

EST.1901

STILL THE ORIGINAL AND THE BEST

The Woodworker

November 2014

www.getwoodworking.com

& Woodturner



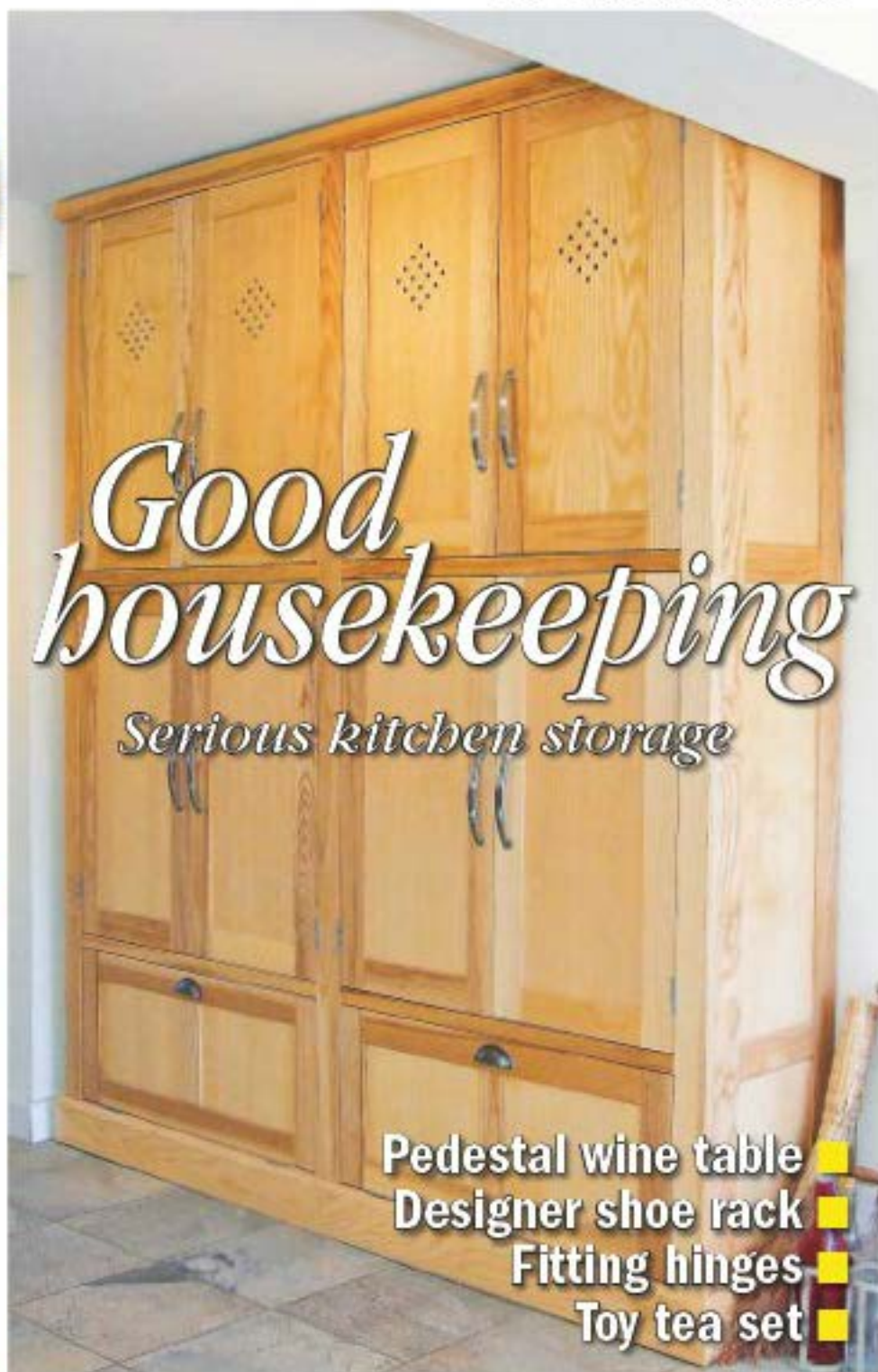
TELLING THE TIME



A FLATTER PLATTER



ROUTER MAGIC



Good housekeeping

Serious kitchen storage

Pedestal wine table ■
Designer shoe rack ■
Fitting hinges ■
Toy tea set ■

PLUS: SIMPLE CHAIR REPAIRS ■ 7 TOOL & KIT TESTS

WOODWORKERS GROUP



563

IronmongeryDirect

MASTERS OF OUR TRADE

ORDER BY 8PM

GET IT NEXT DAY

- ✓ UK's Biggest Range
- ✓ FREE Delivery over £45
- ✓ Minimum 5 Year Guarantee
- ✓ FREE Returns

IronmongeryDirect
MASTERS OF OUR TRADE

LOCKED DOWN PRICES

ARRONE
Arrone Code Lock

- Easy to fit
- Deadlocking handle with 60mm backset
- Anti-bomb function

ONLY £19.80 EACH

Order Code: 242241

ORDER BY 8PM - GET IT NEXT DAY

FREEPHONE 7am-8pm 7 days a week
0808 168 28 28

ONLINE Shop 24/7!
IronmongeryDirect.com

Door Furniture	8
Doors, Slips & Accessories	192
Sliding Door Hardware	238
Ranges	280
Door Closers & Controls	340
Intercoms & Fire Control	358
Signs	462
Locks, Latches & Security	424
Seats for Doors & Windows	558
Window & Joinery Hardware	592
Gate Hardware	662
Cabinet Furniture & Hardware	674

CALL TODAY FOR YOUR FREE CATALOGUE

OR TEXT RBA23 to 62244 FREE
with name, address and email

**FULL RANGE
AVAILABLE
ONLINE**

Download our FREE App!



CALL 7am-8pm 7 days a week

0808 168 28 28



ONLINE Shop 24/7!

IronmongeryDirect.com

welcome



There's something about working with wood which seems to be universally attractive to the average human being. It's not just the beauty of the material itself; it's something more than that. Is it the ease (I) with which a person can put their own stamp on a simple artefact they've made? Or maybe it's the opportunity it provides us with to exercise our technical skills in a clear and potentially attractive way for all to see. For our ancestors – from ancient to fairly recent – it was often the only way to acquire necessary and useful items in a tough and unforgiving world.

Non-fatal attraction

And it's not just woodworking either. In my travels out and about in the world of toil, I've been noticing an increased interest in making things of late, especially amongst younger people. All sorts of folk are rediscovering the joys and pleasures of creating and constructing, and I for one am very pleased to witness it.

Maybe it's a simple reaction to our mass-produced and homogenised world, a chance to simply express ourselves in a world of high-tech gadgetry controlled by computer-aided everything. Perhaps the reduced or non-existent workshop time in schools in recent years has played a part. But whatever the reason, new generations are taking up tools again and exploring the many benefits of custom-made crafts.

Make it

I participated in a 'mini maker fair' down my way recently and was impressed with the number of visitors who called in and took part in workshops and demonstrations of a wide range of high- and low-tech disciplines. These included all manner of electronics, 3D printing, robotics and the like, with yours truly doing what he could to fly the flag for old-school woodworking.

It was gratifying to observe the interest shown in my simple woody fare – consisting mainly of dovetail samples, tools, biscuit and Domino joints – which seemed to strike a chord with many a punter, young and old alike. One proud parent even wrote to me afterwards to tell me just how excited his smallish son had been to watch my basic demo of cutting a curve with a coping saw and planing it smooth. Apparently a block plane is now top of the youngster's wish list!

Help and inspire

So, when it comes to making it, don't forget that this magazine belongs to all of us, and if there's anything you'd like to see featured, just drop me a line and I'll see what can be done. Also, if you know of any young people who have been inspired to stand at a bench and make something, please let me know and we'll look at what we can do to further their ambitions.

mark

You can contact Mark on mark.cass@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

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

Title _____ First name _____

Surname _____

Address _____

Postcode _____

Telephone number _____

If you don't want to miss an issue



CONTENTS

*What's in store for
you this month*



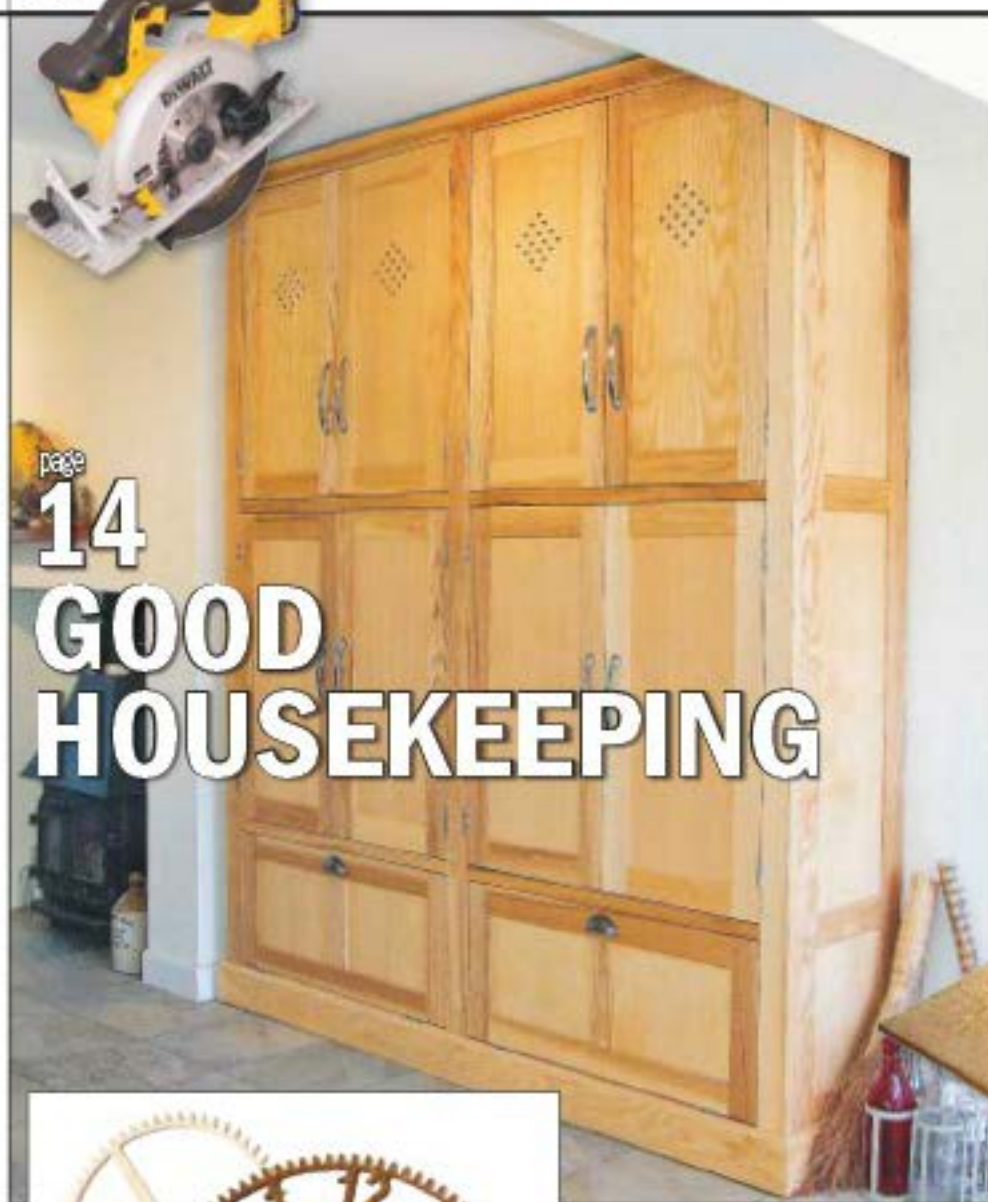
page
83



page
76

page
14

GOOD HOUSEKEEPING



page
29



**NEXT
ISSUE**

THE DECEMBER ISSUE IS OUT
ON NOVEMBER 14th

page
59



page
39

page
49



REGULARS

- 3 Welcome
- 8 News
- 11 News & Diary
- 63 & 70 Subscriptions
- 88 Marketplace
- 89 Readers' letters
- 90 Archive

WOODWORK

- 14 Good housekeeping**
Duncan Rose creates a modern version of the traditional housekeeper's cupboard that provides a generous amount of easy-access floor-to-ceiling kitchen storage space
- 21 Five-star trammel**
Peter Parfitt says he's spent a lot of time over the years making impromptu trammels for circular router work, and has finally decided to make a decent one from Plexiglas
- 29 Three legs good**
David Cockburn has made some 25 versions of this small pedestal wine table over the years, so he should know how to fit the dovetailed legs by now. Here's how he does it
- 34 Routing panels in solid wood**
Ron Fox explains that panelled doors don't have to have a separate jointed frame and floating panel; instead you can rout them quickly and easily from solid wood
- 39 Making time**
Mechanical devices made from wood are always impressive, and few more so than a working timepiece. The unusual clock described here has been made by Christopher Blasius, one of our German readers
- 45 A perfect fit**
Hanging doors is an exacting process that shouldn't be rushed, but approached methodically to achieve the best results. Andy Standing guides you through the process

- 49 Apto shoe rack**
We spotted Hannah Knowles' piece at the 2014 New Designers show in London earlier this year. Struck by its originality, we asked her to describe how it came into being
- 53 The chair doctor**
If you've got an old favourite chair that's past its best, you've probably wondered whether to scrap it or try to repair it. Peter Bishop has some simple fixes

TURNING

- 59 A flatter platter**
Say 'platter', and most people imagine a large circular dish. Most are round, but there's no reason why they shouldn't be square or rectangular instead. Colin Simpson shows how
- 65 Turned to a T**
Ian Wilkie presents a little turning project that will take no more than a few hours and will use up some of your offcuts. It will also make a lovely present for any toddlers in your family

ON TEST

- 73 Wood River 6-piece chisel set**
74 Bosch PFS 3000-2 spraying system
76 Makita LS0815FL mitre saw
78 Axminster AW16BMST2 bench mortiser
81 Trend Snappy 60-piece tool set
82 David Barron cutting gauge
83 DeWalt DCS391M2 circular saw

SUBSCRIBE & SAVE UP TO 34%
PLUS: RECEIVE A FREE BOSCH 34 PIECE X-LINE ACCESSORY SET



OFFER CLOSES 14th NOVEMBER 2014

The Woodworker & Woodturner

November 2014

Published by MyTime Media Ltd
Enterprise House, Enterprise Way,
Edenbridge, Kent TN9 6HF

Tel: 0844 412 2262
From outside UK: +44 (0)1889 868840
www.getwoodworking.com

SUBSCRIPTIONS

UK - Now, Renewals & Enquiries
Tel: 0844 543 8200
Email: mytimemedia@subscription.co.uk
USA & CANADA - Now, Renewals & Enquiries
Tel: (001)-866-647-9191
REST OF WORLD - Now, Renewals & Enquiries
Tel: +44 (0)1889 868896

BACK ISSUES & BINDERS

Tel: 0844 848 8822
From outside UK: +44 (0)1332 912894
Email: customer.services@myhobbystore.co.uk
Website: www.myhobbystore.co.uk

EDITORIAL

Editor: Mark Case
Email: mark.case@mytimemedia.com
Production editor: Mike Lawrence
Email: mike.lawrence@mytimemedia.com

PRODUCTION

Design Manager: Sibhan Nolan
Designer: Malcolm Parker
Illustrator: Michael Lindley
Retouching Manager: Brian Vickers
Ad Production: Robin Gray

ADVERTISING

Business Development Manager: David Holden
Email: david.holden@mytimemedia.com
Tel: 01903 709545
Online Sales: David Holden
Email: david.holden@mytimemedia.com
Tel: 01903 709545

MARKETING & SUBSCRIPTIONS

Sarah Pradhan & Keta Scott

MANAGEMENT

Head of Design & Production: Julia Milar
Group Sales Manager: Duncan Armstrong
Chief Executive: Owen Davies
Chairman: Peter Harkness

mytime media
print & digital media publishers

© MyTime Media Ltd. 2014
All rights reserved. ISSN 1752-3524

The Publisher's written consent must be obtained before any part of the 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's contents, but the publisher 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. Reference 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 TN9 6HF, UK.
The US annual subscription price is \$49.50 (equivalent to approximately £34.50). 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 11434.
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 CDS GLOBAL Ltd, Tower House, Sovereign Park, Market Harborough, Leicestershire, LE16 9EF.
Air Business Ltd is acting as our mailing agent.



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



THE TOOL SUPERSTORE DM-TOOLS.CO.UK

Your No1 choice for Hand Tools, Power Tools & Machinery



D&M Tools has been family owned and managed since 1976. We have earned a reputation with our customers as a trusted partner with the personal touch, combined with expert advice from our trained staff, great value and speedy nationwide delivery service – **PLUS delivery is FREE for most orders over £99.**

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 machinery all at the keenest prices and from stock.

UNBEATABLE VALUE!



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.

Why not subscribe to our regular email to keep up with our latest deals and offers!

FREE CATALOGUE

**OVER 650 PAGES
PACKED
FULL
OF THE
BEST
DEALS
+ THE
LATEST
KIT!**

**GET YOURS NOW!
VISIT OUR
WEBSITE OR
TEL: 020 8892 3813**



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

MASSIVE CHOICE FROM THE BIGGEST BRANDS!



**THE TOOL
SHOW '14**
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.

FREE DELIVERY

UK MAINLAND

ON ORDERS OVER £99

(EXCEPT AS MARKED SEE OUR RATES OF CARRIAGE FOR MORE DETAILS)

CARRIAGE RATES UK MAINLAND

UP TO £99 - NOW ONLY £5.95

OVER £99 - FREE

*Orders over £99 & under 25kg next day £4.95
Single items over 25kg and Machines
carriage R.O.A.



D&M TOOLS



Follow us on Twitter
@DM_Tools



Like us on Facebook
facebook.com/DandMTools



Subscribe on YouTube
youtube.com/DMTools1

18V DJV181Z Brushless Jigsaw Body with MAKPAC Case

- Brushless motor.
- New improved dust extraction hose joint.
- Rigid aluminium base bevels 0 to 45 degrees left and right.
- Change lever for 3 orbital settings and straight cutting.
- Tool-less blade change.
- Variable speed control dial.
- Soft start feature.
- Twin LED job light

Makita



NEW



ETS EC 150/5 Eccentric Sander

- Very high surface quality thanks to 5 mm sanding stroke
- Longlife thanks to EC technology and sanding pad brake with carbide tip
- Compact design and weighing only 1.2 kg for optimal ergonomic work conditions
- Stepless speed preselection, constant speed even under load
- Optimal work protection thanks to vibration and extraction detection



NEW

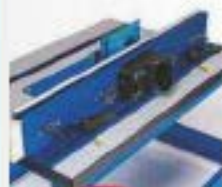
FESTOOL



PRS2100 Precision Benchtop Router Table

Kreg

- Compact router table offers all the features of a full-sized industrial router table.
- Rugged steel stand with vibration-dampening rubber feet.
- Impact-resistant Easy-Slide™ micro-dot skin.
- Edgebanded reinforced MDF table top.
- Unique bottom-up levellers with 8 contact points for accuracy.
- Height 406mm (16").
- Table top size 406 x 610mm (16 x 24").



Comprehensive
range of Kreg jigs etc
are available on our website



NEW

DLX2040TJ 18V 5.0AH Brushless Twin Pack

Contents

- DHP481Z - 18V Brushless Combi Drill LXT
- DTD129Z - 18V Brushless Impact Driver
- 2 x BL1850 18v 5.0Ah Li-ion Batteries
- MAKPAC Plastic Case (TYPE 3)
- DC18RC Compact Charger

Makita

BL MOTOR

18V LITHIUM-ION 5.0AH

BRUSHLESS

NEW



All offers subject to availability. Prices subject to change without prior notice, prices correct at time they went to press. We cannot be responsible for any mistakes. Illustrations are not binding in detail. We offer a full range of tools, these are just a few.

Ref: 091402



020 8892 3813



www.DM-TOOLS.CO.UK

LEGO BOSCH DEWALT FESTOOL IRWIN Makita metabo Panasonic RECORD POWER schaeppel STANLEY trend TORMEC

ALL OUR INC VAT PRICES ARE CALCULATED AT CURRENT RATE OF 20%

In brief...



Powerful combi

Hitachi Power Tools has launched the DV18DGL, a new 18V combi drill, which comes with two 1.5Ah Li-Ion batteries, a fast charger and a carry case. Weighing in at just 1.7kg with the battery attached, the drill delivers an impressive 55Nm of torque, driven by a full metal gearbox that underlines the tool's professional credentials.

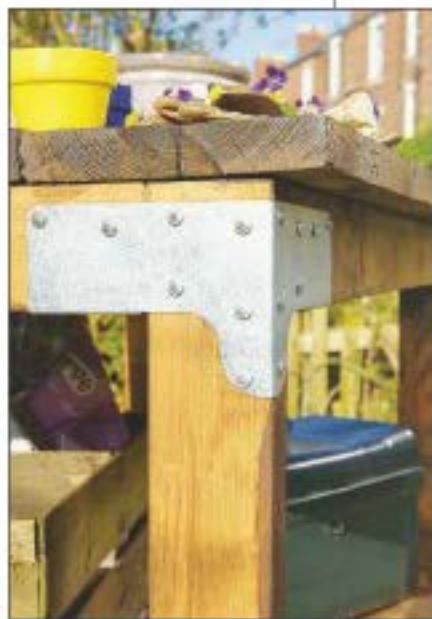
The DV18DGL also features an LED light for use where visibility is difficult, and there's a built-in drill bit holder for easy accessory storage. A spindle lock function ensures user safety when changing

drill bits, and rotational speed can be controlled with a simple switch. The price is around £100. www.hitachi-powertools.co.uk

Cutting corners

The world's leading construction connector manufacturer, Simpson Strong Tie, is breaking into the consumer market with Simply Build It, a unique new product which enables consumers to design and assemble a robust and modular table or work bench at any height, length or depth out of any timber material.

The kit, which retails at £45, includes screws and heavy-duty timber connectors specially designed to ensure true corners and enable purchasers to construct items for garage storage organisation, garden and greenhouse furniture, pet homes and even furniture. www.simplybuildit.co.uk



Polishing angle

Proxon miniature tools come with a reputation for quality, and this small angle polisher is no exception. It has a quiet, powerful DC motor with continuously variable speed control. The main body of the machine is made from glass-fibre reinforced polyamide with a softer section on the underside, making it very comfortable to hold.

The polisher is supplied with a rubber backing disc with hook-and-loop fastening, a polishing sponge, a lambswool polishing disc, polishing felt for metals and non-ferrous metals, 12 sanding discs and Nigrin polishing emulsion plus a microfibre cloth. The polisher and accessories are stored in a tough polypropylene case. The price is £89.95 www.britmarc.com

New website

Draper Tools has a brand new website. The completely redesigned site has a fresh, clean look and can now be viewed seamlessly from desktops, tablets and smartphones. Visitors to the website will find all the latest information on new products, promotions and more.

The new site features improved navigation and product classification, making it quick and simple for anyone to find the product or range they need. Not only is it easy to find the right product; it's also never been easier to find stockist information either. The site can use a mobile phone's geolocation and direct smartphone users to their nearest stockist, while desktop users can simply enter their postcode. www.draper-tools.com



IronmongeryDirect

MASTERS OF OUR TRADE

**ORDER UP TO 7.30PM FOR
NEXT DAY DELIVERY**

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

24/7 ordering
IronmongeryDirect.com



Twin extraction

The new Jet DC-2300 is a twin-bag chip and coarse dust extractor, mounted on castors for easy mobility around the workshop. It can be connected to up to three smaller machines via its three 100mm connectors. The manufacturer recommends connecting it to a simple 125mm metal duct system.



An alloy-bodied motor drives a high-efficiency Impeller fan; the air flowing into the bags is via metal tubes, again creating efficient airflow. Plastic waste sacks are used which are held in place with quick-release metal straps. The large polyester air filters can be replaced with two cartridge filters which upgrade the filtration capability to handle sanding machines. The unit is fitted with a 13A plug, but in some cases it may need a 16A supply. The price is £419.95. www.brimarc.com



See the expert

Deneb Puchalski, the hand tool and sharpening guru from Lie-Nielsen, will be visiting Ireland, England and Scotland this November. Deneb is the recognised authority on how to get the very best from these superb tools. He can help with advice on sharpening, plane tuning and many more techniques. His passion and enthusiasm for the tools he works with are clear to all who have seen his demonstrations.

You can see Deneb in action for free at any of these venues:

- 12 Nov: St Mary's College, Galway, Ireland (evening)
- 13 Nov: The Carpentry Store, Naas, Ireland (afternoon)
- 15 Nov: Axminster Tools, Nuneaton (afternoon)
- 16 Nov: The Sheffield Tap, Sheaf St, Sheffield (afternoon/evening)
- 17 Nov: The Town Wall, Pink Lane, Newcastle (afternoon/evening)
- 18 Nov: Sloans, Argyle St, Glasgow (afternoon/evening)
- 19 Nov: Brodies Timber, Dunkeld, Perth (all day)
- 21-23 Nov: North of England Woodworking & Power Tool Show, Harrogate (all three days)

For more details and precise directions, please visit www.brimarc.com

Latest catalogue

The new Machine Mart catalogue is out now. Its 500 pages are packed with over 7500 great products, so there's sure to be something for everyone in this biggest ever issue. From garage equipment to woodworking, generators to power tools, there's everything you need to get the job done, and there are over 1800 price cuts and new products included. For a free copy visit any of the 65 Machine Mart superstores, call 0844 880 1265 or visit www.machinemart.co.uk



Lathe bargains

If you're looking to upgrade your lathe this autumn or taking up woodturning as a serious hobby, request a copy of the Jet Lathes leaflet and take a look at some of the great offers now available on these machines.

Ranging from the small JWL-1221VS right up to the mighty 4224B heavy-duty lathe, there are some attractive packages and significant savings to be had. Many of the packages include the Evolution SK114 chuck or Clubman SK100 chuck plus suitable sets of jaws.

The leaflet also features the new JWL-1015VS and standard JWL-1015 woodturning lathes with all of the most important features needed by the serious woodturner. All the offers are valid until 31st December 2014.

If you would like to request a copy of the Jet Lathes leaflet, call 0333 240 6967.

IronmongeryDirect

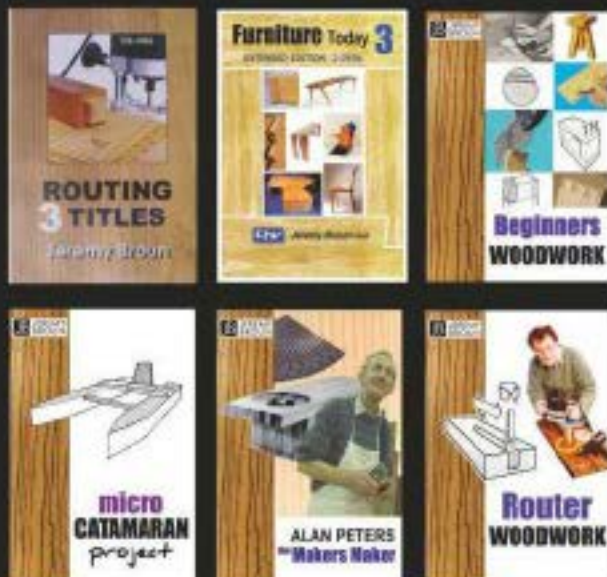
MASTERS OF OUR TRADE

**ORDER UP TO 7.30PM FOR
NEXT DAY DELIVERY**

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

24/7 ordering
IronmongeryDirect.com

Pioneering videos then DVDs
and now *enhanced e-books*



JB JEREMY BROUN
.co.uk

A range of online e-books integrating video
with downloadable plans for projects books



 Wood
Workers
Workshop



01684 594683

www.woodworkersworkshop.co.uk



**THE VERY BEST
WOODWORKING TOOLS**

Sourced by woodworkers
for woodworkers

Quality tools from the finest
UK, US & Canadian manufacturers

The North of England Woodworking & Power Tool Show



Gt Yorkshire Showground Harrogate (HG2 8QZ)

21 November 2014 10am - 5pm
22 November 2014 10am - 5pm
23 November 2014 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, Croke Hall Road, Northfleet Kent, DA11 9AA

Name: _____

Address: _____

Post Code: _____

No of adult tickets £10.00 @ £8.50 _____

No of concession tickets £9.00 @ £7.50 _____

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 ☐

In brief...

