any nice old hand tools...



email photos to: info@oldtools.co.uk
or bring tools to: Bexhill - 01424 217893

WOOD VENEERS



The Wood Veneer Hub

www.thewoodveneerhub.co.uk

We provide the highest quality:

Decorative, Exotic & Burr Veneers
Coloured & Smoked Veneers
Constructional Veneers
Peel & Stick Veneers
Tools & Accessories

Visit Us: Unit 4 Eden Court, Eden Way
Leighton Buzzard, Bedfordshire, LU7 4FY

+44 (0) 1525 851166

sales@thewoodveneerhub.co.uk

MARKETPLACE

Our **FREE** classified advertisement service



FOR SALE

Record 10in table saw with extension table and stand. 1,100W motor; 660 x 860mm table; blade 58mm deep at 90°. Buyer collects; call to make a reasonable offer
01843 601 438 (Broadstairs)

Felder combination machine – 1.3m sliding table spindle moulder with router attachments; F34 power feeder and AF12 dust extractor; £1,500
01435 872 222 (Heathfield)

Record Power DX4000 high filtration dust extractor. In mint condition, complete with 100mm hose and instruction manual. Email picture available; a bargain at £175
01202 698 725 (Bournemouth)

Vicmarc VL100 EVS electronic variable-speed lathe – the Rolls-Royce of mini lathes. Complete with tools and user guide. Email picture available. In excellent condition and selling at a bargain price of £895
01202 698 725 (Bournemouth)

Fein Dustex 25l, 240V wet & dry dust extractor with tools. Latest model, little used; £95
01322 526 897 (Kent)

SIP-01938 woodturning lathe – cast iron; 3/4hp motor; variable 10 speed easy change; digital read out; swivel headstock; steel stand, and various other extras. 36 x 12in capacity, excellent condition; £240
01206 511 071 (Colchester)

Roy mortiser with six Japanese pattern bits; £400. MK1 Woodcut; £180. Mateo 317 bandsaw and blades; £120. Many more tools available – call for further details
01206 826 615 (Essex)

Coronet 3 lathe with wooden bench, collet chuck, Novatech scroll chuck, 20 assorted chisels (including nine Ashley lles' chisels), bench grinder with Robert Sorby grinding jig, woodturning books, blanks and finishes; £500 ONO
02380 266 944 (Southampton)

Shopsmith Mk5 lathe complete with bandsaw, jointer, circular saw with spare tipped blade, moulder, sanding disc, extended table, plus many extras. Call to make an offer
01476 561 966 (Lincs)

DeWalt DWS520 plunge saw plus tracks, clamps and T-square attachment, little used; £185
01322 526 897 (Kent)

Charnwood chuck to fit Nova thread; £50; numerous turning tools; £190; 56lb 6in ceramic tiles; £42; eight books; £5 each; eight acrylic pen holders; £28; chainsaw bib and brace, plus helmet; £65 – buyer collects
01209 211 522 (Cornwall)

Elektra Beckum/Metabo planer/thicknesser HC260 – in mint condition; £375; 10in Shipmate radial arm saw; £150
01873 812 498 (Powys)

Jig plus router for turning (e.g. barley sugar twists). Proton DB250 lathe, fuse saw, MP300 moulder, Leigh dovetail jig, 36in lathe and 9in angle grinder. Call to make offers
01568 770 404 (Herefordshire)

Trend T20K biscuit jointer in very good condition; £65. Mortise & tenon jig, brand-new in box with new straight cutters; £150 ONO
01273 611 839 (East Sussex)

For sale – various Woodworker magazines from 1946–2013. All are in pristine condition. A wonderful collector's item – selling due to bereavement. Please call to make an offer; collection only
07847 394 507 (Derbyshire)

Sedgewick chisel mortiser – model 571; single phase; extra chisels; 160kg weight; instruction manual supplied; very little use; delivery possible; £495
01754 890 282 (Lincs)



Record Power PT260-x planer/thicknesser – bought in 2011 and very light usage. Ideal for planing timber up to 255mm wide and thicknessing up to

150mm-thick, this machine has capacity for a 3mm removal at each pass, though the owner has never taken more than 1mm passes. A resharpenable two-knife cutterblock with metal feed rollers for thicknessing all give a stable performance and good finish. Includes an induction motor, wheel kit and fence; £250 cash sale – buyer collects
07776 250 036 (Norfolk)

Timber clearance – thoroughly seasoned teak: four planks 30 x 350mm; 1 @ 60 x 150mm – all 2.25m; £35
01935 872 222 (Sussex)

WANTED

Woodworker magazines. Pre-1951 plus 1984–1986. Grandfather collecting for cabinetmaker grandson
01493 368 180 (Norfolk)