Record offers

The Record Power Autumn/Winter 2014/15 catalogue is now available. It features great-value deals across the full range of products, plus two brand new sections. The guide to the Record Power bandsaw range gives a summary of the full range, accompanied by a new series of online videos.



There is also a feature on getting started in woodturning, which offers some new superb value package deals aimed to help new turners get started.

Lastly, turn to page 3 of the catalogue or visit www.recordpower.co.uk/ competitions for details of how to be in with the chance of winning a fantastic G3 chuck and range of jaws package worth over £226! Pick up a free copy from your local Record Power stockist or call Record Power on 01246 571 020 to request your copy.



On the beach

Two contemporary beach houses, with floating foundations, stainless steel frames and Kebonywood cladding have been unveiled at Camber Sands in East Sussex. Architects Walker and Martin were commissioned by a private client to build the houses right on the seafloor, on the site of an old bungalow. Just metres from the beach, the houses are in fact almost embedded in the dunes.

The challenges of the location became apparent last winter

during the construction phase, when the site was battered by the severe storms and tidal surges that hit the country and gales swept up the beach, blasting the building with sand as it began to take form. Consequently, the huts have been built with the requisite resilience and ability to fend off the elements in their exposed position on the coast, providing ample protection for their new owners to enjoy the calm, warm summer days.

www.walkerandmartin.co.uk



In the shed

After a record-breaking 2,000 entries and 20,000 public votes, the Allotment Roof Shed from London has been crowned winner of the 2014 Shed of the Year competition sponsored by Cuprinol. Revealed for the first time by George Clarke on Channel 4's *Amazing Spaces* Shed of the Year, the half-biting competition came to a close with Allotment Roof Shed owner Joel Bird, 39, taking home the coveted title along with £1000, £100 of Cuprinol products, a winner's plaque and a giant crown for this shed. www.cuprinol.co.uk

DIARY

OCTOBER

Tewkesbury In-store Show
28-29 Tewkesbury Saw Co,
Tewkesbury GL20 8JG
01684 283082
www.tewkesburysaw.co.uk

NOVEMBER

Aminster Skill Centre courses
1 Pyrography: Ben Beddows
3-7 Make a Windsor chair
6-8 Beginners woodturning *
10-11, 17-18 Beginners woodturning
11 Bandsaws
11-12 Beginners routing *
13-14 Bowls and platters
19 Sharpening with Tomek *
* Course held in Sittingbourne, Kent
Unit 10 Weycroft Avenue, Aminster
EX13 5PH
0800 975 1905
www.aminsterskillcentre.co.uk

John Boddy's courses
20-21 French polishing: Ted Vickerman
27-28 Woodturning: Simon Whitehead
01423 322370 ext 257
enquiries@johnboddymtimber.co.uk

John Boddy's demonstrations
29 Woodturning: Simon Whitehead
Details as above

North of England Woodworking & Power Tool Show
21-23 Great Yorkshire Showground,
Harrogate HG2 8NZ
01474 526535
www.skpmotions.co.uk

Record Power Road Shows
21-22 Yandies, Martock TA12 6JU
01935 822207
www.yandies.co.uk
21-23 North of England show (see above)
www.recordpower.co.uk

Robert Sorby demonstrations
7-8 The Carpenter's Store, Naas,
Co Kildare, Ireland
00353 4588 3088
21-23 North of England show (see above)
www.robert-sorby.co.uk

IronmongeryDirect

MASTERS OF OUR TRADE

**ORDER UP TO 7.30PM FOR
NEXT DAY DELIVERY**

8am-8pm 7 days a week

0808 168 28 28

24/7 ordering

IronmongeryDirect.com

NEW FROM TOOLTEC

CLICK 'N CARVE

**FROM 2D IMAGE
TO 3D MODEL
IN MINUTES**

- Works with Wood, ABS, Foam, Modeling Wax, Styrenefoam, Epoxy Tooling Board
- Easy to use software
- Ideal for the commercial, professional, enthusiast and educational sectors.



**All you need to do is CLICK-CONVERT-
COMMAND-AND-CARVE...**

Call 01494 523991 sales@tooltec.co.uk
Fax 01494 524293 www.clickNcarve.co.uk



5-8 OCTOBER 2014 • NEC

**VISIT US AT
STAND 8D415**

What's new from

**D&M
TOOLS**
'THE' TOOL SPECIALISTS • WWW.DM-TOOLS.CO.UK • 020 8892 3813

DLX2040TJ 18V 5Ah BRUSHLESS TWIN-PACK

MANUFACTURER: Makita
D&M GUIDE PRICE: £419.95

This new 18V 5Ah twin-pack from Makita features the DHP481 two-speed brushless combi drill and the DTD129 brushless impact driver. The set comes complete in a MakPac carry case containing a DC18RC charger and two 18V 5Ah lithium-ion batteries. These offer an unbeatable 45-minute charge time, and are the same size and weight as Makita's 4.0Ah and 3.0Ah batteries but provide up to 33 per cent extra runtime.

The DHP481 delivers speeds of 0-550rpm and 0-2100rpm, with impact rates of 0-8250ipm and 0-31,500ipm respectively. It has 21 torque settings and twin LED work lights. The DTD129 has a maximum torque of 160Nm, with variable speed of 0-2500rpm and an impact rate of 0-3200ipm.



DJV181Z BRUSHLESS BODY-GRIP JIGSAW

MANUFACTURER: Makita
D&M GUIDE PRICE: £199.95 (body only plus MakPac case)

The DJV181 is the first cordless body-grip jigsaw from Makita. The brushless motor produces 800-3,500 strokes per minute with a stroke length of 26mm, and can cut wood up to 135mm thick as well as steel (10mm) and aluminium (20mm). The rigid aluminium base tilts from 0° to 45° to left and right. It has three orbital and plain cutting settings, and features a variable speed control dial as well as a soft start. The blower function, combined with the twin LED work lights, ensures a highly visible cutting line. We are also including a FREE MakPac carry case worth £42.54.



CT WINGS VACUUM CLAMPING NOZZLE

MANUFACTURER: Festool
D&M GUIDE PRICE: £29.95

If you briefly need a free hand for marking, clamping or gripping, CT WINGS combined with your mobile dust extractor cramps workpieces weighing up to 3kg on horizontal and vertical areas on any stable, dry, even, smooth and gas-tight substrate.



DCB102 10.8V-18V DUAL-PORT & USB CHARGER

MANUFACTURER: DeWalt
D&M GUIDE PRICE: £99.95

This new dual-port charger simultaneously charges two DeWalt 10.8V, 14.4V and 18V XR Li-Ion slide-pack batteries, and is equipped with two USB charging ports for maximum versatility. A bright LED indicator clearly shows the battery charge status.





BY DUNCAN ROSE

Good housekeeping

The traditional housekeeper's cupboard has been around since the 17th century. Here's a modern version with a generous amount of easy-access floor-to-ceiling storage that's ideal for holding provisions, non-consumable items and even small appliances

The style of this cupboard complements the rest of this kitchen's cabinetry, with inset doors and chamfered frame edges for easy cleaning. Diamond-shaped ventilation holes provide an attractive decorative feature. It's made in ash for the outside and birch plywood on the inside. Butt hinges with a satin chrome finish hang the main doors, and gas stays control the lowering of the bottom doors.

For easy transportation the cupboard is made in two main sections that join together seamlessly. The two sections sit on a base frame with added decorative wood to make a plinth, and are finished with a top cornice.

Carcasses first

Begin work on the two carcasses by dimensioning the plywood sides and shelf panels to their final measurements. Then cover the front edge of the intermediate shelves with a strip of ash. I glued the lipping to the shelves, photo 1, and held it in position using low-tack tape. When the glue is dry, trim off any overhangs and sand the lipping flush. These intermediate shelves are made 4mm narrower than their counterparts, so they clear the closed doors. This is also a convenient time to round over the edges of the lipped shelves.

Next, mark the sides with the shelf positions and rout through grooves to a depth of 4mm. I used the Trend Varijig clamp guide and router baseplate, enabling the grooves to be cut very quickly and accurately, photo 2.

Each housing joint is pulled tight using three 50 x 5mm screws. Drill the clearance holes in the sides for the screws and countersink them, photo 3. I used the router for accuracy here.

Assembling the panels

Sand all the panels before assembling the carcasses. Begin by inserting the shelves into their housings, arranging the panels with their best faces visible. Ensure that the



1 Glue the ash lipping to intermediate shelves and secure it with low-tack tape



2 Cut the 4mm deep grooves for the shelves in the side panels using a router



3 Drill the clearance holes for the screws in the sides and countersink them



4 Cramp up the assembly, ensuring that all the shelves are at right angles to the sides



HOUSEKEEPER'S CUPBOARD CUTTING LIST

All dimensions are in millimetres

Part	Qty	L	W	Material
CARCASSES				
Back	2	2109	912	6 ply
Base and top	4	914	364	18 ply
Shelf	4	892	364	18 ply
Inner shelf	6	892	340	18 ply
Shelf trim	6	892	20	18 ash
Side	4	2075	364	15 ply
SIDES				
Bottom panel	2	304	248	6 mdf
Middle panel	2	785	248	6 mdf
Top panel	2	766	248	6 mdf
Rail	8	240	70	20 ash
Stile	4	2111	70	20 ash
FACE FRAME				
Muntin	1	2111	56	20 ash
Top rail	6	836	32	20 ash
Base rail	2	836	20	18 ash
Stile	2	2111	70	20 ash
LOWER DOORS				
Muntin	2	227	70	20 ash
Panel	4	321	235	6 mdf
Rail	4	696	70	20 ash
Stile	4	367	70	20 ash
MAIN DOORS				
Panel	8	683	286	6 mdf
Rail	16	278	70	20 ash
Stile	16	815	70	20 ash
PLINTH				
Base bearer	3	282	96	44 softwood
Base side	2	1868	96	44 softwood
Plinth front	1	1908	106	20 ash
Plinth side	2	420	106	20 ash
CORNICE				
Front	1	1908	40	20 ash
Panel	1	1880	396	6 ply
Side	2	420	40	20 ash

You will also need 20 64mm butt hinges, eight handles, two pulls, two stays and 20 8mm diameter rare-earth magnets.



Drive in all the fixing screws to pull the joints up tight and check for squareness



Position the two carcasses side by side and level them using shims

shelves are at right angles to the side panels, photo 4, and pull the joints tight with the screws. Then assemble the top and base panels with more screws, photo 5.

Next, position the two carcasses on a flat surface and add shims underneath until they're level and their edges align, photo 6. Now joint the carcasses together using cabinet connector bolts, photo 7. Try to position the bolts so they're hidden by the face frame at the front and by the shelves at the rear.

The outer frames

Now make the pair of ash sides, using a frame-and-panel construction including a pair of intermediate rails. I made the frame 16mm wider than the carcasses to accommodate the back panel and to leave a 10mm void for easier installation when the unit is placed against the wall.

Prepare the stiles and rails, cutting their length to suit your jointing method. I used floating tenon joints with PVA glue; other jointing options include dowels, pocket-hole screws and mortise-and-tenon joints.

Rout grooves along the stiles and rails to accept the ash-veneered mdf panels. I used the router table fitted with a 6.35mm slot cutter. I also routed a chamfer along the inner edges of the rails, photo 8.

Next, cut the veneered panels to fit the frames. Sand all the parts and then assemble them, photo 9. Cramp everything together, check for squareness and remove any glue that's been squeezed out, photo 10.

Corner stiles

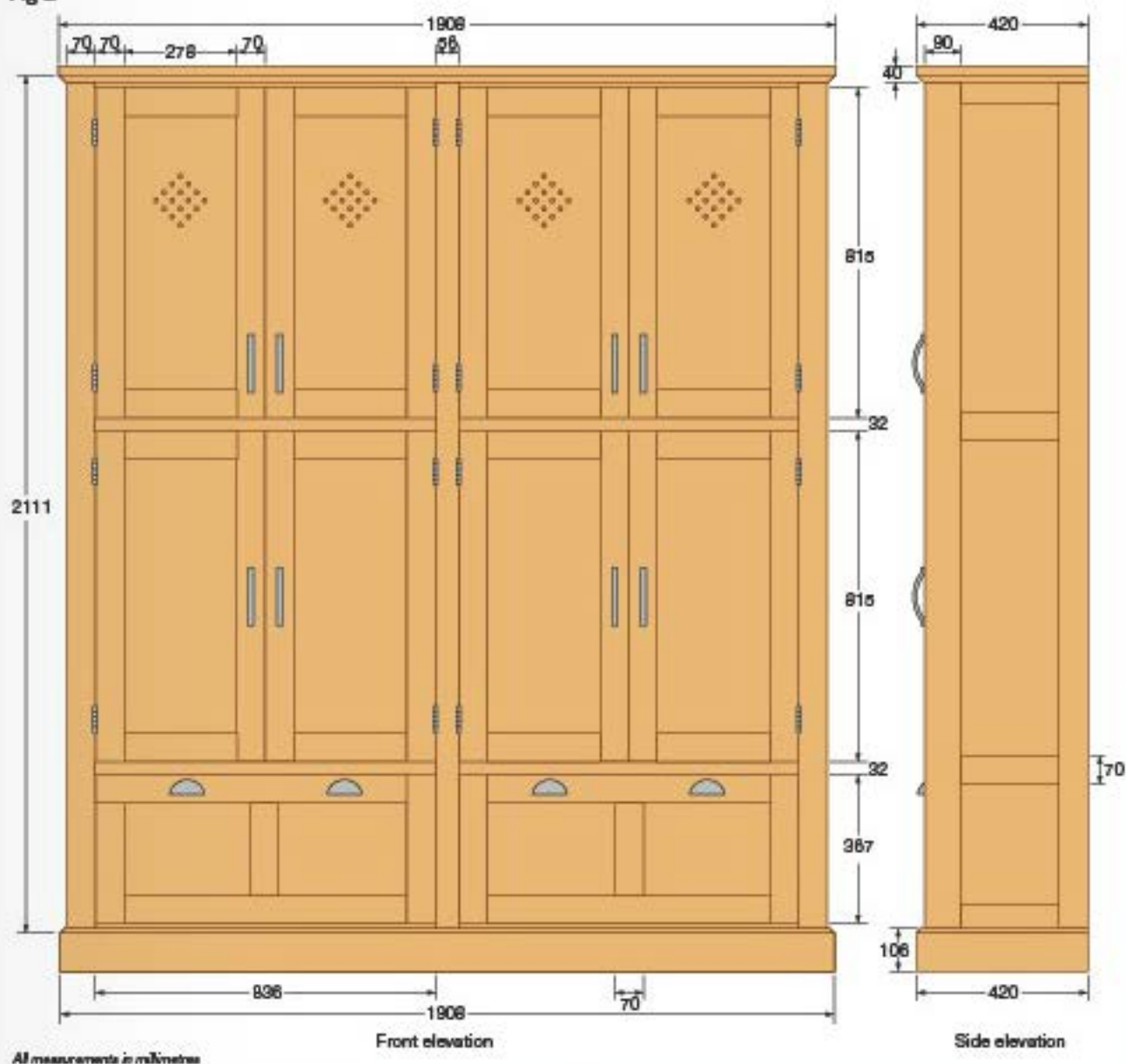
Next, fit the face-frame stiles to the ash side assemblies. This is easily done with the stiles held in the bench vice. I butt-jointed the stiles with PVA glue, using floating tenons to align the surfaces flush, photo 11. Again cramp the joint tight until it's dry.

This is a convenient time to rout a decorative chamfer along the outside corner edge of the stiles using a hand router. Avoid scorching by taking several light passes and keeping the router moving, photo 12. I stopped the chamfer about 70mm from each end.

Offer up the ash side assemblies to the carcasses and mark the face-frame stiles with the door hinge positions, photo 13. Then you can easily cut the hinge recesses at the bench. I cut them using a home-made jig and a hand router fitted with a guide bush and straight cutter, photo 14.

Now it's time to attach the sides to the carcasses. I used PVA glue and pulled the frame tight using small screws that were positioned out of view inside the carcass, photo 15.

Fig 1



Face work time

Prepare and attach the face-frame muntin and rails to the carcasses. Start by offering up the muntin and mark the location of the door hinges; then cut their recesses as earlier. Position the muntin centrally and attach it to just one of the carcasses, enabling them to separate later. I jointed the muntin using PVA glue and floating tenons. Cramp the muntin tight until the glue is dry, photo 16.

Next, attach the face-frame rails to the remaining shelf edges, carcass top and base. Cut their lengths to be a tight fit between the stiles and the muntin, and position them flush with the surfaces. Make the base rails the same width as the base panels, and also cut the hinge recesses for the lower doors before fitting them. Again I attached the rails using glue and floating tenons, and cramped them until dry, photo 17.



7 Joint the two carcasses together using concealed cabinet connector bolts



8 Groove and chamfer the rails for the side panels, ready for assembly



9 Assemble the side panels after slotting the veneered infill panels into place



10 Cramp up each panel and remove any squeezed-out glue with an old chisel



11 Fit the face-frame stiles to the side assemblies, using floating tenons to help align them



12 Rout a decorative stopped chamfer along the outside corner edge of the stiles



13 Offer the side assemblies up to the carcass and mark the stiles with the door hinge positions



14 Cut the hinge recesses. I used my router and a simple home-made guide jig



15 Pull the side assembly tight to the carcass using glue and small screws



16 Cramp the face-frame muntin to just one carcass and leave until the glue is dry



17 Attach the face-frame rails using glue and floating tenons. Again, cramp until dry



18 Cut the back panels slightly undersize and attach them with self-tapping screws



19 Cut the door stiles and rails to size and prepare them for jointing



20 Cut the door panels to size, assemble the doors and check they're flat and square

Adding the back panels

Now cut and attach the ply back panels. If you cut these a few millimetres undersize, it makes their alignment easier. Double-check that the carcasses are square before attaching the backs. I used self-tapping and countersinking screws, photo 18, as this gives the option of removing the backs later so it's easier to apply the finish.

Making the doors

There are only two sizes of door to make, and their construction is very similar to that used earlier for the ash sides. Try to select and plane the stock for the stiles and rails to be as flat as possible, as this will make doors much easier to align when hanging them later. Trim the pieces to length to suit your jointing method, photo 19, then mark out and cut the joints.

Rout the grooves for the ash-veneered door panels and cut chamfers along the rails. Then cut the panels to size and sand all the parts smooth. Glue up the doors, cramp everything together, check that surfaces are flush, photo 20, and remove any squeezed-out glue.

I cut the decorative diamond pattern in the upper door panels using a home-made mdf template and a hand router fitted with a guide bush and a 10mm straight cutter, photo 21.

Hanging the doors

Offer up each door within the cupboard and mark it with the position of the hinge recesses you cut earlier. Use the marks as a reference and cut the door hinge recesses. This is a good time to number each of the doors to ensure you refit them in the same position during final assembly.

Next, hang the doors. At this stage I usually attach each hinge leaf using only a single screw, photo 22, adding the remaining screws after any adjustments during the final installation on-site. With the doors hung, mark and trim their edges for a consistent fit. Here a plastic spacer helps, photo 23.

Fitting the hardware

Next, make and fit the door stop blocks. I made these from ash offcuts, attached them to the underside of the shelves using screws, photo 24, and covered their heads with ash plugs. I made the door catches using pairs of 8mm diameter rare-earth magnets, recessed into the stop blocks and door stiles, glued in place and covered with filler. I cut the magnet recesses using a hand router fitted with a small straight cutter guided by a home-made template, photo 25.

While the doors are hung, mark the positions for the handles. Remove the doors and drill the fixing holes. I like to counterbore the holes so the fixing bolt heads are recessed.

Next, fit the lower door stays that control the speed and extent of the door opening. Position the stays using the instructions supplied. I needed to make some spacer blocks using ash offcuts to position one of the stay brackets correctly, photo 26.

Adding the cornice and plinth

The cornice unit consists of a horizontal panel that holds three cornice mouldings in alignment. Start by temporarily attaching a 6mm thick plywood panel to the top of the cupboard, dimensioned with a 6mm overhang along the front and sides, photo 27. Then make the cornice moulding from a length of ash, cutting a 12mm chamfer along its length on the router table, fitted with a 45° chamfer cutter. Also cut a 6mm deep slot in the rear face of the moulding to fit over the panel overhang.

Now cut the mouldings to length using mitres at the corner joints and glue them onto the plywood panel. I used low-tack tape to hold them in position until the glue dried, photo 28. Now you can detach the completed cornice unit, ready for moving the cupboard out of the workshop.

Make the base frame from lengths of 96 x 45mm softwood. I used simple butt joints, each held tight with three 100mm screws, photo 29. Make the frame dimensions the same as the carcass footprint, less about 30mm at the back if there is a wall skirting board present. Include a centre bearer to support the cupboard weight where the two carcasses join together. Finally, prepare the ash plinth front and side pieces with mitred corners, ready for fixing during installation using glue and large pins.

Finishing and fitting

Dismantle the cupboard and check all the parts are clean, sanded, with any exposed edges rounded over, and generally dust-free. Then apply your favourite finish to all the parts. I applied two coats of oil using a small roller and a foam brush, sanding between coats to remove any ribs using wet-and-dry paper, finishing with a coat of liquid wax.

Installation is a straightforward reassembly of the cupboard sections. Start by levelling the base frame, then position the two main sections and secure them together and also to the wall. Then hang all the doors and check their alignment. Finally, attach the ash plinth pieces and slide the cornice in position.



21 Cut the decorative diamond pattern using a home-made template and hand router



22 Attach each hinge leaf using a single screw. I add the rest during final assembly



23 Using a spacer to mark the doors so you can trim them for a consistent fit



24 Fit the door stop blocks to the undersides of the shelves and conceal the fixings



25 Cut the recesses for the rare-earth magnets using a hand router and a template



26 Position and fix the lower door stays. One had to be fitted with a spacer block



27 Fit the cornice panel temporarily with a 6mm overhang at the front and sides



28 Cut mitres on the cornice mouldings and glue them to the plywood panel



29 Make up the base frame from lengths of softwood using simple butt joints

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, candellilla 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

wood chisel and wood turning tool specialist

Ashley Iles - Henry Taylor - Robert Sorby

All items in stock, ready for dispatch.

*unless marked otherwise

all prices inclusive of VAT

Tool Nut
crank

sharpening stones and tools



Order online today at

www.toolnut.co.uk

or call to order on 01424 224269

JUST IN..

our new stock of turning blanks



BY PETER PARFITT

Five-star trammel

I've spent a significant amount of time over the years making Impromptu trammels for circular router work, and have finally decided to make a decent one from Plexiglas

During the construction of the Gothic garden bench described in a recent issue of *The Woodworker*, photo 1, I made up yet another router trammel from a scrap of plywood. It then joined the five other Impromptu trammels that never seem to get used a second time and just accumulate dust in a corner of the

workshop. This router trammel project has changed all that, and I now have a rather neat little trammel that was easy to make using normal woodworking tools.

I chose Plexiglas as it's easy to work, doesn't swell or warp when the humidity changes, and is reasonably strong. Perspex is a similar material and would be just as

1
The Gothic detail on this bench leg was created using a home-made trammel



2
The Festool mitre saw on its lowest speed setting made perfect cuts every time



3
I cut most of the 25mm channel in the main body using the table saw...



4
...and turned to my trusty coping saw to make that awkward last cut by hand



5
A 30mm Forstner bit works perfectly well for drilling large holes in plastic sheet



6
I started by trimming the final bit of waste from the 25mm channel



7
I then tackled the slide assembly, cutting the four slots which allow it to slide to and fro



8
I scribed lines across the width of the main body and the slide at 100mm intervals

good. There is no plastics supplier near me, so rather than ordering from the Internet I visited my local commercial signmakers and managed to get an offcut at a very reasonable price.

Designing the trammel

The Gothic bench has sparked some interest in that design style amongst my customers, so I wanted to be able to cover all possible sizes and variations, including matching tables that would require a working radius of up to 450mm.

Router trammels can be fixed to the router as a sub-base, as an addition to the side fence or as an attachment to the fence rails. Alternatively, the trammel can have a hole the exact size of a guidebush that's attached to the router, thus allowing the router to be easily inserted or removed.

I favour the guidebush approach as it allows the router to remain facing the operator while the trammel rotates. This stops power leads and extraction hoses from getting wrapped around the router when cutting longer arcs.

Construction details

My previous trammels have had one or more holes drilled in them to take the trammel pin, but no means of fine adjustment. I wanted to have an adjustable slide that could be fixed in place once the required radius had been set, fig 1.

The main body measures 432 x 165mm in size, and has a 25mm channel to take a sliding bar in which a number of 4mm holes are drilled for the trammel pin. The bar is attached to a 137 x 100mm carriage piece by two 5mm countersunk machine screws and washers secured with locknuts. By having the trammel pin holes every 25mm, the slide assembly would only need to move about 30mm.

My plastic sheet was just 5mm thick, but my LUK brand guide bush has a 10mm boss that protrudes below the router base. I therefore had to make a spacer to ensure that the guide bush did not protrude. A 25mm wide bracing piece is used to provide support at the open end of the channel.

Cutting the parts

I frequently cut Perspex and Plexiglas with my bandsaw, mitre saw, circular saw and table saw. It is also very easy to use a router, in a router table, to machine slots and trim curved sections. Hole cutting, even with Forstner bits, is also straightforward.

I use the lowest speed possible for these machines. This stops the plastic from

heating up, which can cause some cut quality issues. Eye protection is essential and it's best to take the time to clean up well afterwards before the plastic dust and swarf spreads far and wide.

The plastic was cut to size on the mitre saw, photo 2, and the table saw, photo 3. I scribed a centre line for the guide bush hole across the width of the main body which would be used as a reference mark later. I cut the majority of the 25mm channel in the main body using the table saw. I then used a coping saw to remove the waste, photo 4.

Precision machining

The largest guidebush in my WJK set is 30mm in diameter, and I've found this to be the best size for trammel work as it allows plenty of room for a variety of cutters in the router. I cut the hole using a 30mm Forstner bit, photo 5.

I then fitted a 6mm cutter in the router table and used this to machine all the parts. I started by trimming the final bit of waste from the 25mm channel, photo 6, and then tacked the slide assembly, photo 7. The main features are the four slots which allow the assembly to slide to and fro on the main body. I staggered these slots and made them 40mm long. I also cut a window at the centre of this piece to allow access to the trammel pin holes in the slide which would be fixed below.

Minor tweaks

To ease the setting up of the trammel I scribed some lines across the width of the main body and across the slide, at 100mm intervals measured from the centre line for the guidebush, photo 8.

As my plastic was only 5mm thick, I cut a spacer on the bandsaw to the same diameter as my router base, photo 9. I made a 30mm hole through the centre and put my guidebush through it, photo 10. I then used some Tensol 12 glue to fix the spacer in place using the guidebush to match it to the hole in the main body, photo 11.

Assembling the trammel

The two parts of the slide assembly were joined together carefully, photo 12, to ensure that the slots for the securing bolts were parallel to the edge of the main body; otherwise it wouldn't slide to and fro freely. The best way to do this is with a square. Once the holes were drilled, I spread Tensol 12 glue between the parts before screwing them together. A pair of 5mm countersunk machine screws were used, with washers and locknuts.

The purpose of the glue is to help to

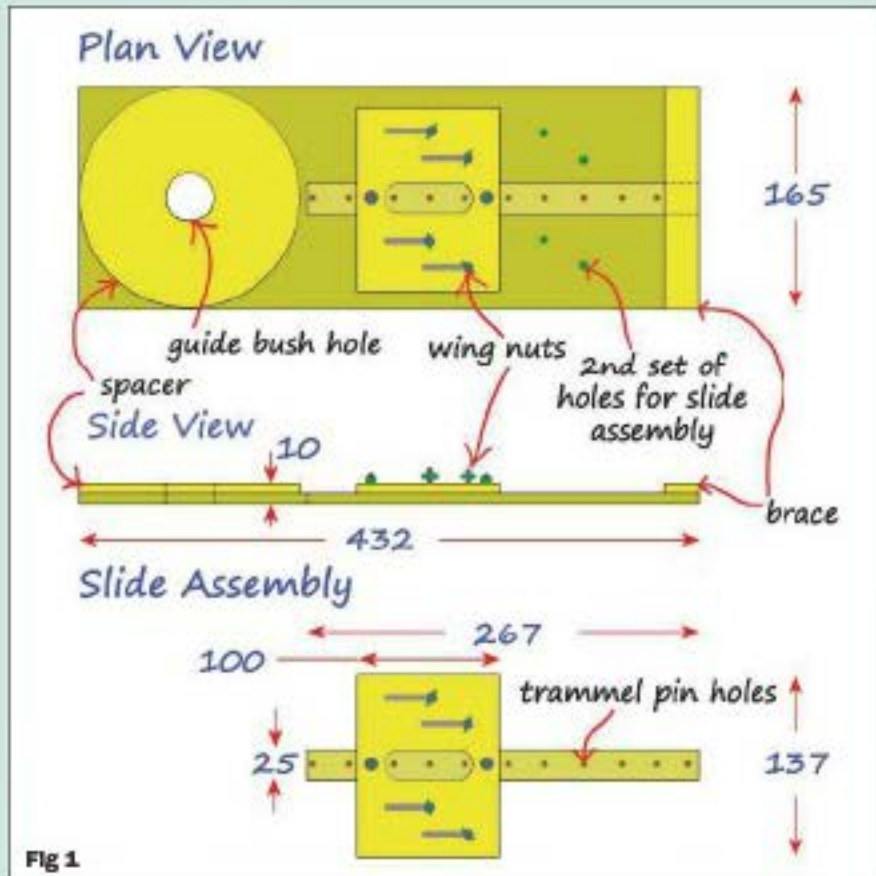


Fig 1



I cut a guidebush spacer on the bandsaw to the same diameter as my router base



Next I made a 30mm hole through the centre of the spacer and put my guidebush through it



I then glued the spacer in place using the guidebush to match it to the hole in the main body



The slide assembly parts are held in place with clamps so the two screw holes can be drilled



13

I allowed the glue to dry overnight, and the parts were ready for assembly the following morning



14

The first stage was to fit the slide assembly into the channel in the main body



15

I drilled the holes at the end of the four slots furthest away from the router end



16

Move the slide assembly up against the brace for drilling the second set of holes

17

I used four machine screws with washers and wingnuts to secure the slide assembly to the main body



18

The proof of the pudding... the trammel performed faultlessly, as I'd hoped it would!

minimise any stress, close to the guidebush hole or the machine screws, on the main body and slide assembly respectively. However, it's not worth buying special glue like Tensol 12 just to build one trammel. Superglue would probably be good enough but, if you're making a trammel like this, ask the advice of the plastics supplier.

I allowed the glue to dry overnight, and the parts were ready for assembly the following morning, photo 13. I used four 6mm countersunk machine screws with washers and wingnuts, photo 14, to fix the slide assembly to the main body.

Drilling holes

When setting up to drill the 6mm holes for the screws, I brought the parts together with the slide assembly in towards the router end as far as it would go. Then I secured everything to the bench with a pair of clamps, photo 15, and drilled the holes at the end of the four slots furthest away from the router end, as shown in fig 1.

To increase the range of radii of the trammel, I drilled a second set of holes further away from the router end. I moved the slide assembly until it was up against the bracing piece, photo 16. I then drilled four 6mm holes with the drill positioned at the left-hand end (furthest away from the brace) of each of the four slots.

The eight 6mm holes were then countersunk from underneath and all the edges of the main body and slide assembly were given a light sanding using 120 grit paper. Everything was then assembled, photo 17, and tested, photo 18.

Afterthoughts

- I made the spacer circular to match my router base, but it would have been perfectly satisfactory to use a square of plastic cut to the right size. I drilled the guidebush hole in the main body and spacer separately, but this could have been done in one operation after gluing.
- I cut out the central section from the slide assembly plate (the 137 x 100mm part) to provide access to the trammel pin holes in the slide. This isn't really necessary, as the pin holes could be extended through the plate.
- If you wanted to use this trammel for radii smaller than that of the router base, the slot could be extended to just short of the guidebush hole. A relief channel could be cut on the router table on the underside of the spacer to make room for the head of a 4mm rivet for use as a trammel pin.



TOOL SHOW

31ST OCT - 2ND NOV LOUGHTON, ESSEX

- ✓ **HUGE SAVINGS**
- ✓ **PRODUCT DEMOS**
- ✓ **BIG BRANDS**
- ✓ **GIVEAWAYS**
- ✓ **FREE ENTRY**
- ✓ **FREE PARKING**

**PRE-REGISTER FOR
EXCLUSIVE OFFERS**

020 8532 5000

www.itstoolshow.co.uk



Over 50 exhibitors including:

FREE ENTRY



**5 mins walk from
Debden Station
(Central Line)**



**Located directly by
M11 (J5) & M25 (J26)**

UNIT 2 THE BRITANNIA CENTRE, LENTHALL ROAD, LOUGHTON, ESSEX, IG10 3SQ

NEW STORE
MANCHESTER
- SAT FORD
OPENS NOVEMBER

Machine Mart

NOW 65 SUPERSTORES NATIONWIDE

WHERE QUALITY COSTS LESS

Clarke
TABLE
SAWS
C1510D



Now load base
INCLUDES AGC & BEAT TABLE ATTACHMENT

Clarke 4" BELT/ 6" DISC SANDER
• Best extraction facility
• 4" x 20" belt 110 & looks 0-60"
• 225 mm x 100 mm table, 110 to 0-60"
• 370W, 230V motor

Clarke 6" BELT/ 9" DISC SANDER
• Includes stand
• 1 HP 230V 1/4 HP motor

Clarke 1" BELT & 5" DISC SANDER
• Inc. 2 tiltlock tables and riving gauge
• 300W motor

Clarke ELECTRIC POWER FILE
• Variable belt speed
• Telling head

Clarke QUICK RELEASE ALUMINIUM SASH CRAMPS
• 1000mm
• Belt speed 4000mm/min

Clarke ENGINEER'S DRILL PRESS
• Tables tilt 0-45° left & right
• Depth gauge
• Chuck jaws

Clarke RANDOM ORBITAL SANDER
• For sanding & polishing
• 125mm diameter sanding disc
• 4300-71000 rpm

Clarke BOLTLESS SHELVING BENCHES
• Simple fast assembly
• 10 and 15mm using only 4 screws

Clarke MULTI FUNCTION TOOL WITH ACCESSORY KIT
• Great for sawing, cutting, sanding, polishing, dressing & much more
• 230W motor
• Variable speed

Clarke CR2 ROUTER
• Powerful 1100W duty machine ideal for trade use
• Variable speed control from 7,400-21,500 rpm
• 2100W motor
• 0-30mm plunge depth

Clarke BELT SANDER
• Two handles for increased control
• 1200W motor
• Belt size: 1000mm x 400mm

Clarke BELT SANDERS
• 1000mm x 400mm
• 1200W motor

Clarke RANDOM ORBITAL SANDERS
• For fast removal of paint or for fine swirl free finishing
• 4 x 150mm diameter sanding discs
• 4000-7000 rpm

Clarke PORTABLE THICKNESS
• Max thickness capacity 150mm
• Planing depths adjustable from 0-2.5mm
• Powerful 1200W motor
• 1200W motor
• 1200W motor

Clarke BANDSAWS
• 1099mm
• 1099mm

Clarke CR2 ROUTER
• Powerful 1100W duty machine ideal for trade use
• Variable speed control from 7,400-21,500 rpm
• 2100W motor
• 0-30mm plunge depth

Clarke CORDLESS DRILL/DRIVERS
• 10mm chuck size
• 2 speed, variable control - 0-3500-12000 rpm
• 21 torque settings

Clarke DRILL BIT SHARPENER
• Great for sharpening HSS drill bits
• 700W motor
• Drill bit guide

Clarke 1000MM VARIABLE SPEED WOOD LATHE
• Large 350mm x 1000mm turning capacity
• Variable speed
• Lockable tailstock

Clarke PLANERS & THICKENERS
• Max thickness capacity 150mm
• Planing depths adjustable from 0-2.5mm
• Powerful 1200W motor
• 1200W motor
• 1200W motor

Clarke POWER PLANERS
• 2200W
• 2200W

Clarke ROUTERS
• 1100W
• 1100W

Clarke 18V PRO CORDLESS DRILL/DRIVERS
• 10mm chuck size
• 2 speed, variable control - 0-3500-12000 rpm
• 21 torque settings

Clarke SHEET SANDERS
• 1000mm x 400mm
• 1200W motor

Clarke 13" MINI WOOD LATHE
• Ideal for enthusiasts & hobbyists
• 1000mm x 400mm
• 1200W motor

Clarke PLANERS & THICKENERS
• Max thickness capacity 150mm
• Planing depths adjustable from 0-2.5mm
• Powerful 1200W motor
• 1200W motor
• 1200W motor

Clarke 255mm MULTI-PURPOSE TABLE SAWS
• 1599mm
• 1599mm

Clarke STATIC PHASE CONVERTERS
• Run big 3 phase machinery on 230V
• 1000W
• 1000W

Clarke 12" CONTRACTORS SAW
• 1000mm
• 1000W

Clarke 13" MINI WOOD LATHE
• Ideal for enthusiasts & hobbyists
• 1000mm x 400mm
• 1200W motor

Clarke 1000MM VARIABLE SPEED WOOD LATHE
• Large 350mm x 1000mm turning capacity
• Variable speed
• Lockable tailstock

Clarke PLANERS & THICKENERS
• Max thickness capacity 150mm
• Planing depths adjustable from 0-2.5mm
• Powerful 1200W motor
• 1200W motor
• 1200W motor

Clarke **MORTISING MACHINE** C8M18

Accurately creates deep square mortises - 100mm size 100 x 3-40mm

• Multi-turn crank expander - Pushes out iron base & column inside for stability & accuracy - secure depth control

"It is easy and precise with a good cut of wood. Excellent value for money. You need to plan well & it's a great machine for a small workshop."

444.00 **173.00**

SMALL AVAILABLE FROM £12.00 DELIVERY FROM £10.00

visit machinemart.co.uk

FOR OVER 14,000 PRODUCTS

INCLUDING NEW **Xtra**

SPECIALIST PRODUCTS

NEW CLICK & COLLECT

NEW 500 PAGE CATALOGUE

Over 1800

PRICE CUTS & NEW PRODUCTS

Machine Mart

CLICK & COLLECT

1800

FREE DELIVERY ON ALL ORDERS

GET YOUR FREE COPY NOW!

• INSTORE
• ONLINE
• PHONE

0844 880 1266

Clarke **WOODWORKING VICES**

Record **WV**

Model: 800mm 100mm 125mm 150mm 175mm 200mm 225mm 250mm 275mm 300mm 325mm 350mm 375mm 400mm 425mm 450mm 475mm 500mm 525mm 550mm 575mm 600mm 625mm 650mm 675mm 700mm 725mm 750mm 775mm 800mm 825mm 850mm 875mm 900mm 925mm 950mm 975mm 1000mm 1025mm 1050mm 1075mm 1100mm 1125mm 1150mm 1175mm 1200mm 1225mm 1250mm 1275mm 1300mm 1325mm 1350mm 1375mm 1400mm 1425mm 1450mm 1475mm 1500mm 1525mm 1550mm 1575mm 1600mm 1625mm 1650mm 1675mm 1700mm 1725mm 1750mm 1775mm 1800mm 1825mm 1850mm 1875mm 1900mm 1925mm 1950mm 1975mm 2000mm 2025mm 2050mm 2075mm 2100mm 2125mm 2150mm 2175mm 2200mm 2225mm 2250mm 2275mm 2300mm 2325mm 2350mm 2375mm 2400mm 2425mm 2450mm 2475mm 2500mm 2525mm 2550mm 2575mm 2600mm 2625mm 2650mm 2675mm 2700mm 2725mm 2750mm 2775mm 2800mm 2825mm 2850mm 2875mm 2900mm 2925mm 2950mm 2975mm 3000mm 3025mm 3050mm 3075mm 3100mm 3125mm 3150mm 3175mm 3200mm 3225mm 3250mm 3275mm 3300mm 3325mm 3350mm 3375mm 3400mm 3425mm 3450mm 3475mm 3500mm 3525mm 3550mm 3575mm 3600mm 3625mm 3650mm 3675mm 3700mm 3725mm 3750mm 3775mm 3800mm 3825mm 3850mm 3875mm 3900mm 3925mm 3950mm 3975mm 4000mm 4025mm 4050mm 4075mm 4100mm 4125mm 4150mm 4175mm 4200mm 4225mm 4250mm 4275mm 4300mm 4325mm 4350mm 4375mm 4400mm 4425mm 4450mm 4475mm 4500mm 4525mm 4550mm 4575mm 4600mm 4625mm 4650mm 4675mm 4700mm 4725mm 4750mm 4775mm 4800mm 4825mm 4850mm 4875mm 4900mm 4925mm 4950mm 4975mm 5000mm 5025mm 5050mm 5075mm 5100mm 5125mm 5150mm 5175mm 5200mm 5225mm 5250mm 5275mm 5300mm 5325mm 5350mm 5375mm 5400mm 5425mm 5450mm 5475mm 5500mm 5525mm 5550mm 5575mm 5600mm 5625mm 5650mm 5675mm 5700mm 5725mm 5750mm 5775mm 5800mm 5825mm 5850mm 5875mm 5900mm 5925mm 5950mm 5975mm 6000mm 6025mm 6050mm 6075mm 6100mm 6125mm 6150mm 6175mm 6200mm 6225mm 6250mm 6275mm 6300mm 6325mm 6350mm 6375mm 6400mm 6425mm 6450mm 6475mm 6500mm 6525mm 6550mm 6575mm 6600mm 6625mm 6650mm 6675mm 6700mm 6725mm 6750mm 6775mm 6800mm 6825mm 6850mm 6875mm 6900mm 6925mm 6950mm 6975mm 7000mm 7025mm 7050mm 7075mm 7100mm 7125mm 7150mm 7175mm 7200mm 7225mm 7250mm 7275mm 7300mm 7325mm 7350mm 7375mm 7400mm 7425mm 7450mm 7475mm 7500mm 7525mm 7550mm 7575mm 7600mm 7625mm 7650mm 7675mm 7700mm 7725mm 7750mm 7775mm 7800mm 7825mm 7850mm 7875mm 7900mm 7925mm 7950mm 7975mm 8000mm 8025mm 8050mm 8075mm 8100mm 8125mm 8150mm 8175mm 8200mm 8225mm 8250mm 8275mm 8300mm 8325mm 8350mm 8375mm 8400mm 8425mm 8450mm 8475mm 8500mm 8525mm 8550mm 8575mm 8600mm 8625mm 8650mm 8675mm 8700mm 8725mm 8750mm 8775mm 8800mm 8825mm 8850mm 8875mm 8900mm 8925mm 8950mm 8975mm 9000mm 9025mm 9050mm 9075mm 9100mm 9125mm 9150mm 9175mm 9200mm 9225mm 9250mm 9275mm 9300mm 9325mm 9350mm 9375mm 9400mm 9425mm 9450mm 9475mm 9500mm 9525mm 9550mm 9575mm 9600mm 9625mm 9650mm 9675mm 9700mm 9725mm 9750mm 9775mm 9800mm 9825mm 9850mm 9875mm 9900mm 9925mm 9950mm 9975mm 10000mm 10025mm 10050mm 10075mm 10100mm 10125mm 10150mm 10175mm 10200mm 10225mm 10250mm 10275mm 10300mm 10325mm 10350mm 10375mm 10400mm 10425mm 10450mm 10475mm 10500mm 10525mm 10550mm 10575mm 10600mm 10625mm 10650mm 10675mm 10700mm 10725mm 10750mm 10775mm 10800mm 10825mm 10850mm 10875mm 10900mm 10925mm 10950mm 10975mm 11000mm 11025mm 11050mm 11075mm 11100mm 11125mm 11150mm 11175mm 11200mm 11225mm 11250mm 11275mm 11300mm 11325mm 11350mm 11375mm 11400mm 11425mm 11450mm 11475mm 11500mm 11525mm 11550mm 11575mm 11600mm 11625mm 11650mm 11675mm 11700mm 11725mm 11750mm 11775mm 11800mm 11825mm 11850mm 11875mm 11900mm 11925mm 11950mm 11975mm 12000mm 12025mm 12050mm 12075mm 12100mm 12125mm 12150mm 12175mm 12200mm 12225mm 12250mm 12275mm 12300mm 12325mm 12350mm 12375mm 12400mm 12425mm 12450mm 12475mm 12500mm 12525mm 12550mm 12575mm 12600mm 12625mm 12650mm 12675mm 12700mm 12725mm 12750mm 12775mm 12800mm 12825mm 12850mm 12875mm 12900mm 12925mm 12950mm 12975mm 13000mm 13025mm 13050mm 13075mm 13100mm 13125mm 13150mm 13175mm 13200mm 13225mm 13250mm 13275mm 13300mm 13325mm 13350mm 13375mm 13400mm 13425mm 13450mm 13475mm 13500mm 13525mm 13550mm 13575mm 13600mm 13625mm 13650mm 13675mm 13700mm 13725mm 13750mm 13775mm 13800mm 13825mm 13850mm 13875mm 13900mm 13925mm 13950mm 13975mm 14000mm 14025mm 14050mm 14075mm 14100mm 14125mm 14150mm 14175mm 14200mm 14225mm 14250mm 14275mm 14300mm 14325mm 14350mm 14375mm 14400mm 14425mm 14450mm 14475mm 14500mm 14525mm 14550mm 14575mm 14600mm 14625mm 14650mm 14675mm 14700mm 14725mm 14750mm 14775mm 14800mm 14825mm 14850mm 14875mm 14900mm 14925mm 14950mm 14975mm 15000mm 15025mm 15050mm 15075mm 15100mm 15125mm 15150mm 15175mm 15200mm 15225mm 15250mm 15275mm 15300mm 15325mm 15350mm 15375mm 15400mm 15425mm 15450mm 15475mm 15500mm 15525mm 15550mm 15575mm 15600mm 15625mm 15650mm 15675mm 15700mm 15725mm 15750mm 15775mm 15800mm 15825mm 15850mm 15875mm 15900mm 15925mm 15950mm 15975mm 16000mm 16025mm 16050mm 16075mm 16100mm 16125mm 16150mm 16175mm 16200mm 16225mm 16250mm 16275mm 16300mm 16325mm 16350mm 16375mm 16400mm 16425mm 16450mm 16475mm 16500mm 16525mm 16550mm 16575mm 16600mm 16625mm 16650mm 16675mm 16700mm 16725mm 16750mm 16775mm 16800mm 16825mm 16850mm 16875mm 16900mm 16925mm 16950mm 16975mm 17000mm 17025mm 17050mm 17075mm 17100mm 17125mm 17150mm 17175mm 17200mm 17225mm 17250mm 17275mm 17300mm 17325mm 17350mm 17375mm 17400mm 17425mm 17450mm 17475mm 17500mm 17525mm 17550mm 17575mm 17600mm 17625mm 17650mm 17675mm 17700mm 17725mm 17750mm 17775mm 17800mm 17825mm 17850mm 17875mm 17900mm 17925mm 17950mm 17975mm 18000mm 18025mm 18050mm 18075mm 18100mm 18125mm 18150mm 18175mm 18200mm 18225mm 18250mm 18275mm 18300mm 18325mm 18350mm 18375mm 18400mm 18425mm 18450mm 18475mm 18500mm 18525mm 18550mm 18575mm 18600mm 18625mm 18650mm 18675mm 18700mm 18725mm 18750mm 18775mm 18800mm 18825mm 18850mm 18875mm 18900mm 18925mm 18950mm 18975mm 19000mm 19025mm 19050mm 19075mm 19100mm 19125mm 19150mm 19175mm 19200mm 19225mm 19250mm 19275mm 19300mm 19325mm 19350mm 19375mm 19400mm 19425mm 19450mm 19475mm 19500mm 19525mm 19550mm 19575mm 19600mm 19625mm 19650mm 19675mm 19700mm 19725mm 19750mm 19775mm 19800mm 19825mm 19850mm 19875mm 19900mm 19925mm 19950mm 19975mm 20000mm 20025mm 20050mm 20075mm 20100mm 20125mm 20150mm 20175mm 20200mm 20225mm 20250mm 20275mm 20300mm 20325mm 20350mm 20375mm 20400mm 20425mm 20450mm 20475mm 20500mm 20525mm 20550mm 20575mm 20600mm 20625mm 20650mm 20675mm 20700mm 20725mm 20750mm 20775mm 20800mm 20825mm 20850mm 20875mm 20900mm 20925mm 20950mm 20975mm 21000mm 21025mm 21050mm 21075mm 21100mm 21125mm 21150mm 21175mm 21200mm 21225mm 21250mm 21275mm 21300mm 21325mm 21350mm 21375mm 21400mm 21425mm 21450mm 21475mm 21500mm 21525mm 21550mm 21575mm 21600mm 21625mm 21650mm 21675mm 21700mm 21725mm 21750mm 21775mm 21800mm 21825mm 21850mm 21875mm 21900mm 21925mm 21950mm 21975mm 22000mm 22025mm 22050mm 22075mm 22100mm 22125mm 22150mm 22175mm 22200mm 22225mm 22250mm 22275mm 22300mm 22325mm 22350mm 22375mm 22400mm 22425mm 22450mm 22475mm 22500mm 22525mm 22550mm 22575mm 22600mm 22625mm 22650mm 22675mm 22700mm 22725mm 22750mm 22775mm 22800mm 22825mm 22850mm 22875mm 22900mm 22925mm 22950mm 22975mm 23000mm 23025mm 23050mm 23075mm 23100mm 23125mm 23150mm 23175mm 23200mm 23225mm 23250mm 23275mm 23300mm 23325mm 23350mm 23375mm 23400mm 23425mm 23450mm 23475mm 23500mm 23525mm 23550mm 23575mm 23600mm 23625mm 23650mm 23675mm 23700mm 23725mm 23750mm 23775mm 23800mm 23825mm 23850mm 23875mm 23900mm 23925mm 23950mm 23975mm 24000mm 24025mm 24050mm 24075mm 24100mm 24125mm 24150mm 24175mm 24200mm 24225mm 24250mm 24275mm 24300mm 24325mm 24350mm 24375mm 24400mm 24425mm 24450mm 24475mm 24500mm 24525mm 24550mm 24575mm 24600mm 24625mm 24650mm 24675mm 24700mm 24725mm 24750mm 24775mm 24800mm 24825mm 24850mm 24875mm 24900mm 24925mm 24950mm 24975mm 25000mm 25025mm 25050mm 25075mm 25100mm 25125mm 25150mm 25175mm 25200mm 25225mm 25250mm 25275mm 25300mm 25325mm 25350mm 25375mm 25400mm 25425mm 25450mm 25475mm 25500mm 25525mm 25550mm 25575mm 25600mm 25625mm 25650mm 25675mm 25700mm 25725mm 25750mm 25775mm 25800mm 25825mm 25850mm 25875mm 25900mm 25925mm 25950mm 25975mm 26000mm 26025mm 26050mm 26075mm 26100mm 26125mm 26150mm 26175mm 26200mm 26225mm 26250mm 26275mm 26300mm 26325mm 26350mm 26375mm 26400mm 26425mm 26450mm 26475mm 26500mm 26525mm 26550mm 26575mm 26600mm 26625mm 26650mm 26675mm 26700mm 26725mm 26750mm 26775mm 26800mm 26825mm 26850mm 26875mm 26900mm 26925mm 26950mm 26975mm 27000mm 27025mm 27050mm 27075mm 27100mm 27125mm 27150mm 27175mm 27200mm 27225mm 27250mm 27275mm 27300mm 27325mm 27350mm 27375mm 27400mm 27425mm 27450mm 27475mm 27500mm 27525mm 27550mm 27575mm 27600mm 27625mm 27650mm 27675mm 27700mm 27725mm 27750mm 27775mm 27800mm 27825mm 27850mm 27875mm 27900mm 27925mm 27950mm 27975mm 28000mm 28025mm 28050mm 28075mm 28100mm 28125mm 28150mm 28175mm 28200mm 28225mm 28250mm 28275mm 28300mm 28325mm 28350mm 28375mm 28400mm 28425mm 28450mm 28475mm 28500mm 28525mm 28550mm 28575mm 28600mm 28625mm 28650mm 28675mm 28700mm 28725mm 28750mm 28775mm 28800mm 28825mm 28850mm 28875mm 28900mm 28925mm 28950mm 28975mm 29000mm 29025mm 29050mm 29075mm 29100mm 29125mm 29150mm 29175mm 29200mm 29225mm 29250mm 29275mm 29300mm 29325mm 29350mm 29375mm 29400mm 29425mm 29450mm 29475mm 29500mm 29525mm 29550mm 29575mm 29600mm 29625mm 29650mm 29675mm 29700mm 29725mm 29750mm 29775mm 29800mm 29825mm 29850mm 29875mm 29900mm 29925mm 29950mm 29975mm 30000mm 30025mm 30050mm 30075mm 30100mm 30125mm 30150mm 30175mm 30200mm 30225mm 30250mm 30275mm 30300mm 30325mm 30350mm 30375mm 30400mm 30425mm 30450mm 30475mm 30500mm 30525mm 30550mm 30575mm 30600mm 30625mm 30650mm 30675mm 30700mm 30725mm 30750mm 30775mm 30800mm 30825mm 30850mm 30875mm 30900mm 30925mm 30950mm 30975mm 31000mm 31025mm 31050mm 31075mm 31100mm 31125mm 31150mm 31175mm 31200mm 31225mm 31250mm 31275mm 31300mm 31325mm 31350mm 31375mm 31400mm 31425mm 31450mm 31475mm 31500mm 31525mm 31550mm 31575mm 31600mm 31625mm 31650mm 31675mm 31700mm 31725mm 31750mm 31775mm 31800mm 31825mm 31850mm 31875mm 31900mm 31925mm 31950mm 31975mm 32000mm 32025mm 32050mm 32075mm 32100mm 32125mm 32150mm 32175mm 32200mm 32225mm 32250mm 32275mm 32300mm 32325mm 32350mm 32375mm 32400mm 32425mm 32450mm 32475mm 32500mm 32525mm 32550mm 32575mm 32600mm 32625mm 32650mm 32675mm 32700mm 32725mm 32750mm 32775mm 32800mm 32825mm 32850mm 32875mm 32900mm 32925mm 32950mm 32975mm 33000mm 33025mm 33050mm 33075mm 33100mm 33125mm 33150mm 33175mm 33200mm 33225mm 33250mm 33275mm 33300mm 33325mm 33350mm 33375mm 33400mm 33425mm 33450mm 33475mm 33500mm 33525mm 33550mm 33575mm 33600mm 33625mm 33650mm 33675mm 33700mm 33725mm 33750mm 33775mm 33800mm 33825mm 33850mm 33875mm 33900mm 33925mm 33950mm 33975mm 34000mm 34025mm 34050mm 34075mm 34100mm 34125mm 34150mm 34175mm 34200mm 34225mm 34250mm 34275mm 34300mm 34325mm 34350mm 34375mm 34400mm 34425mm 34450mm 34475mm 34500mm 34525mm 34550mm 34575mm 34600mm 34625mm 34650mm 34675mm 34700mm 34725mm 34750mm 34775mm 34800mm 34825mm 34850mm 34875mm 34900mm 34925mm 34950mm 34975mm 35000mm 35025mm 35050mm 35075mm 35100mm 35125mm 35150mm 35175mm 35200mm 35225mm 35250mm 35275mm 35300mm 35325mm 35350mm 35375mm 35400mm 35425mm 35450mm 35475mm 35500mm 35525mm 35550mm 35575mm 35600mm 35625mm 35650mm 35675mm 35700mm 35725mm 35750mm 35775mm 35800mm 35825mm 35850mm 35875mm 35900mm 35925mm 35950mm 35975mm 36000mm 36025mm 36050mm 36075mm 36100mm 36125mm 36150mm 36175mm 36200mm 36225mm 36250mm 36275mm 36300mm 36325mm 36350mm 36375mm 36400mm 36425mm 36450mm 36475mm 36500mm 36525mm 36550mm 36575mm 36600mm 36625mm 36650mm 36675mm 36700mm 36725mm 36750mm 36775mm 36800mm 36825mm 36850mm 36875mm 36900mm 36925mm 36950mm 36975mm 37000mm 37025mm 37050mm 37075mm 37100mm 37125mm 37150mm 37175mm 37200mm 37225mm 37250mm 37275mm 37300mm 37325mm 37350mm 37375mm 37400mm 37425mm 37450mm 37475mm 37500mm 37525mm 37550mm 37575mm 37600mm 37625mm 37650mm 37675mm 37700mm 37725mm 37750mm 37775mm 37800mm 37825mm 37850mm 37875mm 37900mm 37925mm 37950mm 37975mm 38000mm 38025mm 38050mm 38075mm 38100mm 38125mm 38150mm 38175mm 38200mm 38225mm 38250mm 38275mm 38300mm 38325mm 38350mm 38375mm 38400mm 38425mm 38450mm 38475mm 38500mm 38525mm 38550mm 38575mm 38600mm 38625mm 38650mm 38675mm 38700mm 38725mm 38750mm 38775mm 38800mm 38825mm 38850mm 38875mm 38900mm 38925mm 38950mm 38975mm 39000mm 39025mm 39050mm 39075mm 39100mm 39125mm 39150mm 39175mm 39200mm 39225mm 39250mm 39275mm 39300mm 39325mm 39350mm 39375mm 39400mm 39425mm 39450mm 39475mm 39500mm 39525mm 39550mm 39575mm 39600mm 39625mm 39650mm 39675mm 39700mm 39725mm 39750mm 39775mm 39800mm 39825mm 39850mm 39875mm 39900mm 39925mm 39950mm 39975mm 40000mm 40025mm 40050mm 40075mm 40100mm 40125mm 40150mm 40175mm 40200mm 40225mm 40250mm 40275mm 40300mm 40325mm 40350mm 40375mm 40400mm 40425mm 40450mm 40475mm 40500mm 40525mm 40550mm 40575mm 40600mm 40625mm 40650mm 40675mm 40700mm 40725mm 40750mm 40775mm 40800mm 40825mm 40850mm 40875mm 40900mm 40925mm 40950mm 40975mm 41000mm 41025mm 41050mm 41075mm 41100mm 41125mm 41150mm 41175mm 41200mm 41225mm 41250mm 41275mm 41300mm 41325mm 41350mm 41375mm 41400mm 41425mm 41450mm 41475mm 41500mm 41525mm 41550mm 41575mm 41600mm 41625mm 41650mm 41675mm 41700mm 41725mm 41750mm 41775mm 41800mm 41825mm 41850mm 41875mm 41900mm 41925mm 41950mm 41975mm 42000mm 42025mm 42050mm 42075mm 42100mm 42125mm 42150mm 42175mm 42200mm 42225mm 42250mm 42275mm 42300mm 42325mm 42350mm 42375mm 42400mm 42425mm 42450mm 42475mm 42500mm 42525mm 42550mm 42575mm 42600mm 42625mm 42650mm 42675mm 42700mm 42725mm 42750mm 42775mm 42800mm 42825mm 42850mm 42875mm 42900mm 42925mm 42950mm 42975mm 43000mm 43025mm 43050mm 43075mm 43100mm 43125mm 43150mm 43175mm 43200mm 43225mm 43250mm 43275mm 43300mm 43325mm 43350mm 43375mm 43400mm 43425mm 43450

IF IN DOUBT ...
... USE A HAMMER

Hammer
 The obvious choice!