Spiers/Norris/Henley planes wanted by private collector; any quote beaten. Ring 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)

USE THIS FORM TO BOOK YOUR **FREE** AD

The Woodworker
MARKETPLACE & Woodturner

- 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 _____

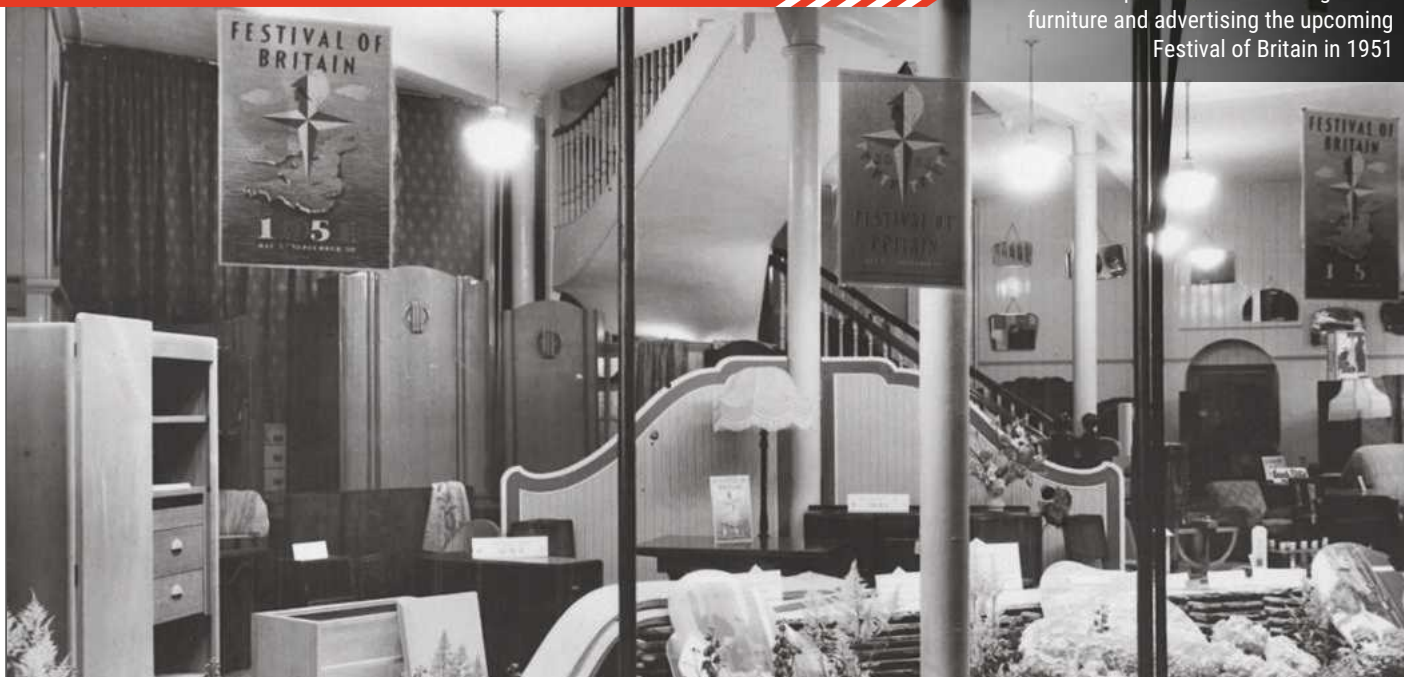
Please publish this advertisement in the next available edition of *The Woodworker*. I am a private advertiser and have no trade connections.

PLEASE TICK: FOR SALE ☐ WANTED ☐

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**

Wards department store selling Lebus furniture and advertising the upcoming Festival of Britain in 1951



The EXCLUSIVITY of HJ Shop

Returning with his next 'Timeslip', Peter Baker picks up where he left off and discusses the Radio Frequency (RF) curing of glue lines – a technical process that aimed to accelerate assembly times while reducing labour content

I have previously told you something about HJ Shop and its exclusivity, all because the secrets within were so ahead of the times. Remember that this was taking place in 1951 – 65 years ago – and the trade still does not acknowledge the potential benefits to be obtained. You'll reach your own conclusions after reading this month's contribution.

Radio Frequency (RF) curing of glue lines

This still reads like science fiction, but it isn't, because I have worked the system, effectively. The biggest cost in manufacturing is labour. You can calculate the material content of a product very accurately (and forget the waste factor), add the overhead burden and profit margin, then you are faced with the labour content. Do you really know how long it will take to make the particular product you are costing? From experience I suggest not, for it always takes longer than you think. Unless there is an incentive to work faster, work always expands to fit the time available. It is human nature to do this. To have a 'task master' holding a whip is now against the law, but one can understand why such people were employed back then.