Silent
POWER



Planer-Thicknesser
A3 31

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



K3 basic

Planer-Thicknessers/Planers/Thicknessers



A3 41



A3 31



A3 28



A3 41 A



A3 41 D



F 3

Spindle moulder

Saw Spindle Moulders



B3 perform



B3 winner



B3 basic

Combination Machines



C3 31 perform



C3 31

Bandsaw



**N4400
 N3800**

**Horizontal
 Mortiser**



D3

**Mobile
 Dust Extractor**



AF 14

Belt sander



HS 2200


HAMMER
 Quality and
 precision from
 AUSTRIA



Three legs good

David Cockburn has made some 25 versions of this small table, so he should know how to fit the legs by now!

These handy little tables are popular and fun to make; they are just the size to take a glass of wine or a cup of tea, they look elegant and they don't occupy a lot of space. Make this table from oak, walnut or any other interesting hardwood, vary the turning of the spindle to suit your taste, make the foot shape simple or complex, and turn a flat or edged top. This is a very versatile design.



A The triangular plate needs to be fixed with two screws. It matches a plywood insert that is fixed inside the jig to stabilise the pedestal. Make sure the V-plate is central, and the fence is set correctly



B The 4 x 2in bar holds the jig in a vice. Notice the wedge supporting the end of the pedestal



C With the pedestal held in the jig you can shape the socket, cutting through the triangular plate

MAKING THE JIG

The most interesting part of this job is cutting the dovetail sockets in the pedestal. This must be done accurately or the legs will be all askew. My solution is to make a jig into which the pedestal fits. I fixed a triangular register plate to the end of the pedestal. This matches an insert that is fitted inside the jig to hold the pedestal in

the three positions. An L-shaped wedge supports the pedestal at the other end.

Like many jigs it is made from offcuts from around the workshop. The bar at the front is a piece of 4 x 2in PAR softwood, and is extended for holding in a vice. To that are fixed softwood slides, though these could easily be ply, and to those an mdf or

ply base, which does nothing more than offer a base to support the pedestal.

I used a couple of routers to remove the waste with a 1/4in straight cutter and then to form the dovetail. It's really important that the cutter is positioned centrally on the axis of the dovetail socket, or the leg will veer off at an angle.



1 Turn away the waste with a bowl gouge, but finish with a scraper if you want and abrasive



2 Turn the edge of the tabletop with the lathe running slowly. The centre is turned with a bowl gouge



3 Drill and countersink the sub-top plate for screws to fit to the top and to the spindle

From a woodworking perspective, the table is pretty straightforward. It has a bowl-turned top and sub-top screwed to a spindle-turned pedestal with bandsawn legs dovetailed into it.

The fun part of this project is the dovetailed legs. Many people make flats on the spindle so that they can shape the legs on a router table but that's a machine-made method, which is not really in keeping with the 18th century style. Some people even use dowels to attach the legs. A big three-legged dining table requires a different approach for adequate strength, but for this little table it is best to use plain, saw-cut dovetails. My idea here is to retain the cylindrical spindle and still be able to deliver a good fit for the legs without too much fiddling.

If you make them one at a time it takes about half a day to produce this table. No doubt you could improve on that if you can find the customers to make it worthwhile. Otherwise this is something of a spare time project or to try out some new techniques.

Making the pedestal

Turn the spindle blank to a 55mm diameter cylinder. Follow the diagram to mark it out

Fig 1 Side elevation

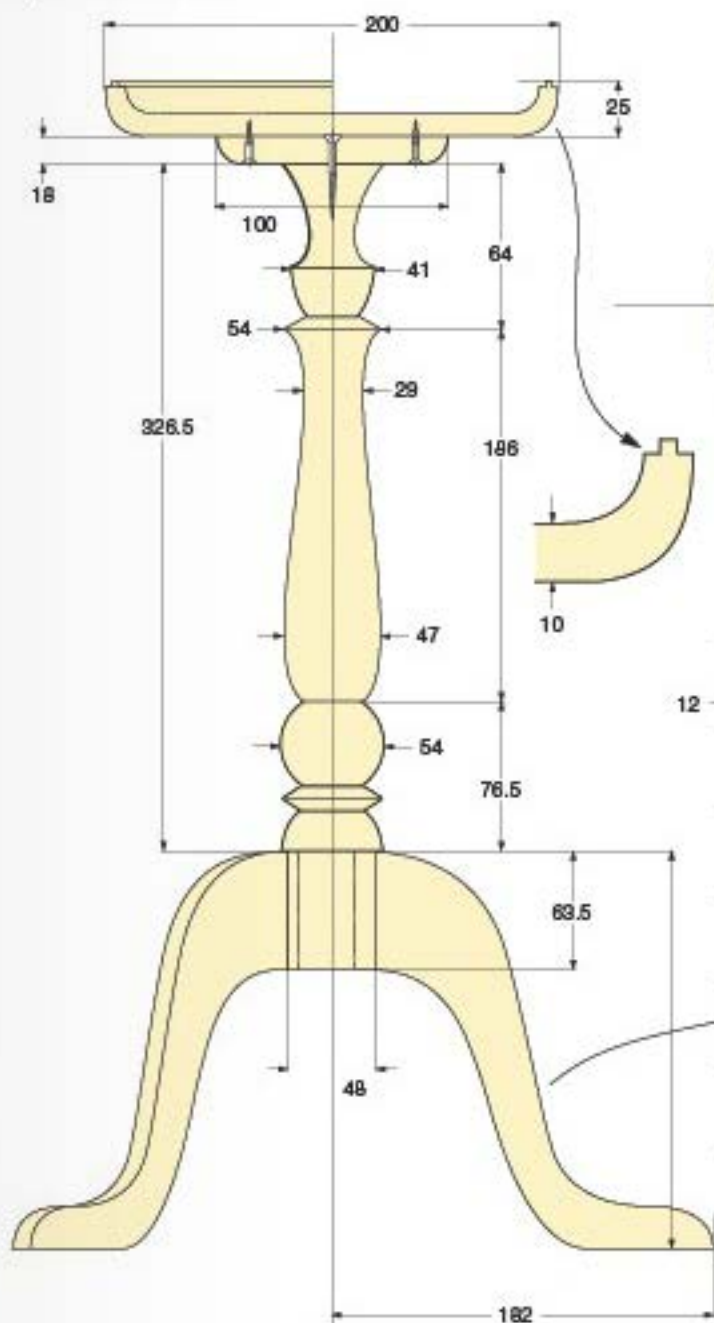


Fig 2 Plan of top showing sub-top

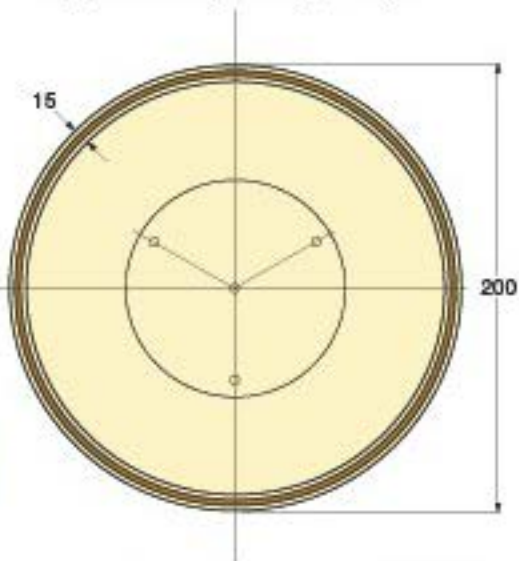
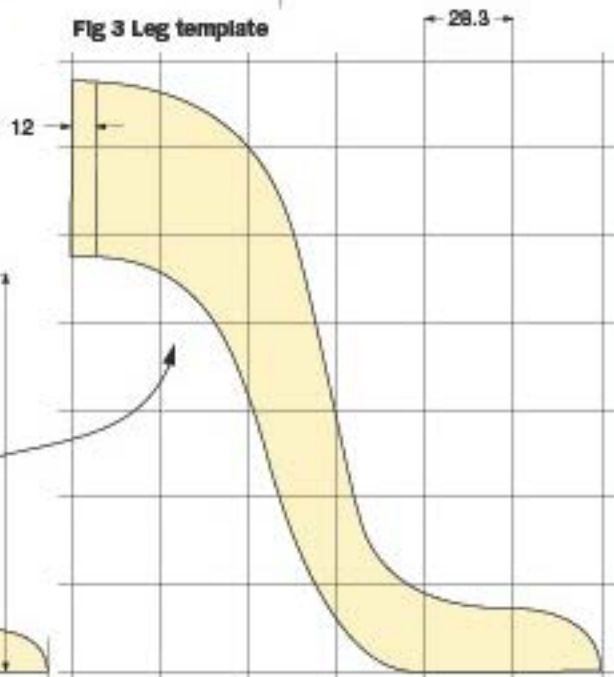


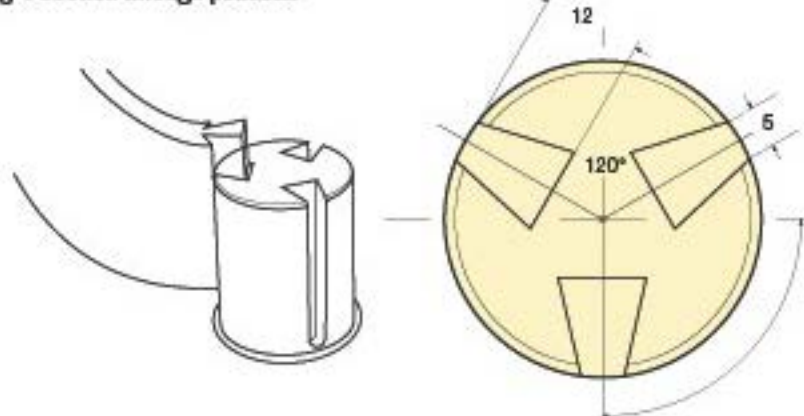
Fig 3 Leg template



NOT SO CLEVER...

The first time I used the jig to cut the dovetail sockets in a pedestal, it never occurred to me that I had to be particularly careful in the positioning of the router. I didn't adjust the fence accurately and the socket wasn't exactly on the axis line, nor was it at right angles to the diameter. I had to fudge the shoulders on the legs to make it fit, with one higher than the other. I now position the sockets accurately by stepping round with a compass.

Fig 4 Section through pedestal





By taping the legs together, you can cut and sand them all in one go for accuracy and speed



This jig holds the leg vertical in both planes for cutting the dovetail on a bandsaw



The quickest way to cut the dovetails on the legs is with a bandsaw. The step hides any gaps



It is vitally important that the sockets are worked accurately or the leg will need adjustment

and then turn it to shape. The only critical point is to ensure that the cylinder into which the legs will be dovetailed is uniform in diameter and there is a wider cylinder above to act as a stop. Don't overdo the sandpaper if you want to retain the crisp edges, which will be admired by other woodworkers.

Construct the jig for routing the dovetail sockets in the pedestal. Attach a plywood triangle with 20mm sides to the bottom end of the pedestal with a couple of small screws. This serves as an indexing 'ring'. The torque generated by the router bit is quite enough to turn the spindle slightly in the jig, resulting in a curved dovetail slot which will be difficult to fit. That is why you should attach the indexing triangle with a screw through the centre and another, where it won't get in the way of the router, to stop it rotating.

Take extra care that you cut the dovetail slot exactly on the diameter, as it is rather too easy to cut it a little off centre. The router cutter must be set up exactly on the centre line of the three sockets, which are set at 120° to each other. Once you are

aware of the risk, careful measurement will avoid this error.

These days you can buy a light-duty router for less than £40, so it makes sense to have a couple of them set up to use in turn. First remove the bulk of the waste with a straight 1/4in bit, then cut the slot to shape with a dovetail cutter. Repeat the same two cuts for the other two leg locations.

Making the top

Considered as woodturning, the top is a shallow bowl 200mm in diameter and 25mm deep. Most of the wood can be removed with the bowl gouge. Take a final very light cut on the table top with a scraper to achieve a perfectly flat surface, and finish it with Danish oil while it's still on the lathe.

The sub-top is a simple 100mm diameter turned disk with a rounded edge. Mark the centre, remove it from the lathe and drill countersunk holes for the assembly screws.

Making the legs

Make a template from the plan; tape the three blanks together, bandsaw the legs to shape and remove the saw marks from the edges with a drum sander. Identical legs will ensure that the tabletop is horizontal so long as the dovetails are inserted to the same depth.

The next step is to cut the male dovetails. The two critical dimensions are the width of the dovetail and the location of the shoulders; get these right and mistakes in other areas can be fudged. In my case the dovetail was 12mm wide and the shoulders were also 12mm from the edge, so I marked these dimensions with a mortise gauge and a cutting gauge respectively. Make a little jig which will hold the leg blank in the right position in relation to the bandsaw table. Verify that the blade is at right angles to the table and make your two cuts on each side of each leg blank. Test-fit the legs to the pedestal and adjust with a file or rasp if necessary. You shouldn't need to insert wedges to fill any gaps, but in any case don't assemble it yet.

Legs that are thinner at the ankle and have a wider but pointed foot are preferred to those that are flat sided. Having made both types, I'm not convinced that the extra work carving the legs is worthwhile for a small table. If however you want to make 'the best', then you will have started with legs which are 20mm thick and you should now carve away 2mm from each side of the thigh, 3mm from each side of the ankle and leave the foot full width.

The rounding must also be carved by hand and should be a semi-circle down the shin, while the foot itself has a slight ridge along the top edge. Respect the grain direction as you carve and finish with a scraper to achieve an even surface. The alternative approach is to make the leg blanks 15mm thick and just round over the top edge on a router table. If you do take the trouble to make the shapelier legs, make sure you point them out to your customer or they may not be noticed!

Schepach Forsa Series professional panel sizing saws are distinctively German from head to toe. German technology - German innovation - German quality - and five models to choose from offering between 1.6m and 3.2m length of cutting stroke. All Forsa Series come complete with patented integral motorised cast iron pre-scoring unit whilst still retaining a 107mm depth of cut for ripping solid timbers plus micro rip fence setting to within 1/10mm. The precision sliding beam can be equipped with optional professional sliding table carriage with telescopic arm and table width extension (TWE) as illustrated. (Both included in prices quoted below.)



2 separate hand wheels for precise height & angle settings.



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



Patented cast iron sawing assembly c/w integral motorised pre-scoring unit.



Height & side setting of the scoring blade conveniently accomplished with the tool provided.



Optional Pro DUO guard system c/w 2 hoods for straight and bevelled cuts. Also ideal for hidden cuts.

**Deutsche
Qualitätsprodukte
seit 1927**



Forsa 4.0

1.6m Precision Panel Sizing Saw Professional Series

Forsa 4.0 c/w optional professional sliding table carriage with telescopic arm & table width extension - but included in price quoted below.



Forsa 6.0*

2.1m Precision Panel sizing saw Professional Series



Forsa 8.0*

2.6m Precision Panel Sizing Saw Professional Series



Forsa 9.0*

3.2m Precision Panel Sizing Saw Professional Series

Also available. Precisa Series of Classic circular sawbenches with optional pre scoring function.

* Forsa 6.0 / 8.0 / 9.0 above illustrated without professional sliding table carriage (Pro STC) with telescopic arm. All prices below include Pro STC & TWE. Substantial price reductions available if standard table outtrigger table required. All prices ex works. Carriage extra. Forsa 4.0 / 4.1 - lorry required. Forsa 6.0 / 8.0 / 9.0 - lorry or truck required.

Model	Product Group Series	Specification Includes (as per quoted price)	Mc HP / Scorer / Volts	Depth of cut & length of stroke	Price Exc VAT - Plus Carriage	Price Inc VAT - Plus Carriage
Forsa 4.0	Professional	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 1.6 m	£2,995.00	£3,594.00
Forsa 4.1	Professional	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 2.1 m	£3,500.00	£4,200.00
Forsa 6.0	Professional	Inc Professional STC + TWE + TLE + Scorer	5.4 / 1.0 / 415v	107 mm x 2.1 m	£3,995.00	£4,794.00
Forsa 8.0	Professional	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 2.6 m	£4,450.00	£5,340.00
Forsa 9.0	Professional	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 3.2 m	£4,600.00	£5,520.00

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



BY RON FOX

Routing panels in solid wood

Panelled doors don't have to have a separate frame and panel. Ron Fox explains how to create them in solid wood

Frame-and-panel construction is a well-known feature of furniture work and, when carried out with a router, usually involves a heavy-duty machine, large expensive cutters and a router table. However, you can also create pleasing effects by making decorative cuts in the surface of a panel with simple cutters and a router used in the hand.

At its simplest, you can make a panelled effect by plunging a suitably shaped cutter into the surface of a board and following a template. At a more sophisticated level, you can use several cutters, perhaps bearing-

guided or used with guide bushes, photo 1, to place one cut adjacent to another and give a more realistic effect.

Simple classic panel

The 'classic panel' cutter is a two-flute plunge cutter with a radiused bottom cut that allows it to be plunged into the surface of a board. In the example, I am using a 1/2in-shank CMT 848-190 cutter, but similar cutters are available from most major suppliers. The cutter has a 19mm maximum diameter and I used it with a 28mm guide bush. This gives an offset of 4.5mm ($28 - 19 = 9$, $9 \div 2 = 4.5$), which has to be allowed for when you're making the template.

If the panel effect forms a simple rectangle, the template can consist of four straight edges taped to the surface. Take the workpiece – a door, say – and mark the notional outline of the 'frame'. Draw a second rectangle around the first, bigger by the offset of the cutter/guide-bush combination. Tape the straight edges to this outer rectangle, place scraps of the same thickness in the middle to prevent the router from tilting, and set a shallow depth of cut on the router, photo 2.

This shows a rectangular panel with four straight edges of 18mm mdf taped to it, and pieces of the same thickness mdf taped in the centre. Make several light passes in a clockwise direction until you've achieved the desired effect; photo 2 shows the finished door with a corresponding drawer front. The pencilled lines, to which the straight edges were taped, are clearly visible. The edges of the door can now be moulded if desired.

The above example used a guide bush to position the cut, but top-bearing versions of many of these cutters are available. With



1 There is a wide range of cutters suitable for surface decoration



2 Straight strips of MDF taped to the panel guide the router



3 The end product can be a door panel or a matching drawer front



4 The cathedral arched panel and the template made from it



PANEL MOULD CUTTERS

Panel mould cutters offer a simple and inexpensive way of creating profiles in the face or edge of drawer fronts, cabinet doors, and panels generally. They have bottom cut, which enables them to be plunged into the surface of the work. They are used with templates and are guided either by bearings mounted above the blades or by means of guide bushes. They are particularly useful for surface decoration of doors, drawers, and panels.



these, the bearing is run against the edge of the template, doing away with the need for a guide bush. This method is illustrated later in this feature.

This simple form of surface decoration is particularly suitable for items in mdf that will be painted. For such work, a wide range of suitable cutters will be found in almost any supplier's catalogue.

Using several cutters

You can create more elaborate and realistic panelled effects by using several cutters in conjunction with large guide bushes. The

only routers that I know of that can take bushes larger than 40mm in diameter are the Trend T9, T10, and T11 models. These have optional guide bushes of 50, 60 and 70mm in diameter. However, it isn't too difficult to make a false base for your particular router to take these large bushes.

To illustrate the method, I'll make a door using the Trend T11, with one standard and two large guide bushes, plus three Trend cutters: the 4/60 19mm straight, the 7/2 ovolo, and the C045 V-groover.

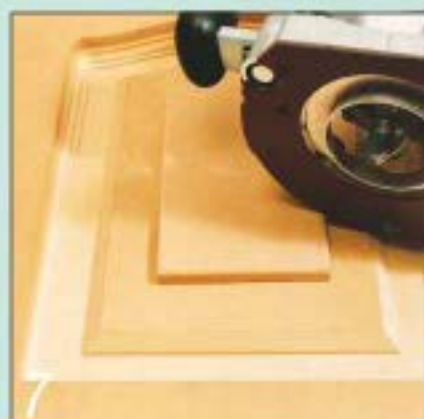
For this example I decided to make a cathedral-arched door. This requires a



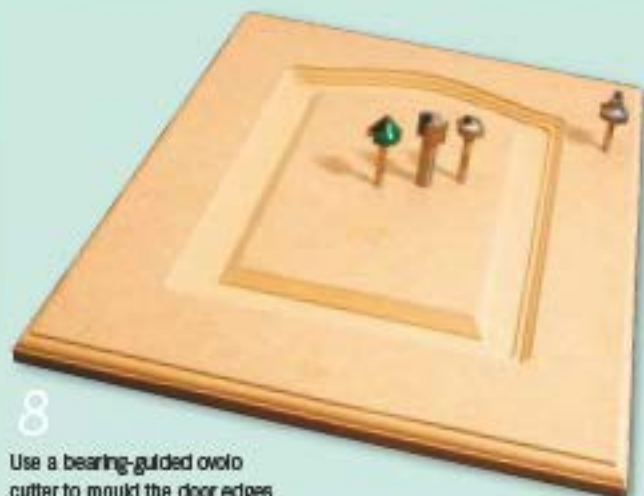
The first stage of the process uses a straight cutter and a 50mm guide bush



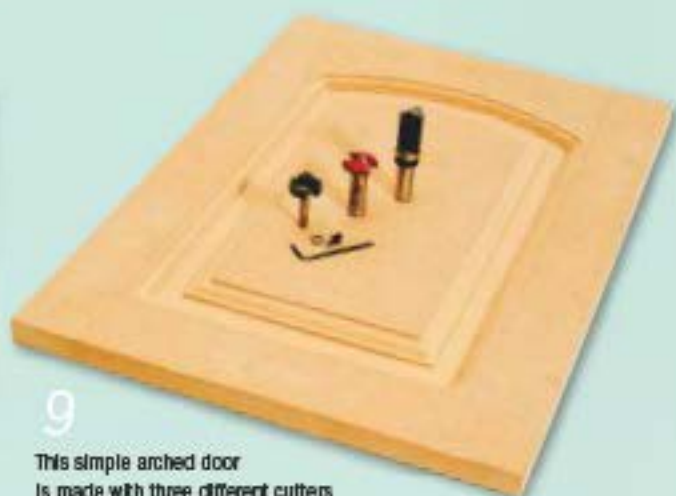
The second stage uses an ovolo cutter and a 32mm guide bush



The third stage uses a chamfer cutter and a 70mm guide bush



Use a bearing-guided ovolo cutter to mould the door edges



This simple arched door is made with three different cutters



This cathedral-arched door was made in softwood using two Wealden Raise-a-Panel cutters



FINE TRIMMING

Using a straight edge with a template-trim cutter in your router to trim your moulded panels to an exact size.

template and I made one in 9mm mdf. First, make a simple arched shape to represent the panel. Next, pin this arched panel to another piece of 9mm mdf and carefully cut round it with a $\frac{1}{4}$ in diameter cutter and a 12mm guide bush in the router.

The key thing in this operation is to start with the dimensions of the required panel, decide on the combination of guide bushes and cutters that you'll use, and make the template to match; photo 4 shows the arched panel and the template made from it.

Tape the template to the workpiece with the usual anti-tilt piece in the centre and make the door in three stages, cutting in a clockwise direction to help keep the guide bush against the template.

Stage 1 involves fitting the 4/60 straight cutter and the 50mm guide bush and making a cut 11mm deep. Take several passes to achieve the final depth, photo 5. In stage 2, replace the 50mm guide bush with one of 32mm and fit the 7/2 ovolo cutter. Make the cut to a final depth of 8mm, photo 6. Stage 3 involves fitting the 70mm guide bush and C045 chamfer cutter and making a cut to 10mm depth, photo 7.

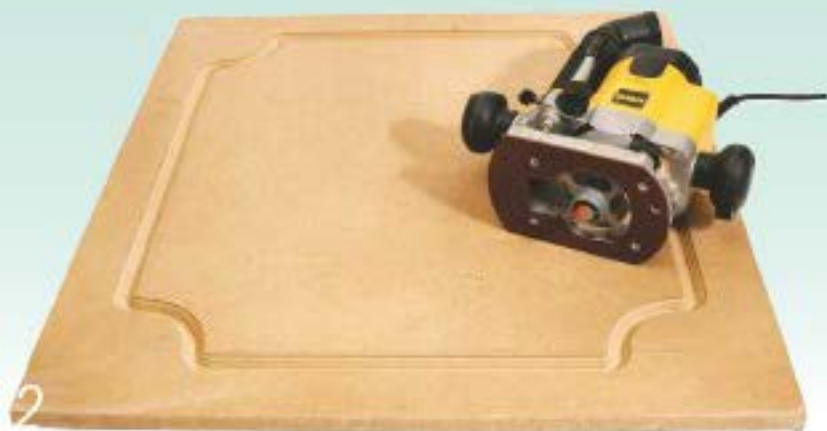
Finally, mould the edge with a suitable cutter such as a bearing-guided ovolo. Photo 8 shows the finished door and the cutters used, including the bearing-guided ovolo. Photo 9 shows a simpler arched door made with different cutters but the same guide bushes.

Bearing-guided cutters

A set of special top-bearing cutters that produce an effect close to the traditional frame-and-panel appearance is available from Wealden Tool Company. Each set consists of a profile cutter and a panel raise



These three different panel patterns have been cut in mdf and softwood



Other panels such as this bath panel can be made using the same routing techniques

cutter. Sets are available on $\frac{1}{4}$ in, 8mm or $\frac{1}{2}$ in shanks.

As examples I used a $\frac{1}{4}$ in shank set and made two arched doors: the cathedral arch in softwood and the simpler one in mdf.

The templates are made in exactly the way described above but in 18mm mdf. The reason for this is that the cutters are guided by top bearings and the templates must be thick enough to position the bearings for the initial passes.

With the template taped or pinned to the workpiece, make the first cut with the profile cutter in a clockwise direction around the template. The recommended full depth of cut is 10-12mm.

Make the second cut with the panel raise cutter. This cuts away the inner part of the profile, creating a raised panel. This cut is also made in a clockwise direction around the template. The combined effect of the two cutters is a quite realistic panelled door. Photo 10 shows the cathedral-arched door made in softwood, the Raise-a-Panel cutters used, and the template.

The Wealden cutter sets are the most straightforward for achieving a realistic

panelled effect, and they have the advantage of being bearing-guided and therefore independent of guide bushes. Photo 11 shows three doors with different patterns – a cathedral arch made with three different cutters and guide bushes, the simple arch made with the Wealden cutters, and the cathedral arch with the same two cutters.

Other panels

These methods are equally relevant to panels other than doors. As an example, I made a panel for the end of a bath, photo 12. This is cut in 15mm mdf with the cutter used in the first door. As before you need a template and the cutter is used with a guide bush and packing piece equal in thickness to the template.

FURTHER INFORMATION

- Trend
- 01923 249911
- www.trend-uk.com
- Wealden Tool Company
- 01580 890500
- www.wealdentool.com

hamilton beverstock

CNC sharpening & metal cutting specialists



- TCT CIRCS • SERVICING • ROUTER CUTTERS • POWER TOOLS
- ABRASIVES • TURNING TOOLS • PLANER BLADES

BAND SAW BLADES

Welded to any length



With over 33 years experience in the saw industry, and as a supplier to major machine manufacturers, we know, like thousands of other satisfied customers, you'll be happy with our high quality band saw blades for cutting wood, metal, plastics, food...

... If you're a hobbyist or a professional, call us today for a friendly service, free advice and competitive prices.

Hamilton Beverstock Ltd.

Grange Industrial Estate, Llanfrechfa Way,
Cwmbran, Torfaen NP44 8HQ

Tel: (01633) 838900 • Fax: (01633) 873803
email: sales@hamiltonbeverstock.com



Founder Member of the Saw Doctor Association



The Wood Veneer Hub

After three decades of being at the forefront of supplying the automotive, aviation, marine and design industries, Freed Veneers has introduced The Wood Veneer Hub, an exciting online one stop shop bringing a wonderful selection of high quality natural, coloured, smoked and constructional veneers as well as all the tools and accessories a woodworker would need along the way...

...with this includes the exciting and innovative Peel and Stick range.

Available in a variety of different species, all pre-sanded, these fully flexible sheets offer an easy solution to the application of wood veneer for any given job.



Introducing our beautiful
Coloured Veneer Range!

The Wood Veneer Hub assures that no job is too big or small whether you need one sheet or a thousand. With our factory in Valencia, Spain there is no service that cannot be provided whether it be a panel you need produced or an image etched into a veneer sheet.

Visitors are always welcome to the fully stocked warehouse in Leighton Buzzard, Bedfordshire where you will receive the warmest of welcomes as well as the chance to view the large variety of different species.

So whether you are an antique restorer, furniture maker, boat builder or anyone else after high quality veneers then please do not hesitate to give us a call.



Unit 4 Eden Court, Eden Way,
Leighton Buzzard, Bedfordshire LU7 4FY

Tel: +44 (0)1525 851166

E-mail: sales@thewoodveneerhub.co.uk

www.thewoodveneerhub.co.uk



Making time

BY CHRISTOPHER BLASIUS

Mechanical devices made from wood are always impressive, and few more so than a working and accurate timepiece. The clock described here has been made by one of our German readers, and full plans for making it are available from his website

This straightforward clock is designed as an entry-level device which can be made by anyone with the time and care to spare; you don't have to be a full-time clockmaker to complete it!

Through its simple yet thoughtful design, anyone with a scroll saw and a steady hand can build the clock if they cut the parts carefully and exercise sufficient patience during the construction.

Minimal movement

The number of moving parts has been reduced to only the essentials, and as there is no minute hand the clock doesn't need a complex dial train. By having the hour hand

fixed, it's only necessary for the dial to rotate to display the current time; this operating motion gave the clock its name, Rotara. It's easy to read the time from Rotara's face, and you can mark additional quarter hour indicator holes on the hour wheel for improved time-telling accuracy.

Maximum efficiency

Optimized tooth geometry (the size and shape of the gear tooth for smooth running), the carefully calculated frame design and an improved pendulum suspension system all simplify the making of the clock considerably, as well as enhancing its operational performance.



1 I've christened my home-made CNC router machine *Solidis*



2 The wall-mounted frame is the baseplate to which all the other parts are fitted



3 The escape wheel and spacer can be centred on a twist drill bit...



4 ...and fitted to the lowest frame arbor along with a pinion



5 Align the gear, the small pinion and the spacer on a drill bit

The drive weight is attached to a cord which is wound around the winding barrel. To wind the clock, you simply move the counterweight downwards. It couldn't be any faster and easier. This will give a running time of approximately 25 hours.

CNC router

I have made all the parts for *Rotara* with my CNC router, photo 1. Having been interested in making automata and similar devices for some time, I have developed my own homemade CNC machine to make the cutting-out work simpler and more accurate. It's called *Solidis*, and I plan to describe its construction in *The Woodworker* in the near future. Enthusiasts of the scrollsaw will have no problem cutting out the components, and even a hand fretsaw will get the job done if used with care.

The right materials

For making the clock I recommend Baltic birch plywood, because this is the best plywood you can get. Birch plywood is preferable because it is dimensionally consistent and is relatively resistant to humidity and movement. Far-eastern and poplar plywood should be avoided because of their poor quality and general unreliability.

The work is made a lot easier if you stick the paper plans to your plywood with a craft glue or aerosol spray adhesive. This leaves no residue when you remove it from the wood, and ensures you achieve a greater accuracy. To remove the paper from the wood I've found it is sometimes necessary to heat it a little bit with a hot air blower.

Making the frame

The frame is the baseplate onto which all the other parts are attached, photo 2. *Rotara* uses a so-called single frame which is very simple because tolerances during the cutting process are not so tight as they would be on a multiple-frame device.

The axes (or arbors) are from brass rod; this is normally available in the right dimensions at your local hardware store or DIY shed. You only have to cut them to the right length. The frame is attached to the wall with two screws, which aren't visible.

Perfectly round

The escape wheel, photo 3, is the most important part in the clock. It must be a perfect circle to obtain a uniform ticking motion. But don't worry; this can be readily achieved with a bench-top disc sander. Just take a piece of scrap wood and position the wheel on it so that it overhangs slightly. By using a close-fitting drill bit as a temporary

A CLOCKMAKER'S GLOSSARY

Anchor Constrains the escape wheel to single-tooth movement

Arbor Gear shaft or axle

Chapter ring A decorative ring on the clock face upon which the hours are indicated

CNC Computer Numerical Control, giving three-axis digital instructions for machine movement

Dial (time) train The gears which drive the hour and minute hands

Drive weight Provides a constant force to power the clock via the going train

Escape wheel Vertically mounted wheel controlled by the anchor, part of the escapement

Escapement The mechanism that controls the swing of the pendulum to a regular interval

Going train Main gear train, transmits the force of the mainspring or weight

Hour wheel The wheel in a clock which carries the hour hand and forms the last piece of the dial train, usually rotating twice in 24 hours

Movement Mounting plates or frame between which the gears are housed

Pendulum Suspended, swinging rod and weight (bob) that regulates the clock movement

Pinions Small gears

Regulator Mechanism that allows the pendulum to be adjusted for increased accuracy

Wheel train General arrangement of gears in a mechanical timepiece

Wheels Large gears

centre, the scrap timber can be clamped to the sander table and the wheel slowly rotated against the disc until it is perfectly round. Once finished, the escape wheel is the first wheel that can be fixed to the frame, photo 4.

Getting into gear

Cutting the gears is not as difficult as most people think. If you use spiral blades for your scrollsaw, you can cut the teeth with extreme precision. All of the small parts should be drilled before cutting them out, because at this point they can be held more securely. To align the holes of the gear, the small pinion and the spacer, you can use a drill bit again, photo 5. These parts can then be added to the frame, photo 6.

Over a barrel

The winding barrel, as its name suggests, is where the cord is wound up, and from which the weight is suspended. It is designed as a sandwich wheel, consisting of several layers. You need to drill three holes for the pins of the ratchet mechanism into the face of this wheel, photo 7. The three ratchets, photo 8, ensure that the weight is firmly connected to the going train. If you wind up the clock, the ratchet releases the connection and you can then pull the weight without moving the other gears. Fit them in place on the frame, photo 9.

A swinging time

The pendulum regulates the time impulses of the clock. My construction of the bob also employs a sandwich technique. Drill a hole in the end of the central section after cutting it to shape, photo 10. The middle part of the sandwich is hollow so that lead shot can be poured into it, photo 11. These very small lead balls are available from diving and sailing suppliers, who sell them to make up ballast bags and the like.

The pendulum also needs to be adjustable, so I have included a threaded rod at the bottom for calibration. It is important to get the centre of gravity as low as possible. The threaded rod is screwed into the bottom of the pendulum shaft, which is then fitted into the pendulum bob, photo 12.

You'll note that the top of the pendulum shaft terminates in a special head which is the last piece of the pendulum to be fitted. This incorporates a V-shaped pin which reduces the friction of the pendulum as it swings, photo 13. The finished pendulum can now be fitted to the frame, photo 14.

A vital link

The anchor connects the pendulum with the escape wheel, and is consequently a very

6
Then fit them in place. The clock is slowly taking shape



7
The winding barrel has three pins fitted to take the ratchets



8
Drill the pivot holes in the ratchet blades after cutting them out



9
The ratchets will engage with the cog on the back of the hour wheel



10
The end of the pendulum bob is drilled to take the adjuster rod



11
The hollow central section of the bob is filled with lead shot...



12
...before being assembled and fixed to the pendulum shaft



13
The pendulum head has a V-shaped internal pin to reduce friction



15
The anchor is drilled to accept the two small adjusting grub screws



16
These can be accessed from each side of the anchor...



14
The finished pendulum can now be suspended on its pivot



17
...and adjusted to bear against the peg on the pendulum



18
The ratchet cog wheel is fixed to the back of the hour wheel



19
The hour wheel can now be set in position; note the fixed hour hand



20
The drive and counterweights complete the clock assembly

Important part of the mechanism, photo 15. To calibrate the anchor easily, two small grub screws are set into the end which attaches to the pendulum, photo 16. A tap (and die) can be used to make the threads, or you can simply drive the screws directly into a pilot hole. With the anchor fitted, photo 17, the clock gets another step closer to completion.

Telling the time

As this clock has a fixed hour hand, the dial of the clock has to rotate twice every day. That's the reason the dial is also known as the hour wheel.

The ratchet wheel is fixed to the back of the hour wheel, photo 18, and is glued in place after a drill bit has been used to align the two holes. The hour wheel can now be fitted to the clock, followed by the hour hand which is fixed in place and allows the dial to rotate behind it, photo 19.

Carry that weight

Rotary needs two weights to function fully, photo 20. The bigger one is the drive weight; this exerts a constant gravity-aided force on the winding barrel which is transferred to the going train and drives the whole mechanism. I've made the drive weight from acrylic tube so you can see the lead balls, but you could make it in any shape or material you prefer.

The small one acts as a counterweight, and ensures that the winding barrel winds up the loose end of the cord cleanly and without tangles.

The clock is now complete, but you may want to apply a finish. Contrasting stains are always a good idea, and can highlight the various components. Paint is an alternative, but it should only be applied very sparingly. Aerosol paint is a possible option as it will avoid clogging up the workings and undoing all your hard work!

FURTHER INFORMATION

■ If you want to see the clock being made, visit my YouTube channel (youtube.com/user/holzmechanik).

You can buy the plans at my website www.holzmechanik.de. They are in English and German, and consist of building instructions, a materials list with reference sources, assembly drawings and part drawings. You can print most parts at full size for ease of cutting. If you want to make the parts with a CNC machine, I can send you the digital .dxf file too.

When the first Basato 5 (now Basa 5.0) bandsaw was introduced it achieved the "Best Machine of the Year" award in Germany. On test in the UK, Good Woodworking magazine stated "So is the Basato 5 the ultimate bandsaw? It's not far off. This is a serious professional machine." With the introduction of the new Basa 4.0 there is now a professional Scheppach Basa bandsaw to suit every serious woodworker. With optional micro fence adjustment to within 1/10th mm, precision cutting is guaranteed if and when required. If economy is the overriding factor in your choice of bandsaw, choose the Basa 3.0v Workshop Series machine with variable cutting speed or Basa 1.0 (not illustrated): A benchtop replica for the small workshop.



Basa 7.0
Professional Series



Basa 5.0
Professional Series



Basa 4.0
Professional Series



Exceptional +/- tilt adjustment



Optional HD X-cut & mitre
off on all Professional Series machines



HD top & bottom tipple
precision roller guides



Basa 3.0v
Workshop Series



Terms &
Conditions apply



Model	Product Group Series	Format Cutting capacity width / height	Table Tilt Range	Horse Power 240v / 415v	Price Exc VAT Plus Carriage	Price Inc VAT Plus Carriage
Basa 1.0 (not illustrated)	Classic	195mm / 100mm	0° to +45°	0.41 / N/A	£157.50	£189.00
Basa 3.0v	Workshop	306mm / 250mm	-8° to +45°	1.0 / 1.0	£432.50	£519.00
Basa 4.0	Professional	375mm / 250mm	-22.5° to +45°	2.04 / 2.04	£1,125.00	£1,350.00
Basa 5.0	Professional	457mm / 305mm	-20° to +47°	3.8 / 4.9	£1,662.50	£1,995.00
Basa 7.0	Professional	600mm / 400mm	-15° to +47°	3.8 / 5.2	£2,850.00	£3,420.00

Basa 1.0 & Basa 3.0 are designed by scheppach in Germany but made in China where scheppach resident engineers oversee manufacturing quality control. All scheppach bandsaws carry the same warranty and have been sold and serviced in the UK by NMA since 1972. Go to nmatools.co.uk and see what users say about NMA's unprecedented service.

The Innovation Continues...



Rip-Cut™ KMA2675

- Simplifies process of ripping down large plywood & MDF sheets
- Allows to direct any circular saw
- Cuts accurately from 1/8" to 26" wide

Kreg Jig® HD KJND

- For use with minimum 1-1/2" materials
- Optimized for large outdoor projects

Shelf Pin Jig KMA3200

- Hardened steel drill guides
- Removable, dual position fence
- Standard 32mm hole spacing



Kreg

Find your nearest stockist
kregtool.eu

GO AHEAD, GLUE ALL POWERFUL BONDING SOLUTION

ELMER'S GLUE-ALL®

Elmer's Glue-All is the perfect choice for all kinds of repairs. Versatile, easy to clean up and non-toxic, Glue-All delivers a solid bond every time.



Find your nearest stockist
elmersglue.eu

Available on the App Store



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 lathe 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



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





BY ANDY STANDING

A perfect fit

Door hanging is an exacting process that shouldn't be rushed, but approached methodically to achieve the best result. There are many types of door hinge available; in this feature we're concentrating on traditional butt hinges

The majority of hinges are made from either steel or brass. Steel is the cheaper material and is normally used for general joinery applications, such as hanging house doors and windows. Traditionally the brass butt hinge is used in high-quality furniture applications. There are good reasons for this. It won't rust and is generally unaffected by temperature or humidity. An extruded brass hinge will be strong and precisely made, with accurately drilled, square-edged leaves and a tight hinge pin. Cheaper hinges tend to be made to a lower specification, with uneven leaves

and loose hinge pins; these can cause problems both during fitting and in use.

But hinges must be recessed into both the frame and the door for appearance and maximum strength. Flush hinges, on the other hand, don't need to be recessed and so are easier to fit. However, they're also considerably weaker than the equivalent butt hinge, and so are generally used only for lightweight applications.

Size and place

It's also important to select the correct hinge size. This is dictated by the thickness



1 Start by marking out the hinge positions on the door. Use a try square to line up with the edge of the rail and mark the position with a scalpel or marking knife



2 Place the hinge on the door against this mark and butt the try square up against it. Remove the hinge and make a second mark to show the precise length of the hinge on the door



3 Take a marking gauge and set it to a fraction short of the full width of the hinge leaf. This means that the hinge knuckle will stand a little proud of the front, ensuring that the door will open through 180° without fouling the frame



4 Use a second marking gauge to set the thickness of the leaf. Don't set it too deep; otherwise the door will bind in the frame. Brass butt hinges usually have tapered leaves, with the thickest point being close to the knuckle. Set your gauge close to this



5 Use the first marking gauge to mark the hinge width on the door edge



6 Switch to the second marking gauge and use this to mark the depth of the recess on the face of the door

USING A ROUTER

Recessing hinges is a job that a router will do extremely well. It is easy to set up and quick to use. If you use the same size of hinges a lot, then you can make up a dedicated jig to speed up the process, though this is not entirely necessary. A router fitted with a side fence and a straight cutter of around 18mm in diameter will be ideal. Start by marking out the hinge position as before.



1 Stand the router on the door edge and plunge the cutter so it is just in contact with the door. Set the side fence so that the edge of the cutter will just reach the marked line at the rear of the recess



2 Without releasing the router plunge mechanism, remove it from the door and set the depth of cut by sandwiching a hinge leaf between the turret and the depth setting rod



3 Using this setting, carefully rout out the recess. Make sure that you don't run over the lines. Square off the rounded corners of the recess with a chisel



4 As there is little support for the router on the door edge, it's all too easy to let it tip and consequently make an inaccurate cut. Make a simple right-angled support out of scrap mdf or plywood and clamp this to the door as shown



5 Here is a simple jig for hinge recessing. To use it the router is fitted with a straight cutter and guidebush, and the size of the aperture is governed by this. Make the top plate wide to give the machine support, and screw a batten underneath so that it can be cramped to the door

of the door. The hinge leaf should be wide enough to sit neatly on the door, leaving a minimum of around 3mm of timber at the back. The fixing holes should be as close to the centre line of the door stile as possible.

Once you have the correct hinge, where should you place it, and how many do you need? For the majority of applications, two hinges are enough. Occasionally, on a very heavy door, a third hinge may be added for extra strength. Traditionally door hinges are placed about 150mm from the top of the door and 228mm up from the bottom. If the door is panelled they can be lined up with the edges of the rails.

Before you begin

To give yourself the best possible chance of success, both the door and frame should be perfectly square and flat. Carefully plane the door edge until it fits into the frame with a small clearance all round. Once the hinges have been fitted and the door has been temporarily hung it will be easier to adjust the gap to suit, but keep it small to start with.

Before fitting your hinges, make sure that they are also flat and square. Dress any rough edges with a file if necessary, and gently run a countersink bit into the screw holes to make sure that the screw heads will sit flush. Brass hinges can be cleaned before fitting with a piece of 320-grit abrasive paper.

Here is a set of instructions for hanging a door using standard butt hinges. In some circumstances makers may choose to angle the hinge more towards the door or the frame, perhaps to blend in with a moulded edge. Here both leaves are equally recessed, which is the normal practice.

13

Open the hinges and offer the door up to the frame. Use a piece of folded abrasive paper as a shim under the bottom of the hanging stile to position it. Mark the hinge positions on the frame face with a marking knife. Remove the door and square off the marks with the try square. Now use your two gauges on the frame and remove the waste as before, with a chisel. Test-fit the door



To make it easier to see the gauge marks, run a sharpened pencil along the marked lines



Start removing the waste by making a series of parallel cuts across the grain with a chisel. Keep them shallow and be careful not to run over any of the marked lines



Pare out the waste with a wide chisel, finally working up to the marked lines. Clean up the recess so its base is level



Place the hinge leaf in the recess to check its fit, and trim away wood if necessary so it fits flush with the wood. Make sure the knuckle is clear of the door edge



Drill pilot holes for the screws. Use a self-centring drill bit as shown, to ensure that the holes are centred in the countersinks



Alternatively, run a countersink bit lightly into each countersink to mark the pilot hole position before drilling it with a twist drill bit. Fit the hinges to the door with just the middle screw



Hang the door with just one central screw in each hinge at this stage. Now is the time to check the gap around the door and to even it up if necessary. Try to keep it as small as possible. When all adjustments have been made, fit the remaining screws to the hinges and close the door



Close the door. The hinge knuckle is just proud of the door face and parallel to its edge. There should be an even clearance gap all round the door

NEW

Olivers *Woodturning*

WOODTURNING TOOLS FOR WOODTURNERS

But we don't just sell tools....

Spend & Save!

Earn Reward Points on your store purchases



Oliver's **Woodturning Forum**

Join our online woodturning community today!



Oliver's **Woodturning Club**



Spend & Save

We offer reward points to support our customers, but more than that we give them away. Check out the site for details.

Forum

Come and join in and make the forum the place you want it to be.

Oliver's Woodturning Club

We have an online club for the support of woodturning and woodturners. Members get Free Reward Points, Special Offers and all the Fun we can Supply.

**Products from Leading Brands Such as
Robert Sorby - Planet - Rotus - Chestnut Products**

You can view the site at www.oliverswoodturning.co.uk

Olivers Woodturning
Unit 5 Bearsted Green Business Centre
Bearsted, Maidstone, Kent, ME14 4DF

Follow us



Telephone: 01622 370280
E-Mail: sales@oliverswoodturning.co.uk
Skype: [olivers_woodturning](#)

Opening Times - Monday to Friday 9am to 5pm. Online 24 hours a day, 365 days a year.



Apto shoe rack

BY HANNAH KNOWLES

In our ongoing search for new takes on old ideas, The Woodworker has great pleasure in presenting this unusual piece of furniture from a new maker; may it inspire us all to explore things further!...

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

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

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

A pipe dream

The initial use of copper plumbing pipe and fittings seemed to happen by accident. I was looking for a simple and quick way to create a curve within the modelling stage of my design. To my amazement, the fittings did the job perfectly and it led me to think of



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



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



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



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



5 The cross bars were glued into their drilled holes in the two long side rails



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

how I could develop furniture by using only off-the-shelf parts. I wanted to use these as it would not only make the flat-pack range cheap, but also easy to make and repair.

Choosing sizes

I started to do a bit of digging into the standard diameters of wood dowel, and also the different sizes and types of pipe fitting that were readily available. I used 15 and 22mm capillary pipe fittings (the slimline type that are soldered on) as you can purchase them from your local DIY store without any hassle.

I opted for ash dowel due its affordability, sustainability and its lightweight properties. I've used 22, 15 and 9.5mm diameter dowel for the project.

Minimising waste

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

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

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

Collecting components

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

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

Precision drilling

Drilling the holes was the next thing to be done on the 22mm dowel. It was important that the holes were exactly 83mm apart, starting from the centre. I started off by holding each length in a vice, finding the centre on each end and drawing a line through it. This would allow me to draw a

straight line along the dowel. Each hole had to be on the same line so it would match up to its other half. After all four lengths were marked, I used a 15mm flat drill bit to create the holes. To ensure that each was the same depth I set the drill stop at 7.5mm. This meant that I could drill all the holes at once and ensure they were the same.

Sanding and sticking

As the dowel came rough from the store and not exactly 15mm in diameter, it had to be sanded. Each piece had to be done individually so I could fit the pipe fitting to the end and the cross bars to the holes. I did this by hand, but wish I'd just used the lathe as it would have saved me a lot of time and would have created an even smoother finish on the piece.

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

Professional help

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

I went for a high polish on all the copper fittings and base, which were then given a coat of clear lacquer; this would help stop the copper from tarnishing over time.

Finishing touches

After adding ash strip wood and copper strips around the various tabletops, the pieces were nearing completion. All that was left to do was to assemble them and wax the wood, using a white wax. I wanted to keep the ash as creamy as possible as it gave a good contrast to the high shine on the copper.

The simplicity of the pieces shows that flat-pack doesn't have to be complicated or expensive. All it needs is good-quality materials, simplicity and affordability.



I then cramped each rack and set it aside for the glue to harden



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



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



John Davis Woodturning Centre

... a working woodturning centre run by Woodturners for Woodturners

not just a shop

We are having a Demonstration Day
Friday 5th December 2014 - 10 am - 4 pm

JET

PROXXON

TORMEK

Flexcut
FLEXIBLE TOOLS

Come and chat to the experts and see the tools in action

Free parking Free Entry Free light refreshments

See the website www.johndaviswoodturning.com for more details



www.johndaviswoodturning.com

Shop Open: Mon - Sat 10am - 5pm, Sun 10am - 2pm

The Old Stables, Chilbolton Down Farm, Stockbridge, Hampshire SO20 6BU

email: admin@johndaviswoodturning.com

Tel: 01264 811070



N-M-O.com Woodworking Machinery



Established in 1978, Neville M. Oldham Woodworking Machinery has a well respected reputation for supplying new, used and reconditioned woodworking machinery. Neville previously worked in sales in the north of England for Multico.

Why buy used woodworking machinery?

Gareth believes there are three reasons:

- 1.** The used equipment we sell, manufactured by Wadkin, Sedgwick and many others, built in the UK, were built to last by the best engineers, using the best materials, and building the highest standards.
- 2.** Due to the build quality of this used machinery and the fine adjustments that can be made over the years, these machines continue to be extremely accurate, easy to work with and, on most occasions, will give a far more professional finish.
- 3.** Used woodworking machinery built in England can be as expensive as new machines manufactured overseas but will still have a value when you come to sell, making them excellent value in the long-term.



Remember - NMO advice is FREE!

NMO has supported the Northern Woodworking Show since the early 1990's and we look forward to meeting you all on Stand No.157, where we will be exhibiting a range of quality used machines.

As in the past, NMO will continue to stock a comprehensive range of used and reconditioned woodworking machinery.

www.n-m-o.com

Gareth Tomlinson joined the company in 1985 after marrying Neville's oldest daughter, Judith.

As a small, family-run business, Gareth's role in the company was both in sales and purchasing and, when necessary, to help the engineers in servicing and re-building machinery.

NMO has always had a strong customer service policy and we have felt that this has been enhanced by our desire, whenever possible, to deliver the machinery purchased directly to the customer. This enables us to ensure that the customer is completely satisfied with the machinery delivered and also that the customer understands the workings of the machines.

For five years in the late 1990s Gareth worked for one of the largest woodworking machinery suppliers in the UK as Sales Manager, and later as Export Sales Manager.

During this time Gareth gained a comprehensive knowledge of all types of woodworking machinery. He travelled the world selling single machines through to full turnkey projects.

Gareth returned to take over NMO in 2003, bringing with him a wealth of experience.

For further information on any machines, please telephone us on: **07709 131249** or email us at: sales@n-m-o.com



BY PETER BISHOP

The chair doctor

If you've got an old favourite chair that's past its best or has been damaged, you've probably wondered whether to scrap it or try to repair it. This series of short pieces will help you to tackle some of the more common repairs

Chairs: I hate them! If I'm asked to make one, the enquirer looks bemused at the price quoted; they simply don't understand how many joints, thus man hours, are involved in making one. And, to pour oil on the fire, I always seem to be inundated with chair repairs whichever way I look. So I thought, how about showing what can be done to bring

back to life something that would otherwise be junked. The result is as follows; a series of short pieces telling you how I've overcome a few of the problems faced and created some solutions. It's quite challenging but, in the end, very satisfying to repair something that might otherwise have been thrown out.



1 The break had clearly been got at before. I started by drilling the hole for the secret bolt



2 Once the bolt was inserted and tightened into its nut, I could plug and fill the various holes



3 Once the glue had dried I cut away the excess, trimmed the plugs and sanded the joint smooth



4 Although the rail has obviously been repaired, the chair will have many more years of life in it

1: A WINDSOR CHAIR BACK

This particular chair was the worst one of several I sorted out for one customer. The break, in the back curve of the top rail, had been got at several times before. The evidence could be partly seen on the outside. Odd bits of filler and some solid pieces had been inserted, and there was probably some shrapnel hidden inside. What hadn't been addressed was that the rail was broken right through and needed stitching back together.