With RF you automatically speed up the rate of production by virtue of the very accelerated assembly times alone. You will reduce your labour content dramatically, which makes more profit available. So how

does this thing work? For repetitive work you will need to make special jigs, which can be used many times, while for one-off production there are hand-held 'guns' available. The common element to both is that two electrodes have to be positioned adjacent to the joining surfaces and these electrodes have to be capable of taking electricity, at very high frequency, along them. The principle utilised is that of a microwave oven. Therefore great care needs to be taken when using RF curing of glue lines, but why? Well, a microwave cooks from the inside out. Radio Frequency curing is a forerunner of microwave cooking. The principle is that, as electricity passes along a conducting strip or electrode at very high frequencies, or radio frequencies, a magnetic field is created around that conductor. Where two conductors are adjacent to one another and the magnetic fields cross, heat is created within any resistance between the conductors. Wet glue is a resistance and the created heat starts the cure of synthetic glues like Araldite. In other words, resin

adhesives. Allow any part of the body, especially hands, to get between the electrodes and their magnetic fields and you start 'cooking' yourself from the bone outwards. Which is why we refer to the curing time as 'the cooking time'. Somewhat painful, I am told!

The genius of Chaim Schrieber

In order to achieve these very high frequencies one also has to invest in a very high frequency converter, a special device capable of altering ordinary electrical current from 50 cycles per second (50Hz) to 3,000 cycles per second (3kHz) or more. And this isn't even high tech now for they refer to gigahertz as a normal figure. Perhaps the cost of this equipment deterred other companies from the investment required to follow the Lebus lead. And all this came from the brain of one man, Chaim Schrieber, the company's development engineer. His knowledge was tremendous and I am extremely pleased to be able to say that I worked under his direction while I was in HJ Shop. Maybe my understanding of that which he spoke had been enhanced by my National Service and serving as a 'Radio Tradesman' while in the Royal Air Force. Was I just lucky to be in the right place at the right time? Who knows. **WW**

GET IN TOUCH

© Peter Baker 2016

In part 7 of this series, Peter takes readers on a virtual tour of the factory, starting with the wood yard – where it all began. And if any other readers have a story to tell, we'd be glad to listen. Just write to editor.ww@mytimemedia.com and we'll see how we get on



Engineered Precision



Get a Grip!

SJA 300

SuperJaws XXL portable workstation with a powerful 1000kg clamping force and controlled clamping pressure.

Constructed from tough, powder-coated steel, **SuperJaws XXL** boasts a 1000mm clamping width and will securely clamp almost anything from timber and bikes to doors and fence panels.

Features include a lock/release switch for fast release of the workpiece, reversible jaws for extra-wide capacity and foot-operated clamping for hands-free operation. The greater load capacity of 250kg, allows larger workpieces to be clamped.



Introducing the New Range of Woodturning Chucks and Jaws

We are extremely proud to introduce the new range of Record Power woodturning chucks and jaws. This exclusive range has been developed using Record Power's extensive experience and knowledge of woodturning in conjunction with a group of highly experienced professional and hobby woodturners to bring you the ultimate in quality, versatility and value.



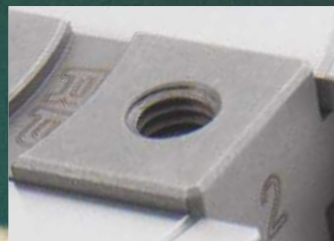
Precision Engineered Gears

Super Geared True-Lock™ technology ensures high levels of accuracy to provide smooth and solid operation.



Jaw Fixing System

The SC3 and SC4 feature a jaw fixing which will not only fit the Record Power series of Jaws but is also fully compatible with Nova and Robert Sorby brand jaws.



Heavy Duty Jaw Slides

The improved and enlarged jaw slides give unsurpassed holding power and load bearing ability. They are made from high tensile steel, reinforced with nickel and copper and heat-treated to ensure superior strength.



Sealed Backing Plate with Full Indexing

The SC4 features a strong backing plate to protect the gear mechanism from dust and 72-point indexing around the full circumference.

SC3 Geared Scroll Chuck Package **Only £99.99** **Now includes 2" Faceplate**

SC4 Professional Geared Scroll Chuck Package **Only £129.99** **Now includes 2" Faceplate**

15% OFF
All jaws when 3+ sets bought

See online for full details

Prices valid until 28.2.2017

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

BURGESS

Incorporating some of the most famous brands in woodworking, Record Power have been manufacturing fine tools & machinery for over 100 years. Built to last we provide support for thousands of machines well over 50 years old, which are still in daily use. Testimony to the sound engineering principles and service support that comes with a Record Power product.