Time for reinforcement

Barrel nuts and bolts are a great solution when trying to pull joints or breaks back together. The round barrel-like nut is inserted into one side of the break, at right angles to a bolt that comes into it from the other side. Once tightened up this will form, along with some glue, a pretty much unbreakable joint. You can buy sets of nuts and special bolts online, or use a barrel nut and a simple bolt as I do.

Siting the bolt

The first job was to decide where this nut-and-bolt arrangement would go through the break. Fortunately I was working on a corner bend, so the bolt could be inserted from the side and the nut, at right angles, in from the back. I'd had to drill out a couple of the old repairs and remove an odd screw or two so I had free access to drill the bolt hole; it just meant a bit more plugging later on!

Expanding adhesive

I find that an expanding foaming adhesive is great for these types of jobs. The one I use mainly is Gorilla Glue, which isn't cheap but is very effective. For this repair, once I had the barrel nut and bolt lined up, I dampened the break surfaces with a fine sprayer and wiped off the excess water. Gorilla Glue works quicker when there is moisture involved; the chemicals in it react to this. You have to make sure that the surfaces are not sodden, just damp.

Having spread a little on the breaks, I then pulled the whole lot up together with the nut and bolt. The glue can expand up to ten times its liquid form so, as it changes structure it forces itself into any nearby cavities and out of the joint, thus filling and binding at the same time.

Plugging the holes

I'd got some plugs cut ready for the various holes I'd made. These were popped in and held in place with some G-cramps, to stop them coming out as the glue expanded in the hole. The repair was then left to work its chemical magic for several hours.

Later on all the excess glue was cleaned off and the plugs cut and sanded back. I now had a good, firm joint where the break had occurred. Some stain, sealer and polish finished the job off.

2: A TURNED KITCHEN CHAIR LEG

I bought an old kitchen carver chair at auction knowing it had a dodgy leg riddled with woodworm. It was fairly cheap because of this, but that didn't put me off. I knew I had some beech in stock and a lathe to turn out a new leg.

Back in the workshop the worm-ridden leg just fell off. The first job was to minimise any further damage by the woodworm. Using a proprietary woodworm killer I gave the whole chair a liberal coating and left it to dry.

Turned and drilled

A length of 50mm square beech was soon mounted between centres on my lathe for the next stage. I quickly turned it to a cylinder the same diameter as the largest section of the old leg. Before turning the blank to its final shape, it's a good idea to drill out the round mortise sockets for the stretcher. Taking an angle off the existing leg and stretcher I used a flat bit to bore this socket.



1 This is the well-worn and worm-ridden leg that needed replacing



2 The first job was to treat the whole chair with a liberal coat of woodworm fluid



3 A beech blank is roughly turned on the lathe and compared to the original

Matching the original

My objective was to turn a replacement leg as close to the original profile as possible. It's fairly easy to do this using a couple of gouges and a skew chisel. It doesn't really matter too much if it's not an exact match because most of these types of legs were turned by bodgers (rustic turners working in the woods) anyway. It's good to get some crisp turning and then, if you wish, knock the sharp edges off to mimic wear.

Trimming to fit

The new leg was soon fixed in place and, because I'd made it a little longer on purpose, I then marked around the bottom and trimmed it off so that the chair sat firmly on all four legs. Some stain, wax and a polish saw the job done. Did I make a profit when I resold it? Yes and no! I more than doubled my money, but this didn't really cover the cost of my time to fix it. Never mind; it was a bit of fun anyway!



4 It's important to get the angle of the stretcher mortise hole right



5 The replacement leg is turned and checked for detail against the original leg

6 The leg is turned slightly over-long to allow for some final trimming so it will stand level



1 This upholstered chair was in a sorry state. Even the sound arm had a loose joint which had been repaired previously... and badly



3 A brace is cramped across the cut area to give it strength at this stage. Note the shrapnel!



5 The second section has also been cut out and replaced. Both are then trimmed back to shape



2 The vertical back rail had also apparently been patched and repaired several times before. I cut half of it away first



4 The first new half block is glued in place in the cut-out and securely cramped



6 Finally the original arm is secured with a secret barrel nut and bolt reinforcement

3: A PARTLY UPHOLSTERED CHAIR

One of our local wedding venues often ends up with damaged or broken furniture after the revellers have left. On these occasions I'm asked to give an opinion on the viability of repair or, if it's too far gone, to recommend its scrapping.

A close examination

This repro mahogany chair still had some life in it, but certainly needed a bit of thought on how to patch it up. The angles and end grain where the back of one arm enters the side rail were broken off. There were a couple more loose joints but these were not going to be much of a challenge to put right.

The break had been got at before; I could see bits of filler and old round dowels poking out. I didn't think that the rail wood was sound enough to simply re-joint the arm to it. After scratching my head for a while I decided the only thing to do was to actually replace a section of this rail with new wood. I'd then have something to work with and could use my favourite barrel nut and bolt arrangement to sort the whole thing out.

A two-part approach

Rather than simply cut a section right out and try to joint a new one in, I went for a two-part approach. Sawing halfway through the rail and then chiselling out the waste was

the first part. As I had weakened the joint I provided extra strength by using a clamped section of wood to support this area. Taking the waste out exposed more old screws and nails – the bane of my life! Eventually I'd created a bridge across the break into which I could secure a new piece of wood. Using Cascamite, a powdered resin glue, I then fixed and cramped the new piece in. This type of glue gives a result that's stronger than wood and also produces a rigid joint; it won't move like PVA does.

The second half

Once this first insert was in place and the glue had cured, I could work from the other side. Another, longer section was chopped out and a further overlapped piece fitted and glued in place. Later I was able to finish these inserts off to profile with a spokeshave.

The tenon on the arm was shot so I cut it off. I then worked out the angles for a bolt to enter the rail, from the back, and go into the arm to join up with the barrel nut set at right angles to it. After a bit of trial and error I got there in the end. More Gorilla Glue was applied to help fill the gaps and the bolt was tightened up. The other loose joints had some glue worked into them and these were then cramped up. A bit of stain, a wax and polish and another job was done.

4: MAKING A NEW SPLAT

This is another of those kitchen carver chair projects. This one needed its splat – the centre section of the chair back – replaced, so I decided to copy a pattern from an old family chair. I suppose you could call it a sort of tyre shape with its cut-outs. I found a piece of elm, took a pattern off the original and cut the blank out ready for the next stage.

Copying the curves

I'd taken the back of the chair apart so I could pick up the curves from some of the existing slats. To shape the new splat I'd need to steam it to correspond to this curved profile. One large chunk of neutral non-staining hardwood was selected, the flowing curves marked and, in a smooth,

continuous bandsaw cut it was chopped through to make the former. These two halves would hold the steamed, pliable splat until it had cooled and set.

A head of steam

Steamers can be tricky. You need to be able to build up a good head of steam and heat inside the chamber but not create a pressure vessel that might explode! Inside the chamber, there needs to be some sort of racking system that allows the steam to circulate entirely round the workpiece.

I'd made my chamber from an old length of large diameter heavy-duty tubing that I nipped off a scrapped lawnmower. A wooden disc was fixed in one end to seal it. A little steam does come out of here, but I chuck some old towels on to help keep it in.

Next to that is a sealed connection that fits onto my wallpaper stripper. At the inlet end I had another disc of wood with a handle and a small hole at the bottom. The hole was to alleviate any pressure build-up and encourage flow from the back end, where the steam goes in, up through and around the chamber to this escape hole.

Around the bend

Once everything was set up, I filled up the stripper with water, attached it and turned it on. I slipped the splat into the chamber onto a couple of strategically placed supports. It didn't take long to build up a head of steam, and it was soon streaming out of the small exhaust hole. I left it alone, resisting the temptation to take a look inside!

I guess it was about 15 or 20 minutes later that I felt I'd done enough. With gloves on to avoid being burnt by the metal handle and scalded by the steam, I whipped the splat out and set it between the two formers. I whacked the whole lot into a vice and got some G-clamps on as well. Another test of patience ensued! I knew I had to leave it until it was entirely cold, so I tried to forget about it overnight.

The right result

Hey presto! The following morning it came out of the formers and was pretty much the exact shape I wanted: what a relief! I cleaned it up and sanded it, then stained it to match the rest of the chair and fixed it in place with all the other loose bits. The result (see page 53) looked pretty smart if I may say so myself!



1 I used a template to prepare the new splat. The original back supports (right) show the curve I needed to copy



2 The flat splat is placed inside my home-made steamer, supported on two blocks



3 A wallpaper stripper produces the steam and a sealed metal tube makes the chamber



4 The hot and pliable splat is fitted between the two former blocks and securely cramped up

5 The cooled and curved splat accurately matches the profile of the original back supports



More chair repairs next month...

mafell

Random orbital sander

EVA 150 E

Superior in every function

NEW

Initial limited availability
See below

3

Year Guarantee
Parts & Consumables

Deutsche
Qualität
seit 1899



Anti-vibration pads achieve 50% less vibration than other leading random orbital sanders. Circa 24,000 perforations in each sanding disc combined with maximum extraction performance enhances life of sanding disc; minimises clogging and ensures a safe working environment. Choice of 3mm or 5mm sanding stroke to suit fine or coarse sanding projects. Adjustable edge protection avoids damage to the workpiece and sanding pad. 350 W motor and up to 12,000 rpm guarantees greater sanding efficiency plus outstanding performance on all types of wood, boards, paints and other coated surfaces. Mafell EVA 150: Sanding efficiency beyond all your expectations.



Adjustable edge protection prevents damage to workpiece and sanding pad.



Abranet® discs with 24,000 perforations set new standards of sanding efficiency.



Powerful self extraction resulting in low dust for a safe working environment.



Model EVA 150 E/5 has 5mm stroke + 12,000 rpm for maximum efficiency when coarse sanding.

Due to excessive demand throughout Europe availability is currently limited. Contact NMA for nearest stockist.

NMA
AGENCIES LTD

www.nmatools.co.uk

Tel: (01484) 400 488 Email: sales@nmauk.com

Birds Royd Lane
Brighouse
West Yorkshire
HD6 1LQ

TOISHI OHISHI

SUPERIOR JAPANESE WATERSTONES

These stones were introduced into the UK market in 2012 and have also become the firm waterstone favourite for Lie Nielsen Toolworks in the USA.

Use for edge preparation, honing and final polishing for chisels to plane blades, knives to cut throat razors.

Available in the following grits:

- 220 - £34.22 • 600 - £34.69 • 1000 - £43.09 • 3000 - £46.69
- 6000 - £59.89 • 8000 - £73.20 • 10,000 - £93.60

Full Set of 7 Single Grit Stones and Nagura Stone - £359.23

Combination Stones available in the following grits:

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

**FREE UK
MAINLAND
SHIPPING ON
ORDERS
OVER £45**

Classie Hand Tools®

Classic Hand Tools Ltd., Unit 8, Hill Farm
Business Park, Wiltshire, Ipswich, Suffolk IP6 9EW



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



www.norfolksawservices.co.uk

Visit us on-line or in-store for a comprehensive selection of woodwork machinery, power tools & consumables from all the top brands



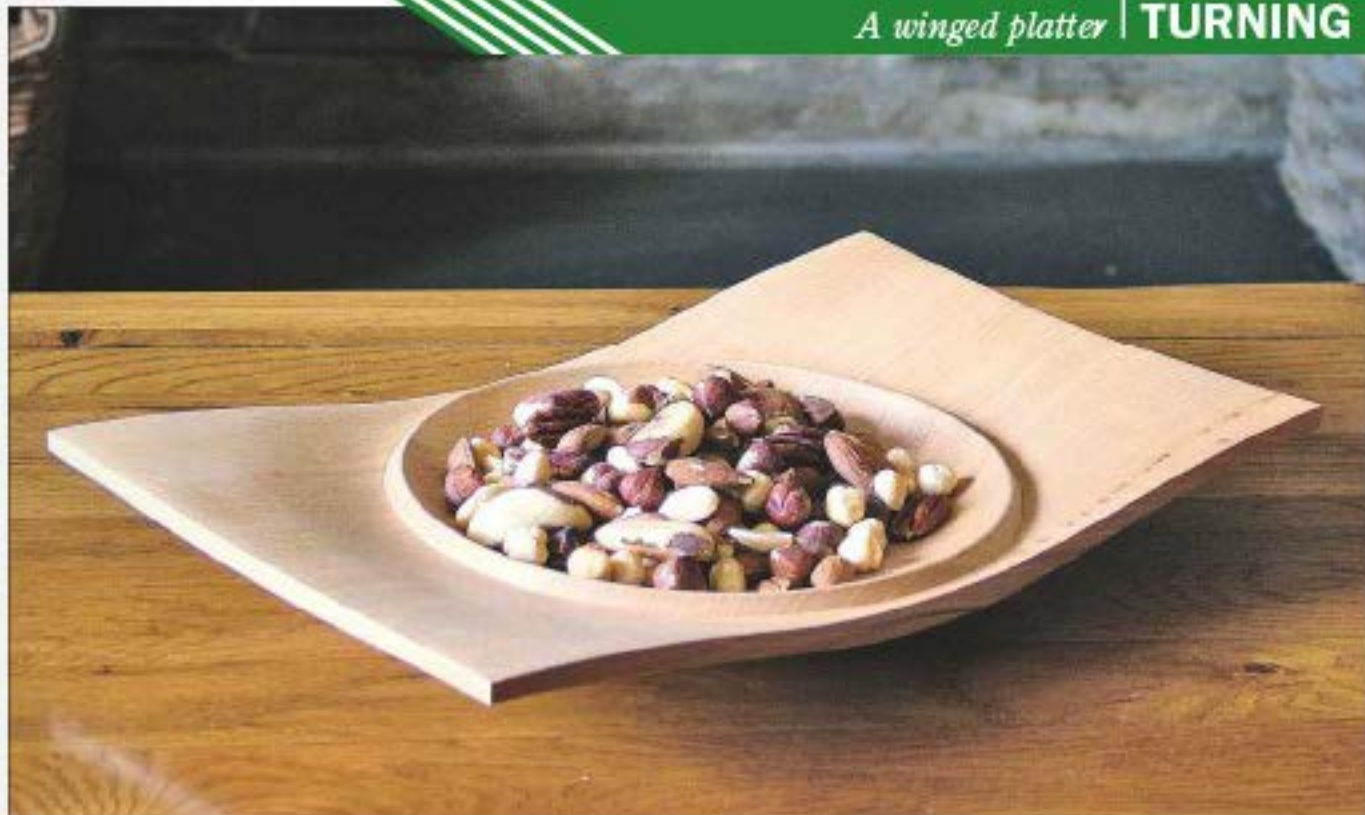
www.facebook.com/norfolksawservices



@Norfolksaw

Norfolk Saw Services, Dog Lane, Horsford, Norwich NR10 3DH

Tel: 01603 898695 E-mail: sales@norfolksawservices.co.uk



BY COLIN SIMPSON

A flatter platter

Say 'platter', and most people imagine a large circular dish. Most are round, but there's no reason why they shouldn't be square or rectangular. Instead. Turning one poses some new challenges, however

I've had a 300 x 200 x 50mm beech offcut in my workshop for a couple of years. I've often looked at it, wondering whether to cut it into a 200mm bowl blank, but always decided that might be wasteful... besides which a big beech bowl could look quite bland. So I finally decided to use it to turn this rectangular platter.

Hit and miss

Many of the tool techniques used here are the same as those for a conventional bowl, but there are some differences. Firstly, as the blank rotates the tools will sometimes be cutting solid wood and then thin air. It's therefore essential not to rub the bevel hard against the wood; a gentle caressing of the bevel is all that's needed.

The other warning I must give is to keep the whole of your leading hand, including your fingers, behind the toolrest. I know that sounds obvious, but some turners like to wrap their fingers over the toolrest when holding the tool, photo 1. Don't do this! If you do, sooner or later you will get a very nasty rap on the fingers as the wood comes round and hits them.

Getting ready

It's a good idea to tidy up the edges of the blank before you start turning. I used my power planer to square it up, photo 2, before marking the centre of the top of the blank and screwing my faceplate to it, photo 3.

Mount the blank on the lathe and position the toolrest across the face. When the piece



1
Avoid this technique of supporting the tool if you want to keep your fingers intact!



2
True up the edges of your blank with a power or hand plane before you start turning



3
Mark the centre of the top of the piece and screw the faceplate on



4
Stick masking tape to the toolrest so you know where the rotating wings will pass it



5
Make an initial pull cut to flatten the blank using a fingermill grind bowl gouge



6
Next, mark and cut the chuck recess and the bowl foot with a parting tool...



7
...and undercut the recess to form a dovetail with a skew chisel held on its side



8
Starting near the wings, use a bowl gouge to start removing the waste wood



9
Work back towards the foot with a series of gentle cuts to create an ogee shape



10
You can see here that the shape is coming, but a little more refinement is needed



11
Use the bottom wing of the gouge to shear-cut the wood and remove any ridges



12
Alternatively, you can use a round nosed scraper, but the finish won't be as good

is rotating, it's sometimes difficult to see its extremities, so I like to mark my toolrest with masking tape where the corners of the rectangle will pass it, photo 4.

Making a start

My first cut is a pull cut made with a fingernail grind bowl gouge, photo 5, and is used to flatten off the bottom of the bowl. Next, I mark and cut a recess for my chuck using a parting tool, photo 6. I also cut a 4mm groove to the left of this recess. This will become a shallow foot for my bowl. Undercut the chucking recess to make the dovetail using a skew chisel on its side, photo 7.

Now you can start shaping the outside. I wanted a smooth ogee curve on the outside of my bowl. Start near the wings and make small cuts with the bowl gouge to remove the waste wood, photo 8. I'm using a bevel-supported cut here and cutting on the tip of the gouge. Keep taking gentle cuts and caress the bevel, working back towards the foot, photo 9.

Changing tools

The observant among you will have noticed that I've switched to a conventional ground bowl gouge at this point. Even with light pressure on the bevel, I was getting too much knocking as the wood came round and struck it twice during each revolution. The conventional grind has a smaller bevel behind the cutting edge, and this reduced the problem.

Stop the lathe frequently to assess your progress, photo 10. Here the shape is coming, but I still want to refine it a little. When you're happy with the outside shape, use the fingernail gouge to shear-cut the surface and remove any ridges, photo 11. Try to move the tool slowly and smoothly across the wood and again, don't push hard into the surface. With practice this shear cut should give you a very good surface. Alternatively, you can use a round-nosed scraper, photo 12 but I don't think this gives such a good finish.

Hand or power

Sand the piece next. I prefer power sanding, photo 13, but there is a danger of rounding over the two leading edges of the wings when doing this. To reduce this danger, try to keep the sanding disc as vertical as possible.

If power sanding isn't for you, hand-sand the solid part of the bowl, photo 14, using one hand to support your other wrist. Don't be tempted to hand-sand the wings with the piece revolving; it will hurt. Instead, stop the lathe and sand it by hand, working with the grain, photo 15.



13 Power-sand the surface with the sanding disc held almost vertical



14 If you prefer, you can hand-sand the solid part of the bowl while it rotates...



15 ...and then switch off the lathe before hand-sanding the wings, working with the grain



16 Use a bowl gouge to shape the wings. Leave the wood in the centre for stability



17 I find that placing some dark card behind the work helps to show up the ghosting



18 This photo shows that the wall near the centre of the platter needs to be much thinner



19 Keep the gouge well over on its side to prevent a dig-in from happening



20 Again use the bottom wing of the fingernail gouge (or a scraper) to shear-cut the wings



21 This photo shows the bowl with the wings finished to a uniform thickness throughout



22 All that's left to do is to hollow out the centre of the bowl in the conventional way



23 Use double-ended callipers to measure the wall thickness at the centre of the bowl



24 Sand the bowl, and don't forget about the edges, but turn the lathe off first!

A cunning plan

Polish the back of the piece; then remove it from the lathe, unscrew the faceplate, turn it round and mount it back on the chuck. Bowls are normally hollowed by starting in the centre and working out towards the rim.

However, I wanted the wings on this piece to be quite thin; if I hollowed in the normal way they would be liable to flex as I cut them. To avoid this, keep the centre of the bowl solid; this mass will help to support the wings as you shape them. Cunning, eh?

Creating the wings

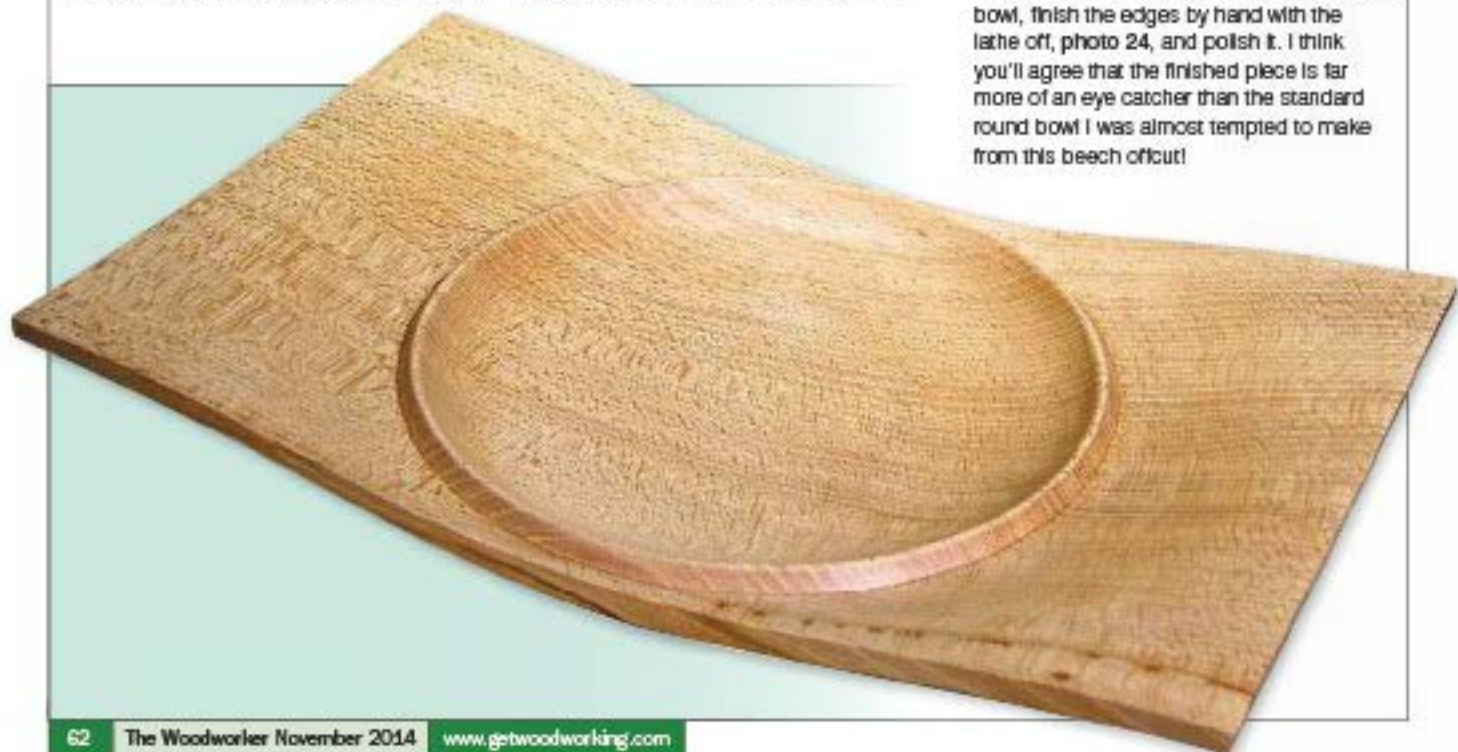
Start at the tip of the wings and make gentle cuts towards the middle, photo 16. Photo 17 shows the same cut but from a different angle. It also shows a dark piece of cardboard that I've put on the lathe bed to help me see the wings as they rotate. As with the back of the bowl, keep stopping the lathe to monitor your progress. Try to achieve an even wall thickness or a slight tapering of the walls towards the wings. Photo 18 shows that the wall becomes much thicker nearer the centre, so more wood needs to come off here.

As you cut down the wings towards the centre, you need to be careful not to let the gouge hit the wall of wood you have left for stability. Keep the gouge well over on its side to prevent this from happening, photo 19. You can see here that the bottom wing of the gouge is away from the wall of wood, but if the tool hadn't been on its side that wing would have dug in.

Final hollowing

Shear-cut the wings using the fingernail bowl gouge, photo 20, or use a scraper if you prefer. Photo 21 shows the completed wings, and all that's left to do is to hollow out the centre of the bowl in the conventional way, photo 22. Use double-ended callipers to check the wall thickness. Here, photo 23, I'm using one leg of the callipers between the chuck jaws so I can get into the chucking recess and get a more accurate reading.

When the hollowing is complete, sand the bowl, finish the edges by hand with the lathe off, photo 24, and polish it. I think you'll agree that the finished piece is far more of an eye catcher than the standard round bowl I was almost tempted to make from this beech offcut!



Christmas Shopping – Sorted!

There's no denying it – Christmas is sneaking up on us once again! Why not get organised early this year and treat your loved one 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!

£19.99*
for any of these titles...

*UK ONLY OFFER

Congratulations!
You have been given a gift magazine subscription



- * CHOOSE FROM A RANGE OF HOBBY MAGAZINES
- * GREAT SAVINGS
- * FREE GREETINGS CARD



SUBSCRIBE SECURELY ONLINE: mymagazineoffers.co.uk/X293

CALL: 0844 543 8200 and Quote X293

BY POST: Please complete the form below and post it to the address provided. Quote Ref: X293

YOUR DETAILS (This section must be completed)

Mr/Mrs/Miss/Ms Name

Surname

Address

Postcode Country

Tel/Mob

Email

D.O.B.

(Complete if the subscription is for yourself)

Magazine Price

GIFT RECIPIENT (Complete if not for yourself)

Mr/Mrs/Miss/Ms Name

Surname

Address

Postcode Country

Tel/Mob

Email

D.O.B.

(Complete if gift recipient is under 16)

Magazine Price

PAYMENT DETAILS

Please make cheques payable to MyTimeMedia Ltd and write code X293 and magazine title on the back.

Postal Order/Cheque Visa/Mastercard Maestro

Card no: (Maestro)

Cardholder's name:

Valid from Expiry date Maestro issue no.

Signature Date

SEND TO: MYTIMEMEDIA SUBSCRIPTIONS, Tower House, Sovereign Park, Market Harborough, Leics LE16 9EF

TERMS & CONDITIONS: Offer ends 31st December 2014. UK offer only. Gift subscriptions will begin with the February 2015 issue and personal subscriptions with the next available issue when order is placed. 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.

A free greetings card will be supplied with all gift subscriptions;

Please note that this will be sent to the payer's address, separate to the order confirmation. Although we will strive to supply this card prior to December 25th 2014 we cannot guarantee this for any orders placed after December 8th 2014.

For the perfect finish – **every time.**

The new ETS EC 150



You'll never work alone.

SERVICE
all-inclusive



Designed to meet the demands of a modern working environment.

The ETS EC 150 is perfectly balanced to tackle all fine sanding applications. Combined with perfect ergonomics the ETS EC 150 performs effortlessly. For performance at the highest level the unique vibration control system maintains the smooth performance but when required the sanding pad brake brings the ETS EC 150 to a halt quickly and effortlessly.

The brushless EC-TEC motor ensures reliable working. To experience the difference visit your dealer or www.festool.co.uk

FESTOOL

Tools for the toughest demands

www.festool.co.uk



BY IAN WILKIE

Turned to a T

Here's a little turning project that will take no more than a few hours to execute and will use up a few of your offcuts. It will also make a lovely present for any toddlers in your family

My sister-in-law had difficulty in finding a small tea set for her toddler granddaughter. The plastic versions were not to her liking, and the child was too young for a china set which would soon get broken. I've made lots of toy wooden mugs, teapots, saucepans and casseroles over the years, so this was a good excuse to update my designs and make some more!

The toy is aimed at three- to four-year-

olds who love to have pretend tea parties for their dolls and teddies. You don't need any expensive equipment to make it, and everything shown in this project can be turned on a small lathe such as the Jet Midi.

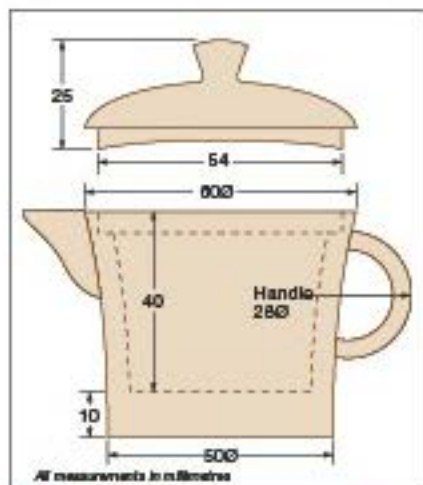
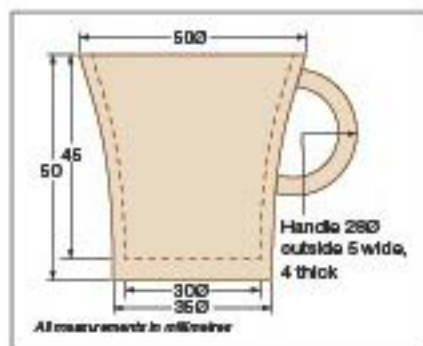
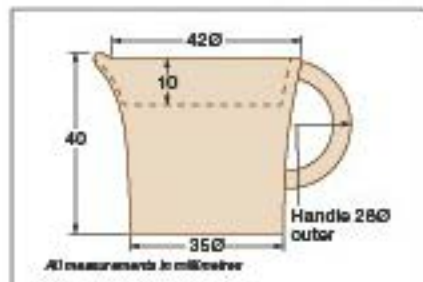
With these more unusual woodturning projects, I hope to foster an interest in what can be produced on a lathe in an imaginative and fun way. Even quite young children can be involved in the choice of colour and decoration.

DESIGN TIPS

■ Anything designed for a young child should be robust, and wooden items need to be smooth and splinter-free. I don't use any screws or nails, but rely on glue and wooden dowels. Any paints used should be labelled as safe to use for toys.

■ I've chosen to turn mugs rather than cups because they're more familiar to today's children. However, it's a simple matter to reduce the height slightly to make a cup, and to turn a saucer as a smaller version of the plate if this is preferred.

■ All the handles need to be strong. They could be solid, but I think that looks clumsy and I decided to turn rings for them. They're cut in half and secured with bamboo dowels and Gorilla superglue. I've tried to break this joint without success, so I'm confident that it will survive quite rough play!



TOOLS AND MATERIALS

I've used Robert Sorby's modular turning tools throughout this project, photo A. Photo B shows the carousel I made a while ago (see the December 2012 Issue of *The Woodworker*) to hold a selection of blades with the handle stored on top; it's proved to be very useful. The blades slope inwards so there's no risk of them falling out, and the clear acrylic disc protects the fingers from the sharp tips of the tools.

I also used the new Record 2000 chuck which I tested in the August 2014 Issue. It continues to perform very well, both in expansion and contraction, and it particularly suits these small projects. It's useful to make a small gauge to ensure accurate spigot sizes for a particular set of chuck jaws, photo C, and to store it with the chuck to save time in the future; the gauge shown here is for the standard jaws.

Choosing wood

It's best to select light-coloured woods such as sycamore or lime which are fault-free, close-grained and will sand to a smooth finish. I can't resist these £5 bags of offcuts (plus one bag free in the case of the lime) from Ockenden Timber, photo D, which are very suitable for these small projects.

You will need to prepare blanks as follows:

- mugs, sugar bowl and jug 50 x 50 x 70mm
- teapot body 70 x 70 x 70mm
- teapot lid 70 x 70 x 45mm
- plate 100 x 100 x 20mm

These sizes are only a guide and you may wish to make them bigger. However, I don't recommend that you go any smaller.

MAKING THE MUG, SUGAR BOWL & JUG

All these items are drilled out and turned in a similar way to start with. Beginning with a mug, turn a blank to a cylinder between centres and form a spigot at one end to suit the chuck jaws you intend to use. Mount the blank in the chuck jaws, tighten up and face off. The paper red dot on the chuck jaws and blank ensures rechucking will be accurate, photo 1.

With a 25mm saw-tooth Forstner bit fitted in the tailstock, photo 2, drill the blank to a depth of 40mm to remove most of the wood from the inside of the mug. Remember to reduce the lathe speed for this operation or the wood will overheat and burn.

Shaping the mug

Shape the outside of the mugs with a gouge, photo 3, aiming for a top diameter of 50mm tapering down to 35mm diameter at the base. You're looking for a wall thickness of about 5mm.

Remove more wood from the inside if necessary and widen out the rim using a beading tool, photo 4 – but don't make the edge sharp. Sand the work very thoroughly to a smooth finish. Remember to hold the abrasive under the revolving wood and keep it moving to avoid sanding marks and burning.

Partially part off to give a 50mm tall mug and then cut the final wood through with a fine-toothed saw, photo 5. The lathe must be stationary while you do this! If you're turning a set of mugs, make sure they match in size before parting each one off, photo 6. Finally, sand the bottom so that the mug stands absolutely flat, photo 7.

Making the sugar bowl

This needs to be shallower than the mug. The edge can be scalloped with a file or a small drum sander for added decoration. Don't drill the hole too deep; then the basin will appear full of sugar when it's decorated.

Making the jug

Drill the jug blank to a depth of just 10mm, leaving sufficient wood to be painted later to simulate milk. Shape the outside as before. Then turn a band 8mm wide and 4mm thick around the rim. Part off the work to give an overall height of 40mm. Take the blank off the lathe, mark out the position of the pouring lip and cut away the surplus wood around it; this can be done on a powered fretsaw, as shown in photo 8.

Photo 9 shows the band cut away, leaving just the pouring lip. The next stage is to sand away the cut edges until they are smooth. Use a small file or sanding drum to shape the lip.



1 Mount the mug blank in the chuck jaws, tighten them up and face it off



2 Drill the blank to a depth of 40mm with a 25mm saw-tooth Forstner bit



3 Shape the outside of the mug, tapering down to 35mm diameter at the base



4 Widen out the rim using a beading tool, but don't make the edge sharp



5 Partially part off the mug and finish the cut with a fine-toothed saw



6 If you're turning a set of mugs, make sure they all match in size



7 Finally sand the bottom so that the mug stands absolutely flat



9 ...to leave just the pouring lip. Shape it and sand all the cut edges smooth



8 Mark the position of the pouring lip on the jug and cut away the surplus wood...

MAKING THE TEAPOT

The teapot is hollowed out to produce an interior 48mm in diameter and 40mm deep. Turn the outside first to give a flared shape 60mm in diameter at the top and 50mm at the base. Then hollow out the interior and form a rebate 54mm in diameter and 5mm deep on the inside of the rim to take the teapot lid, photo 1. Part it off.

Next, mount a blank for the lid. Drill a suitable hole first for the chuck jaws in expansion. Then turn a spigot on the underside of the lid which will fit comfortably into the top of the teapot, photo 2. Make sure the spigot is deep enough to engage securely in the teapot recess, photo 3; check that it isn't too tight.

Push the teapot fully home onto the lid spigot and draw round the circumference of the pot, photo 4. Then turn the outside of the lid down to the pencil line so it matches the outer diameter of the pot, photo 5.

Now reverse the lid so it's held in the chuck jaws and turn the top into a dome shape and an integral knob, photo 6. Then part off the lid and cut through the remaining wood with a fine saw. This completes the turning for the teapot, photo 7.

Fashion a spout with a pouring channel from a small block of wood and fit it at the top edge of the pot. Superglue this in position and insert a thin bamboo dowel at the base for extra strength. Carefully file the upper surface of the teapot to match the spout, photo 8.



1 Hollow out the interior and form a shallow rebate to take the teapot lid



2 Turn a spigot on the underside of the lid blank to fit into the top of the pot



3 The spigot must be deep enough to fit securely in the teapot recess



4 Push the pot onto the lid spigot and draw a line round the pot circumference



5 Turn the outside of the lid down to the line to match the pot diameter



6 Reverse the lid and turn the top into a dome shape with a knob



7 Part off the finished lid and check its fit within the teapot recess



8 Shape a spout from scrap wood and glue it to the edge of the pot

FINISHING TOUCHES

To make the handles for the mugs, jug and teapot, turn a cylinder 28mm in diameter, and drill a 24mm hole through the centre, photo 1. Mark off a series of rings 4mm wide on the cylinder, photo 2. Shape a ring using a beading tool. Then part it off, photo 3, and repeat the process to create as many rings as you need.

Now cut a ring in half and drill a hole in each end to take a short bamboo dowel. Drill matching holes in the side of the mug, insert the dowels and attach the handle with superglue, photo 4.

To make the plates, face off a 100mm diameter blank and turn a recess for the chuck jaws. Reverse the partially turned plate, tighten up the jaws and turn to shape with a slightly raised edge.

Give all the finished pieces a final sanding and decorate them as you wish with child-safe paints. Add some decorative transfers too if you wish, as shown in the photograph on page 65.

Finally, to make the tea party even more fun, you could make some wooden cakes and biscuits and a stand to display them on. To find out how they're made, see pages 55-58 in the February 2013 issue of *The Woodworker*.

1 To make the handles, turn a cylinder and drill out its centre



2 Mark off a series of rings 4mm wide along the cylinder



3 Shape a ring using a beading tool and part it off. Repeat as necessary.



4 Cut each ring in half to form a handle. Then drill small holes for the bamboo dowels and glue the handle on





HELPING YOU GET THE JOB DONE

NEW

**315mm Table Saw
2712**
Blade diameter: 315mm
Bore diameter: 30mm
Weight: 52.9kg

Cutting angle	Depth
90°	85mm
45°	58mm
Angle settings	0-45°



Carrying handle

Soft grip handle

LED job light



Sliding sub fence

NEW

**216mm Slide
Compound Mitre Saw
LS0815FL**
Blade diameter: 216mm
Bore diameter: 30mm
Weight: 14.2kg

Mitre Angle	Bevel Angle		
	0°	45° (left)	5° (right)
0°	85x305mm	50x305mm	60x305mm
45° (left)	85x215mm	50x215mm	
60° (right)	85x150mm		



Woodworking range
Scan the QR code or visit
www.makitauk.com



Visit www.makitauk.com
to register for your Makita
3 Year Warranty.
Terms and conditions apply.



Follow Makita UK

Woodworker SUBSCRIPTION ORDER FORM

DIRECT DEBIT SUBSCRIPTIONS (UK ONLY)

Yes, I would like to subscribe to *The Woodworker*

- ☐ Print + Digital: £10.50 every 3 months (SAVE 34% on shop price + SAVE 75% on Digital Download + FREE GIFT)
☐ Print Subscription: £8.50 every 3 months (SAVE 34% on shop price + FREE GIFT)

YOUR DETAILS MUST BE COMPLETED

Mr/Ms/Miss/Ms Initial Surname
 Address
 Postcode Country
 Tel Mobile
 Email D.O.B.

I WOULD LIKE TO SEND A GIFT TO:

Mr/Ms/Miss/Ms Initial Surname
 Address
 Postcode Country
 Account holder

INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY

Originator's reference 422552 
 Name of bank
 Address of bank
 Postcode
 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 assumed 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.

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 + Digital: £47.50 (SAVE 23% on shop price + SAVE 75% on Digital Download + FREE GIFT)
☐ Print: £39.50 (SAVE 23% on shop price + FREE GIFT)

EUROPE & ROW:

- ☐ EU Print + Digital: £67.00
☐ EU Print: £59.00
☐ ROW Print + Digital: £67.00
☐ ROW Print: £59.00

PAYMENT DETAILS

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro
 Please make cheques payable to MyTimeMedia Ltd and write code X280 on the back.
 Cardholder's name
 Card no: (Maestro)
 Valid from Expiry date Maestro issue no.
 Signature Date

TERMS & CONDITIONS: Offer ends 14th November 2014. 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: Q1Email Q2Post Q3Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: Q1Post Q2Phone. If you wish to be contacted by email by carefully chosen 3rd parties, please tick here: Q1Email

POST THIS FORM TO: THE WOODWORKER SUBSCRIPTIONS, TOWER HOUSE, SOVEREIGN PARK, MARKET HARBOUR, LEICS LE16 9EF.

**HURRY
OFFER
CLOSES
14TH NOVEMBER
2014**



PRINT + DIGITAL SUBSCRIPTION

Free Bosch 34 Piece X-Line Accessory Set*

13 Issues **delivered to your door**

Save up to **34% off the shop price**

Download each new issue to your device

A **75% discount** on your Digital subscription

Access your subscription on **multiple devices**

Access to the **Online Archive** dating back to January 2007

Exclusive discount on all orders at myhobbystore.co.uk



PRINT SUBSCRIPTION

Free Bosch 34 Piece X-Line Accessory Set*

13 Issues **delivered to your door**

Save up to **34% off the shop price**

Exclusive discount on all orders at myhobbystore.co.uk

SUBSCRIBE TODAY

CHRISTMAS OFFER

DIGITAL
SUBSCRIPTIONS
AVAILABLE ONLINE!

Receive a **FREE** **Bosch 34 Piece X-Line Accessory Set***

WORTH £15.00

when you subscribe today

**"A great addition
to your tool collection!"**



**SAVE
34%** ON THE
SHOP PRICE &
75% ON DIGITAL**

34-piece X-Line classic drill and screwdriver bit set:

This premium Bosch quality X-Line set contains all that you will need for drilling and screw driving and fits all power tools and brands.

Box contains:

- 5 x wood drill bits 4-8 mm
- 5 x HSS metal drill bits 2-5 mm
- 5 x masonry drill bits 5-8 mm
- 3 x socket wrenches 7/8/10 mm
- 1 x adapter for socket wrench
- 1 x magnetic universal holder
- 1 x countersink bit
- 13 screwdriver bits

TERMS & CONDITIONS: Offer ends 14th November 2014. *Gift for UK subscribers only, while stocks last.
**When you subscribe by Direct Debit. Please see www.getwoodworking.com/terms for full terms & conditions.

SUBSCRIBE SECURELY ONLINE

 www.subscription.co.uk/twwl/X260

CALL OUR ORDER LINE

Quote ref: X260

 0844 543 8200

Lines open weekdays 8am - 5.30pm & Saturday 8am - 4pm

(BT landline calls to 0844 numbers will cost no more than 1p per minute. Calls from mobiles usually cost more.)

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 PRODUCTS

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:

PO Box 536
Ipswich IP4 5WN

Tel: 01473 425678 Fax: 0800 066 4442

www.chestnutproducts.co.uk

mailroom@chestnutproducts.co.uk

Stockist enquiries welcome



INCHMARTINE Tool Bazaar

Visit our successful website for constantly changing tools for sale

www.toolbazaar.co.uk

We also still produce a mail order list.
Contact us for a copy.

**The leading suppliers of
antique and quality old
woodworking tools for
both Craftsmen and
collectors in the country!**

Rait Antique Centre, Rait, Perthshire, PH2 7RT

Tel: **01821 670770** • Mob: **07734 345652**

E-mail: toolbazaar@googlemail.com

Lathes

Chucks

Tools

Hardware

Abrasives

Polishes

**Trend
Respirators**

**Wood
blanks**

**Pyrography
machines**



Patriot Chucks
SuperNova Chucks
Record G3 Chucks
Multistar chucks
and accessories

**CUBIC BORON NITRIDE
Grinding Wheels**

Amazing edge on your tools
Better than diamond wheels
Cuts fast and cool
Does not wear down in size
Grinds on face and edge
No mess, long life

150mm x 40mm
machined to fit your
grinder **£162.75**

inc. mainland p&p
Other sizes in stock

Microcrystalline grinding
wheels also in stock



Hundreds of wood blanks
on display and priced



Shop is open
Tuesday to
Friday
9 to 4
Saturdays
9 to 12



We have manufactured fine pyrography tools for over 40 years.
Outfits starting at **£109.95**

Order online www.peterchild.co.uk
or telephone 01787 237291

PETER CHILD

WOODTURNING SUPPLIES

The Old Hyde, Little Yeldham, Nr Halstead, Essex CO9 4QT

Tel 01787 237291 Fax 01787 238522 www.peterchild.co.uk

Wood River is fast becoming a rival to the established premium brands in the UK. These American chisels look like filling the gap between mainstream and high-end tools very well

Wood River 6-piece chisel set

A set of plastic-handled chisels will always have a place in any tool kit, especially when out and about. However, a decent set of wooden-handled ones are always a pleasure to use when you're at the bench. Wood River has backed up its plane-making expertise with a decent set at an equally decent price;

this set of six works out at around £11.60 each, and that's without accounting for the smart wooden case they come in.

At first glance

These certainly look to be polished performers, with a well-finished blade free from machine marks and with a subtle satin sheen that slightly dubs the bevels for a soft feel, matched with a tapered ferrule on the neck of the bubinga handle. Scoops in the handles give them a good feel in the hand and remove any sign of chunkiness, so they're comfortable for paring or knocking with a mallet.

Top steel

With a blade composition of chrome vanadium steel hardened to Rockwell Rc59-63, these chisels take a keen edge as well as feeling hard on the stone. The durability of the edge is decent as well, while the chrome content will help to keep them free of rust. They aren't as hard as the A2 steels that

were so popular a while back; these slightly softer high carbon steels are quicker to hone and to retouch in a few seconds when you need to get back to work quickly.

Testing the tool

Using the 25mm as the test tool, the back needed a bit of work to get it flat enough to turn a wire edge. It showed a marginal hollow along the length that needed to be honed back to get the edge fully flat all the way across. Using a diamond stone it took just a few minutes to get it flat enough to form a full wire edge and hone it off. A further sweetening-up on a block of maple charged with Veritas green honing soap then gave a very keen edge.

Using maple as the test timber, a bit of end-grain paring to test the edge left a creamy polished finish as well as forming a full, crisp shaving. Striking the handle with a mallet is recommended for wooden-handled chisels, and the fine lands on these blades will serve well on joint fitting, so cutting and cleaning out dovetail waste is certainly an area where they will find their niche. **AK**

£69.95



SPECIFICATION

CHISEL SIZES	¼, ½, ¾, 1, 1½, 2 and 1in
HANDLES	bubinga
BLADES	CRV (chrome vanadium) steel
HARDNESS	Rockwell Rc59-63

VERDICT

These are good-looking tools that perform well and come at a budget price.

- PROS**
- Excellent quality
 - Fine lands (blade edges)
 - Good edge retention
 - Sturdy storage box

- CONS**
- Backs need a little work

VALUE FOR MONEY

PERFORMANCE

FURTHER INFORMATION

- Wood Workers Workshop
- 01684 594683
- www.woodworkersworkshop.co.uk



The lands (the blade edges) taper finely - ideal for cleaning into tight corners



Paring waste from housings is an area where these chisels work well



The handle is big enough to be struck either with the palm or a mallet



You can get very keen edges, which are essential for end-grain paring

If you want a general-purpose sprayer that's capable of applying a wide range of finishes from one unit, this looks an ideal option

Bosch PFS 3000-2 spraying system

Bosch describe this as their 'ALLpaint' system, capable of applying thinner finishes such as lacquers and wood stains as well both solvent- and water-based paints. It's aimed at the DIY end of the spectrum, but don't be fooled into thinking that Bosch have cut corners to achieve this; it's built to high standards, and is very easy to get to grips with, using the usual Bosch tool-free set-up.

This includes the hose that connects with a twist-lock bayonet fitting to both the air supply unit and the spray gun, as well as the finish container that locks in a similar fashion, so setting up, refilling and breaking down after the job is done is very quick and user-friendly.

How it works

The unit operates as an HMLP (high-volume low-pressure) sprayer. This allows the finish to be applied with less bounce-back and keeps overspray down, so you use less material to get the finish you need.

Of course, you have to set the gun up correctly for the type of finish you're spraying, and while it doesn't have the adjustments found on professional setups, it still has the basics to alter the settings. All these user-operable controls are picked out in red so you can easily determine what parts are relevant to the tool operation.

Simple controls

On the gun itself a large rotating dial alters the airflow through the nozzle, with five stage indicators – 1 to 3 for 'wood' applications;

(lacquers, varnishes and stains), and 3 to 5 for 'wall' applications (thicker paint finishes and the like). In fact there are 16 clickable positions in all on the dial, so you can fine-tune the air supply through the nozzle quite precisely.



The airflow can be altered by rotating the twist ring on the gun



The kit comes with interchangeable seals for the paint container



The air horn fits over the nozzle and is retained with a collar



Thinner fluids like this wood preserver go straight into the container



Thicker finishes have to be filtered first through the supplied sieve

On the air supply unit there's a slider that corresponds with the 'wood' and 'wall' gun settings, so you can easily marry up the air unit to the gun once you've selected the finish you want to apply.

The gun also has a rotating front horn for horizontal, vertical and spot-pattern sprays, clicking into each position as you rotate it.

Using the unit

We sprayed some Cuprinol wood preserver first, and even on its lowest air setting it fired it on very quickly. Once it was dry we then oversprayed the treated timber with a Cuprinol Garden Shades finish. Coverage was excellent, giving a solid coat of colour, and once we had adjusted the airflow on the gun it produced a smooth finish without runs.

The gun is capable of coating up to two square metres per minute, so coverage is very quick indeed if you need it to be, but the trigger also allows additional control to apply mist coats – useful for feathering in close to another surface.

The shoulder strap on the air unit is brilliant for spraying larger areas, as it allows you to work at arm's length without the hose catching or stretching. On the downside, the power cable is pretty short so you're likely to need an extension cable in most instances. **AK**

SPECIFICATION

MOTOR	650W
CAPACITY	1 litre
DELIVERY	300ml/min
APPLICATION RATE	2sq m/min
HOSE LENGTH	2m
WEIGHT	3.7kg
ACCESSORIES	2 nozzles, paint filter, cleaning brush, carrying strap

VERDICT

This is a cracking little unit for general-purpose spraying around the home and garden.

PROS

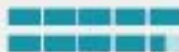
- All-in-one system for most finishes
- Easy to set up
- Fast to clean

CONS

- Not a gun for high-end work
- Short power cable

VALUE FOR MONEY

PERFORMANCE



FURTHER INFORMATION

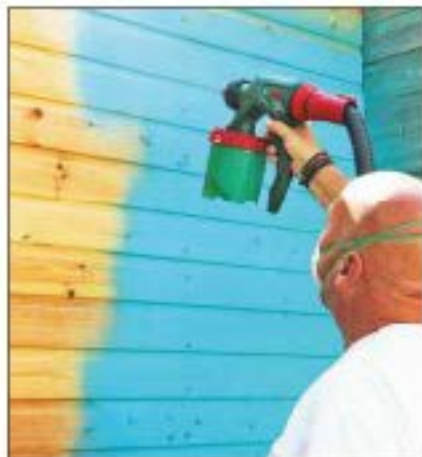
- Bosch
- 01895 838743
- www.boschpowertools.co.uk



The horn rotates for vertical, spot and horizontal spray patterns



A simple slider sets the air power low rate through the gun



Coverage with a paint finish is quick and the coverage is excellent

This new saw is the successor to the original Makita LS0714 model, which featured a 190mm diameter blade. The new model has a larger blade, but does it do better in other departments apart from just cutting wood?

Makita LS0815FL mitre saw

£330



The original Makita LS0714 mitre saw suffered from limited depth of cut due to its 190mm diameter blade, so an upgrade to a 216mm diameter blade sounds very beneficial. Sadly though, while this saw cuts faultlessly, its design is a stride in the wrong direction. For a start, it's made in China and looks a little rough around the edges. For a trade-rated machine it would have been better to look at the original LS0714 and build from that, opting for quality first.

Two steps back

There are two main areas where Makita has taken its eye off the ball with this redesigned model. Firstly, the 'bar over bar' system to keep the saw compact and gain a smaller footprint has been ditched in favour of a pair of full-length bars that increase the back

projection, requiring about 700mm of bench depth to allow the saw its full travel.

The bearings are good though; the saw head runs freely and without slop, so the resulting cuts made during testing proved accurate in all three modes – 90° cuts, mitres and compound work. The increase in blade diameter also allows the saw to cut common 50mm thick carcassing timbers on a 45° tilt, so it becomes a saw capable of first- and second-fix work on site.

A disappointing laser

Other Makita tools have an excellent laser that fires across the face and down the front edge of the work and is also very easy to adjust to either side of the kerf line. Not here, though: this one is tucked at



You need about 700mm of space to allow the full-length bars to run their arc



This large wingnut handle is easy to operate for setting bevel cuts



The saw tilts to the left and the fence slides away to accommodate it



The ability to chop 50mm stock when tilted at 45° is a big plus point

the back of the blade and, although it's adjustable, it's awkward to get at. On the test model it was in need of adjusting too, as the blade struck a couple of millimetres away from the laser line when the head descended.

What's more, this laser fires only across the face of the work. Makita is failing to realise just how good the original laser was, as you could pick up a mark on the front edge – exceptionally useful on mitre work, and a feature which this one won't achieve. This is a single-tilt machine, which is where the original laser design proved invaluable for picking up marks on the opposing face.

The laser is switchable, but most people tend to keep a laser on if it's accurate. Alongside is a further switch for the useful work light. However, the area around the switch box for both functions did seem to get a little hot if they were in use.

Now for the good news...

There are positives, though. The saw has the same simple but effective flipstop trenching function for fast switching between full plunge cuts and trench cuts. Alongside this there's a good range of mitre angles, 50° to the left and 60° to the right, indented at the usual common angles.

For compound cuts you have to slide the fence away to gain room for the saw to swing through. There's an over-ride function on the compound tilt that gains an extra couple of degrees. You can go to 47° or alternatively you can tilt the head slightly to the right for a -2° undercut – useful for achieving very crisp butts on top edges.

Lastly, there's a soft-start motor so you don't get a crashing, jerking start-up.

Summing up

Although the ability of this saw to cut cleanly and accurately can't be disputed, the two design changes – the double bar and the different laser set-up – have altered our view of Makita as the manufacturer of the best small mitre saw on the market.

It would have made sense just to upgrade the old model to a bigger blade rather than going back to the drawing board and coming up with what is sadly an inferior machine. **AK**

SPECIFICATION

MOTOR	1400W
BLADE DIAMETER	216mm
NO-LOAD SPEED	5000rpm
MAX MITRE RANGE	50° left to 60° right
MAX BEVEL RANGE	47° left to -2° right
MAX CUTTING CAPACITY	at 90° 305 x 65mm
	at 45° x 90° 215 x 65mm
	at 45° x 45° 215 x 50mm
WEIGHT	14kg

VERDICT

This saw can't be faulted for its cutting performance, but the design is a step in the wrong direction.

PROS

- Good capacities
- Accurate cuts
- Soft-start motor

CONS

- Laser not aligned to the blade
- Long bars need additional work surface
- Looks a little rough in some areas

VALUE FOR MONEY

PERFORMANCE

FURTHER INFORMATION

- Makita
- 01908 211678
- www.makita.co.uk

Checking the cut on wider stock off the saw shows its accuracy



Mitre angles are set and locked with the large front handle



When the head descends you can see how far the laser is out of line



A couple of hooks for the storing the power cable on-board is a neat touch

One of the great advantages of a mortising machine such as this is that it will make repeat cuts with unfailing accuracy, and it also does so with considerable speed

Axminster AW16BMST2 bench mortiser

The column, base, and table assembly on this mortiser are all of cast iron, which provides the total rigidity required even in a smallish machine. The base can be bolted down if required. The table holds the adjustable work cramp, which can also be set at an angle so tapered components can be gripped.

Smooth operation

The movement of the head and the dual movements of the table all operate in dovetailed ways, and these can be adjusted for any possible slack that might develop over a period of long usage.

The forwards/backwards movement of the table is controlled by a good-sized knob, while the lateral movement is governed by the handwheel at the front. This wheel projects below the underside surface of the base, this means that when the machine is mounted on a bench, packing must be introduced to raise it sufficiently for the fingers to operate the wheel freely. Alternatively, it must be positioned so that the wheel overhangs the front of the bench. Once the forward/backward position of the table has been established, it is secured in place with a small locking lever.

Stop and go

The lateral movement of the table can be limited by the stops at either side. These are useful for repetition work, and allow for a maximum mortise length of 170mm. The length of the table is a little on the small side at 180mm – adequate for short material as used by the furniture maker, but not for joinery work when work supports are really needed. The optional riser block kit might also be considered for larger work; this raises the column by 50mm and thus gives a greater height capacity.

The depth of the mortise can be controlled by the stops on the right-hand side of the column. This is essential when forming a



This knob controls the fore-and-aft movement of the table



The adjustable work cramp can be set for tapered workpieces



The depth of cut is controlled by stops on the side of the column



This mortiser can also be used as a pillar drill with an adapter fitted

stopped cut in thinish wood, and when cutting haunches. This facility can be brought in and out of use in an instant.

Using the mortiser

We used the three sizes of chisels in the TIN set Axminster supplied (it's priced at £28.94) with the test machine to cut mortises to various depths in a variety of both softwoods and hardwoods. While cutting was easier in softwood, the machine coped adequately with hardwood too.

Using the quite advanced depth control system is simple enough. Not all mortises are formed as through joints, and it's essential that stopped mortises can be formed to the depth intended.

This mortiser can also be used as a pillar drill, but long-shanked bits must be used, or the optional drill chuck and adapter obtained (it costs £21.95). It performed very well in this alternative mode of use, but the adaptor is essential when using engineers' pattern twist drills. Whatever this machine is being used for, a gas strut on the left-hand side of the column ensures the head is raised to its upper position after use.

Summing up

We found this machine to be very adequate in all the uses to which it was put. To have such a compact machine with a dual-movement sliding table makes cutting mortises quick and simple. The power is more than enough, and mortises are created with a high level of accuracy. It makes hand cutting of mortises quite outdated, and mortise chisels almost museum pieces! **GW**

SPECIFICATION

MOTOR	375W
MAX CHISEL CAPACITY	16mm
CHISEL STROKE	100mm
MAX WORKPIECE HEIGHT	110mm
	with riser block kit 160mm
MAX DISTANCE CHISEL TO FENCE	70mm
WEIGHT	42kg
ACCESSORIES	riser block kit (£9.44)

VERDICT

This mortiser represents very good value for money, and will last not just a lifetime but several.

- PROS**
- Excellent quality
 - Smooth dovetail slides
 - Can hold tapered work

- CONS**
- Accepts chisels with 3/4in shanks only
 - Relatively short table

VALUE FOR MONEY



PERFORMANCE



FURTHER INFORMATION

- Axminster
- 03332 406406
- www.axminster.co.uk

The tests were carried out using Axminster's TIN-coated bits and chisels. These are available separately as well as in sets



The optional riser block kit adds 50mm to the column height



The lateral movement handwheel must overhang the front of the bench



The machine coped well with a range of typical mortising tasks



Firing imaginations
for over 30 years



WOOD • MULTI-FUEL • GAS • ELECTRIC

STOVAX | **GAZCO**
Fire Your Imagination



www.stovax.com



TEWKESBURY
SAW COMPANY LTD

Spindle Moulder Cutters & Limiters

Made to Order!

- Quick turnaround • Able to supply to fit most types of blocks
- Many low priced standards from stock

Tewkesbury Saw Co. Ltd.

Newton Trading Est. Tewkesbury, Glos. GL20 8JG

Tel: 01684 293092 Fax: 01684 850628

www.tewkesburysaw.co.uk



The Ultimate protection
for your wooden worktop

- > Resistant to common stains: wine; beer; drinks and fruit juice.
- > Will not crack, peel or blister.
- > Highest coverage of any oil on the market.



Call or visit
the web for
stockists.



+44 (0)1296 481 220

www.osmouk.com

osmo

The Snappy chuck is at the centre of this tool set. It fits into any power drill, and can also be mounted in the chuck of a bench drill. All the tools are housed in a fabric holder, with a dedicated storage spot for each one.

Trend Snappy 60-piece tool set

£110.95

The Snappy chuck allows for the almost instant changing of drilling and screwing tools covering a wide range of applications. It has an hexagonal shank that ensures a positive hold in the drill chuck. The spring-loaded sleeve of the chuck is simply pushed backwards, the tool required inserted and the sleeve released to give a positive hold. The system allows for a quick changeover from one drill diameter to another, or to the countersink, or to one of the many screwdriver bits when a variety of these are needed as the job demands.

A comprehensive selection

There are four masonry bits, two auger bits and a range of five flat bits from 16 mm to 30 mm diameter. The seven twist drill bits are fitted with their own collet chuck which is mounted on a hexagonal shank to allow for mounting in the Snappy chuck.

Clever drill guides

Two drill guides are also included. These devices are designed to drill pilot holes when fitting hardware using countersunk screws. They incorporate a spring-loaded

retractable sleeve with the end chamfered. This end is located in the hole in the fittings, then gentle pressure from the power drill causes the sleeve to retract and the bit to drill the required hole. The result is a pilot hole for the screw that's exactly centred inside the screw holes on the fitting.

Multiple drivers

There is a massive assortment of driver bits to cover slotted, Pozidriv, Phillips, hex-headed and Torx fixings. These are designed to be used in the bit holder, another clever device. It's magnetic, and it also features a retractable sleeve. In use this sleeve can be withdrawn, and thus ensure that the bit remains fully located on the head of the screw. This is especially useful on screws with slotted heads.

The set also includes four nut drivers for nuts measuring 6, 8, 10 and 12mm across flats, and three square drive adapters.

All or nothing

It could be argued that there will be items included which might never be used. However, you often need a tool you can't



find, even in a well-equipped workshop. Having such a set can solve a problem and justify its existence even if it's only used occasionally. What's more, buying such a comprehensive range of tools is very economical compared with buying them separately. You get sixty items contained in a stout fabric holder for less than £2 each, and there's even a pencil! *GW*

WHAT'S IN THE KIT

- Trend Snappy standard chuck
- Twist drill bits: 1, 2, 3, 4, 5, 6 and 7mm
- Drill countersinks: 2.5, 3.25 and 3.5mm
- Drill bit guides: Nos 6 and 8
- Flat wood bits: 16, 19, 22, 25 and 30mm
- Auger bits: 10 and 13mm
- Masonry drill bits: 5, 6, 7 and 8mm
- A huge range of nut and screwdriver bits
- A Trend Snappy pencil and belt strap

VERDICT

This set contains a tool for almost every purpose, at under £2 a throw!

PROS ■ Comprehensive range
■ Tool holder keeps tools safe

cons ■ You probably won't use everything

VALUE FOR MONEY
PERFORMANCE 

FURTHER INFORMATION

- Trend
- 01923 249911
- www.trend-uk.com



The Snappy chuck with its hexagonal shank fits any corded or cordless power drill.



The set includes two drill guides, which are excellent when fitting hardware.



The wide assortment of drills incorporate countersinks



The drill guide centres the screw hole when fitting a butt hinge

Marking work out accurately is vital, and for smaller-scale tasks such as marking shoulder lines for dovetails and the like, a cutting gauge is the ideal choice

David Barron cutting gauge

£69



This elegant cutting gauge forms part of a range of hand-made tools from David Barron that includes planes, mallets and dovetail templates. This particular one is made from macassar (Indian) ebony that has been soaked in linseed oil, giving it a subtle satin sheen.

Classy engineering

Despite being quite a small tool – it's just 95mm long – it can cope with some quite big work if needed thanks to its generous backset. It's adjusted with the large knurled brass knob; a brass

bushing let in the stock ensures that the setting locks solidly, with a fibre washer allowing the gauge to be fine-tuned before locking it off tightly.

You can sometimes get away with a thread directly into certain timbers, but over time the threads can strip under constant adjustment. Therefore the bushing is certainly a sign of attention to detail. An identical bushing is fitted to the end of the stem to retain the cutting blade within its small housing, and this can be adjusted for depth of cut as required.

Brass Inserts ensure secure connections and a long life for the tool



Comfort factor

The stem and stock are linked with another housing to keep them square to each other. The gauge is very comfortable to hold and use, with small indents in the back of the stock for the middle finger when you're gripping the stem with the index finger and thumb. Newer models now have additional sculpting indents to the stem for increased comfort.

Using the gauge

After gauging a few lines with the tool, one thing that immediately stands out is how easy it is to control, simply gliding across the work. A wheel gauge feels almost sticky by comparison because of the way it works.

If you are by habit a 'wrist roller' gauger, the flat profile needs to be held pretty flat as you drive it, but it's surprisingly easy to get to grips with. **AK**

VERDICT

This is a beautifully crafted little tool that's very accurate to set and a pleasure to use.

PROS

- Light and easy to control
- Made from quality materials
- Backset up to 7.4mm

CONS

- Rather expensive

VALUE FOR MONEY



PERFORMANCE



FURTHER INFORMATION

■ David Barron Furniture
■ 02380 769644
■ www.davidbarronfurniture.co.uk



The blade can be adjusted for depth or reversed using a screwdriver



Small scallops behind the stock are natural resting points for fingers...



...while the stock is gripped between finger and thumb for making the marks



It's a very controllable little gauge, running freely across the work

Cordless circular saws are now powerful enough to perform just as well as their corded cousins, with ever more powerful batteries guaranteeing good run times too

DeWalt DCS391M2 circular saw

Although lacking any frills such as an LED light, this is a solidly built machine with a cast magnesium base, alloy upper guards and rubberised grips. The lower retractable guard is plastic so may be prone to damage, but it looks to be pretty durable.

The base has a 50° maximum tilt to compensate for any discrepancies on mitre work, locking at the front through a solidly constructed protractor scale. Depth of cut is set using the rear lever that allows the base to pivot and set the blade protection.

Unusual orientation

With its central switch the saw is easy to operate for both left- and right-handers. However, it's orientated differently to the majority, with the motor on the outboard side if you're a right-handed user.

In its favour there's no restriction in seeing the blade. However, for edge-trimming work many people kneel on the work to restrict its movement, which means the saw only has the narrow part of the base to hold it. Therefore, as a right-handed operative, to work with the base sitting with its widest area on the work you need to progress from left to right. The machine's compact size makes single-handed

operation easy, but there is a front handle for additional safety. With no riving knife, the front grip should be used in situations where the chances of kickback are increased.

Using the saw

We put the saw to work on 19mm Sterling board as well as ripping cuts on 45mm thick pine. While it isn't as powerful as a mains model of similar specification, it still put in a superb performance.

Even so, there are times when you can work any tool too hard, and DeWalt has accounted for overheating of the battery pack or overloading the saw itself with some excellent protection circuitry. This certainly works; we pushed the saw hard a couple of times and it kicked in, stopping the saw immediately; it reset itself a few seconds later so work could resume.

Battery runtime

There's certainly enough power in the tank on these 4.0Ah batteries to put this saw high on anyone's agenda and to consign another mains power tool to the back burner. A 5.0Ah battery is on the way. **AK**

£360



SPECIFICATION

BATTERY	18V 4.0Ah Li-Ion	
BLADE DIAMETER	165mm	
NO-LOAD SPEED	3700rpm	
MAX BEVEL TILT	50°	
MAX DEPTH OF CUT	at 90°	55mm
	at 45°	42mm
WEIGHT	3.8kg	
ACCESSORIES two batteries, charger, carry case		

VERDICT

This is a basic but well-constructed and powerful saw that's particularly suitable for converting sheet materials.

PROS

- Solidly built
- Powerful
- Overload protection circuitry

CONS ■ Basic specification
■ Blade orientation may not suit some users

VALUE FOR MONEY 

PERFORMANCE 

FURTHER INFORMATION

- DeWalt
- 0700 339258
- www.dewalt.co.uk



The solidly cast base includes a protractor scale for locking cutting angles



The lower retractable guard is plastic but appears to be durable.



Cutting depths are selected and locked in position with this rear lever



Cutting notches in 45mm stock was well within the saw's capabilities

TIMBER SUPPLIES & SPECIALIST EQUIPMENT

STEEPCRAFT

BECOME AN EXPERT

Fast, accurate and simple
fabrication of your parts.
1 machine - 1000 possibilities!



from £655



www.stepcraft-systems.com

distributed
exclusively by

STONEYCNC

Happy to help at all times:
info@stoneycnc.co.uk

+44 (0) 1432 507 908

Allan Calder's Ltd

Sandpaper Supplies

Unit 2B, Chumet 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

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

Unloved? Unuseable? RESTORE IT!



Stanley No.5 'before & after' photo courtesy Peter Hensley - 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 59, 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

HOW TO MAKE THIS WINDSOR SIDE CHAIR

by Peter E Judge



ONLY £15.00
Plus £7.00 p&p
for UK
Delivery

The book is packed full of useful diagrams and colour photos on how to make this Windsor chair from start to finish. Every part of the process is explained in easy language, and in a step by step format, supported by dedicated photos and drawings, throughout its 420 pages.

Critique of the book from Mr R A of Florida, 21 Jan 2014

"Without doubt, it is the most detailed and comprehensive Windsor chair construction book on the market today. Finding detailed instructions on this subject has been difficult. I have collected every book and article I could find. Your book beats them all; no contest."

www.makingwindsorchairs.co.uk

Order through PayPal on the website, or please contact Peter by calling 0121 705 2196 or Email: peterjudge@gmail.com or write to: Peter E Judge, 21 Somerby Drive, Solihull, West Midlands B91 3YY.

Delivery to Europe £15.00 plus £14.00 p&p - America £15.00 plus £22.50 p&p - Australia £15.00 plus £24.50 p&p - Canada £15.00 plus £22.50 p&p



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

ray
precision made easy

Sealant Finishing Tool



info@raytool.co.uk

The Finishing Touch - Made Easy



Effortless - Clean - Easy to use
No Mess - on hands/clothes

Perfect uniform
sealant joint everytime

Use with all types of silicone, fillers and putty

YOU CAN'T FAIL

Demo on www.raytool.co.uk

Perfect seal without messy fingers



ADD A NEW DIMENSION TO YOUR WORK WITH

metalcraft

Visit our
Online Store
Today!

(with address at bottom
of the advert)

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 "MTW14" we will send you our new demo DVD free of charge

J & C R Wood, Dept MTW14, FREEPOST NEA15848, Hull HU5 1BR
01482 345067 | info@jandcrwood.co.uk

www.metal-craft.co.uk

SHOP GUIDES

**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) £12.95
inc. VAT and UK post. 1/2 metre each of grits
80, 120, 150, 180, 240, 320, 400, 600.
Also the NEW * GRIP - A - DISC *
Power Sanding/Finishing System
Plus lots of Belts, Discs, Stars, Low cost KK114
We also stock WOODTURNERS SUPPLIES
Timber/Bowl Blanks/Tools/Waxes/Finishes
Glues/Chucks/Gluevares/Cutlery/Sandries.
SAE FOR CATALOGUE
JW Piers Woodturning Supplies
3 Kimberley Villas, Southmill Road,
BISHOPS STORTFORD, HERTS CM2 3DW
Tel/Fax: 01279 653760

BERKSHIRE

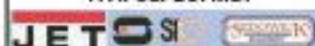
**WOKINGHAM TOOL
COMPANY LTD**

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 4738
Fax: (0113) 257 4293
www.dbkeighley.co.uk
P. A. CS. BC. MO.



WEB GUIDE

WEALDENTOOL COMPANY
Router cutters
Spindle tooling
Bandsaw, jigsaw &
circular sawblades
Online catalogue & ordering
www.wealdentool.com

**WWW.
getwoodworking.com**

SCAWTON SAWMILL

- Kiln Dried Oak
- Delivered Nationwide
- All thicknesses 20mm-100mm
- Phone or Buy online

Compare our prices at:
www.scawtonmill.co.uk

01845 597733

DIAMOND SHARPENING & CHAINSAW DISCS

StarkieSharp.com
The Diamond Sharpening Specialists

- Better Prices
- More Information
- Visit us at 40+ Shows



KATS
Chain Saw Discs
**The Ultimate
Power Carving
Experience!**
Cut, Carve, Shape, Notch,
Trench & Groove in Seconds!
Massively increases productivity!

Much safer, smoother carving
with up to 44 Teeth cutting
fast at 10,000+ RPM.

Quote Code
SSTVWS at
checkout
for FREE
Universal Nut
worth £5.95

Shown Lancelot
& Squire in Tandem
Richard Starkie Associates.
Timber Cottage, Wistow, Leicester, LE8 0QF Email: sales@starkies.com

www.StarkieSharp.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 22064 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 6PH
Tel/fax: (01246) 590 062
Email: milnerwoodwork@aol.com

**HERMLE / KEMNER MECHANICAL
CLOCK WORKS. DELIVERED EX STOCK**
Retirement Sale • All prices reduced
Martin H Dunn Ltd
The Clock Gallery, Clarks Road,
North Kilvinge, North Lincolnshire DN41 3JD
www.martindunn.co.uk
FREE PRINTED CATALOGUE
Clockwork Open Days: 11.15-14.00, 14.15-16.00, 16.15-18.00, 18.15-20.00
Tel: 01469 540901

**To advertise
here...**

Call David on
01993 709545

MARKETPLACE

Our **FREE** classified advertisement service

Send
or email a
photograph of
your item and
we'll include it
with your ad for
FREE!

FOR SALE

Elektra Beckum bandsaw,
BAS 500 model, £500. Elektra
Beckum SPA1100 dust extractor;
£100. Felder BFG-31 combination
machine; offers please.
020 8337 6380 (Surrey)

Coronet Minorette on stand; £250.
Little Rat, in good condition; £250.
ECE wooden smoothing plane; £80.
ECE wooden block plane; £40.
01432 354960 (Herefordshire)



Record Power bandsaw, model
BS12, 12in throat, 6in cutting
height, with rip and mitre fences,
one new blade and instruction
manual; £200. Buyer collects.
02393 781045 (Hampshire)

**Stanley Bailey No 4 smoothing
plane** in excellent condition; £20.
01189 712472 (West Berkshire)



Charnwood mortiser, model
W310, three chisel sizes, optional
drilling conversion kit, with chisel
sharpening kit and instruction
manual; £150. Buyer collects.
02393 781045 (Hampshire)

Patternmakers' tools in purpose-
made box; £200. Woodrat; £150.
01206 826615 (Essex)

**Triton 2000W router and router
table**, both unused; £200. Buyer
collects.
01233 638039 (Kent)

Tyme Avon lathe, 3/4in x 16 tpi,
11in over bed, 36in between
centres, revolving tailstock, Patriot
chuck, disc sanding/bowl turning
attachments, in good working order;
£175 ono. Buyer collects.
01362 820823 (Norfolk)

Stanley ratchet brace, 8in
swing two-jaw model in excellent
condition, with selection of auger
and flat bits; £35.
01189 712472 (West Berkshire)

Black & Decker sander, 1/3-sheet
orbital finishing model, 135W, in
good boxed condition with dust
extraction kit; £10.
01189 712472 (West Berkshire)

Myford ML8 lathe on steel stand,
with two faceplates and 11 chisels,
also circular saw bench unit; £200.
01604 862203 (Northamptonshire)

Elektra Beckum planer thicknesser,
model HC260, with new spare blades
and belts; £220 ono.
01395 516914 (South Devon)



Scheppach planer thicknesser,
model HMS 260, 260mm planing
width, 250 x 140mm thicknessing
capacity, dust extraction hood, with
two new blades and instruction
manual; £350. Buyer collects.
02393 781045 (Hampshire)

Charnwood planer thicknesser,
model W583, in very good
condition due to very little use
(about three years old); £450.
07747 026075 (call for location)

Scheppach spindle moulder,
with sliding table, rebate block, 18
scribe cutters plus block, wobble
saw, panel-raising cutter; £400.
Buyer collects.
01686 627724 (Powys)

WANTED

Small workshop facility in South
Tyne-side area for woodturning and
furniture assembly. Please phone
or text.
07887 793532 (Tyne & Wear)

Spiers / Norris / Henley planes
wanted by private collector; any
quote beaten. Ring Ron Lowe on
01530 834581 (Leice)

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 751768 (Lincoln)

Woodworking tools: planes by
Norris, Spiers, Mathieson, Preston,
Slater etc, brass braces, interesting
rules and spirit levels; top prices
paid, auction prices beaten.
01647 432841 (Devon)

USE THIS FORM TO BOOK YOUR **FREE** AD

The Woodworker
MARKETPLACE

- 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 869652 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.

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:

Name

Address

Postcode Daytime tel no.

Signature

Please write your advertisement in **BLOCK CAPITALS** and send it to: **The Woodworker Marketplace, MyTime Media Ltd, Enterprise House, Enterprise Way, Edenbridge, Kent TN8 6HF.** You can also email your free ad to: thewoodworker@mytimemedia.com Send/email a photograph of your item and we'll include it with your ad for **FREE**

In your own write...

Here are just a few 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!

SNAIL MAIL OR EMAIL?

You can write to us at The Woodworker, MyTime Media Ltd, Enterprise House, Enterprise Way, Edenbridge, Kent, TN8 6HF or send an email to mark.cass@mytimemedia.com

A BRIBE TO SUBSCRIBE?

Hi Mark

As a previous subscriber to your magazine and its sister title *Good Woodworking* for many a year, I was thinking of renewing my subscription to *The Woodworker & Woodturner* as I now have a lathe to play with. I'm a total novice, by the way. I'm finding Peter Child to be a very influential type of guy in this field, and really do enjoy it.

Anyway, my point of writing is on the subject of your enticements to subscribe. As a joiner of some 40+ years and fast approaching retirement, I seem to have collected most of the dinky little shiny oddities and accessories over the years... but not all. That, sir, is my point: give people a larger choice of different types of things to entice different types of people. That means things for the turners, the part-time woodworkers, the hobby carpenters and even the professionals.

I'm a patient guy and so I'll hold fast until something comes along that's shiny enough – or even useful enough – to tempt me. In the meantime I'll just keep looking forward to each month's new issue arriving on the shelf at my local newsagent.

With best regards
Allister Liddell

Well Allister, I'm glad to hear you're still keen after all this time! I'd like to think that the vast majority of us woodworkers out there also maintain your levels of enthusiasm. As to subscription enticements, we do our best to source a wide variety of useful kit, so hopefully there'll be something along soon which fits the bill entirely!
All the best

BENCHMARKS

Dear Mark

I'm just devouring the latest copy of *The Woodworker*, and was interested in the article from Duncan Rose about building a garden bench using recycled cast iron ends.

I've done four of these in the past year. A boatyard I'm involved with had a number of them lying around, all in a sorry state and in need of some TLC. I had some European oak in my stash from many moons ago and did a similar number on them. However, I did have the benefit of the old bits to work with, including the metal braces.

One thing I'd like to point out is that the slats are often of two different sizes. The top and bottom slats are nearly half the width of the rest, enabling them to sit around the sharp curve of the frame. Duncan had to do some work on the outer slats to get them to fit in.

If the frames are in fair condition, a wire brush job is fine, but two of mine were really quite bad, so I had them shot-blasted and powder-coated. This does add quite a bit to the overall cost, but I'm confident these will see me out, as it were. Don't look on the Internet and see how cheap these benches are to buy new; just be content that you've prevented some decent material being broken up for scrap!

Duncan Edwards, Stratford-upon-Avon

It's great to hear of all of this bench restoration, Duncan, and cheers for the tip. I'm a big fan of a bench, and rarely miss an opportunity for five minutes in the sun on a comfy-looking one. I think the curve of this type of design takes some beating, and the more of them out there the better. If anyone has a photo of a particularly interesting bench I'd love to see it.

EARLY START

Hello Mark

I'm 14 years old, and started woodworking with a tool set for Christmas (and not a plastic set either) when I was about three as I showed an early love for tools. My parents recently bought me a three month's trial of *The Woodworker & Woodturner*. I look forward to receiving the magazine through my letterbox and thoroughly enjoy reading it.

My grandad was a carpenter/joiner, my two uncles are joiners and my older brother did a three-year carpentry course, so I guess it's in my genes too. I'm fortunate to know an elderly gentleman whose hobby is turning wood on a lathe, so I'm also learning about woodturning and have made some very nice pieces (see the attached photo). I love looking through the Axminster and other tool catalogues, writing a list of things I'd like to buy. I already have my own lathe and lots of hand and power tools.

I hope my experiences will give other young people inspiration. You can get so much enjoyment out of creating individual things from a piece of wood. I'm very lucky to have so many people around me who give up their time to teach and guide me.

Charles Taylor

I'm very pleased to learn of your woodworking exploits, Charles, and I have to say I'm impressed with your turning. So many young people have missed out on woodwork and metalwork at school of late; I think this partly explains the increased popularity of craft-related activities today. I'd love to see some more of your work as your career progresses!



Cupboard doors need closing

Having just been disappointed – again – at my local Ironmonger, I think it's time for me to investigate hardware and door fittings from a different age and see how things compare with what's available today

It's a familiar scenario. More in hope than expectation, you stand at the counter of your favourite hardware store and present your modest requirements, ready money waiting in your eager pocket. Barely a minute or two later you're back out in the street empty-handed, slightly dazed and wondering how you're going to finish the job as planned.

In the good old days...

Judging by this fine selection of bolts and catches from *The Woodworker* of December 1940, the average cabinetmaker was well catered for when it came to devices to keep cupboard doors closed seventy-odd years ago. This is a very pleasing sight and, after the initial gratification of seeing a page full of cupboard fittings, I started to look at the marketplace more closely to see which ones were still available.

Things are looking up

Despite economical changes and differing tastes in furniture fashions, I have to grudgingly acknowledge that, when it comes to bolts and catches, things aren't quite as black as I've painted them. Experienced readers will no doubt put me right if I'm mistaken, but as far as I know, all of the items pictured here are still available with the exception of the spring catch, the thumb push catch and the gravity catch.

Over recent years I've purchased all the others, and I regularly see them in shops and catalogues. This is very good news, but I'd love to be able to try out the missing three, especially the thumb push. A friend of mine has these on some of her original fitted cupboards, and it's a treat to use them.

Magnetic variation

Now at this point I expect there are some readers out there saying 'but what about



magnets?' and I have to agree. A far cry from the cheap plastic ones, today's rare-earth magnets present a whole new field of door closures to today's craftsmen and women. Discreet and effective, this new generation of magnetic catches really suits the sort of handmade high-end furniture that many of us would like to own – or make.

Despite my fondness for wearing the

rose-tinted glasses of yesteryear, it's starting to look as if we might just be better off today after all when it comes to fitting out our furniture. Not exactly a bolt from the blue; it's the truth, no catch.

Mark

More from *The Woodworker* archive next month...



NEW ROUTER CUTTER STARTER SETS

Tungsten Carbide Tipped with 1/4" & 1/2" shanks.
Popular ranges for decorative & professional woodworking.

SET/SS11 £23.94 inc. VAT



6 popular 1/4" or 1/2" shank router cutters in a plastic case.

SET/SS24 £77.94 inc. VAT



24 popular 1/4" shank router cutters in a plastic case.

SET/SS35 £101.94 inc. VAT



35 popular 1/2" shank router cutters in an alloy case.

Available at Trend Routing Centres, visit www.trend-uk.com

trend[®]
routing technology



Phone 01923 249311 or visit www.trend-uk.com for your free
2014 Routing Catalogue & details of your nearest stockist.

The PT260 Planer Thicknesser.

Same Great Machine, New Lower Price.

The PT260 needs little introduction, having found its way into countless workshops over the past decade. Its capacities, build quality and reliability make it the obvious choice for the discerning woodworker.

What They Say...



The Woodworker

"I fed some 180 mm wide pine through the thicknesser at a 2 mm depth of cut, getting excellent results without straining the motor...it's useful to know the Record will cope. For it's price the Record is excellent value."

Good Woodworking

"In use the Record performs well. It feels solid and secure and the finish is good. The wheel kit is a real boon, making it easy to push the machine around the workshop. Overall this is a good all rounder and with that 5 year guarantee, it certainly looks enticing."

The Woodworker

"At an overall length of one metre the tables are ideal and they are remarkably accurate as well. My straight edge showed no significant discrepancy over the whole length - something other major manufacturers should learn from... a very capable machine."

Practical Woodworking



STILL ONLY
£599.99
Inc. VAT



Includes
pedal
wheel
kit



Price valid until 28.02.2015. SAGE.

RECORD POWER

ESTABLISHED 1908*

www.recordpower.co.uk Tel: 01246 571 020

Over
100
years
Experience • Knowledge
Support • Expertise

RECORDED POWER

REPAIRS

W/ CORNET

REPAIRS

Incorporating some of the most famous brands in woodworking, Record Power has been manufacturing fine tools & machinery for over 100 years. With total in-house support for thousands of machines, well over 100 years old, which are still in daily use, we're proud to be the most experienced and reliable support that comes with a Record Power product.