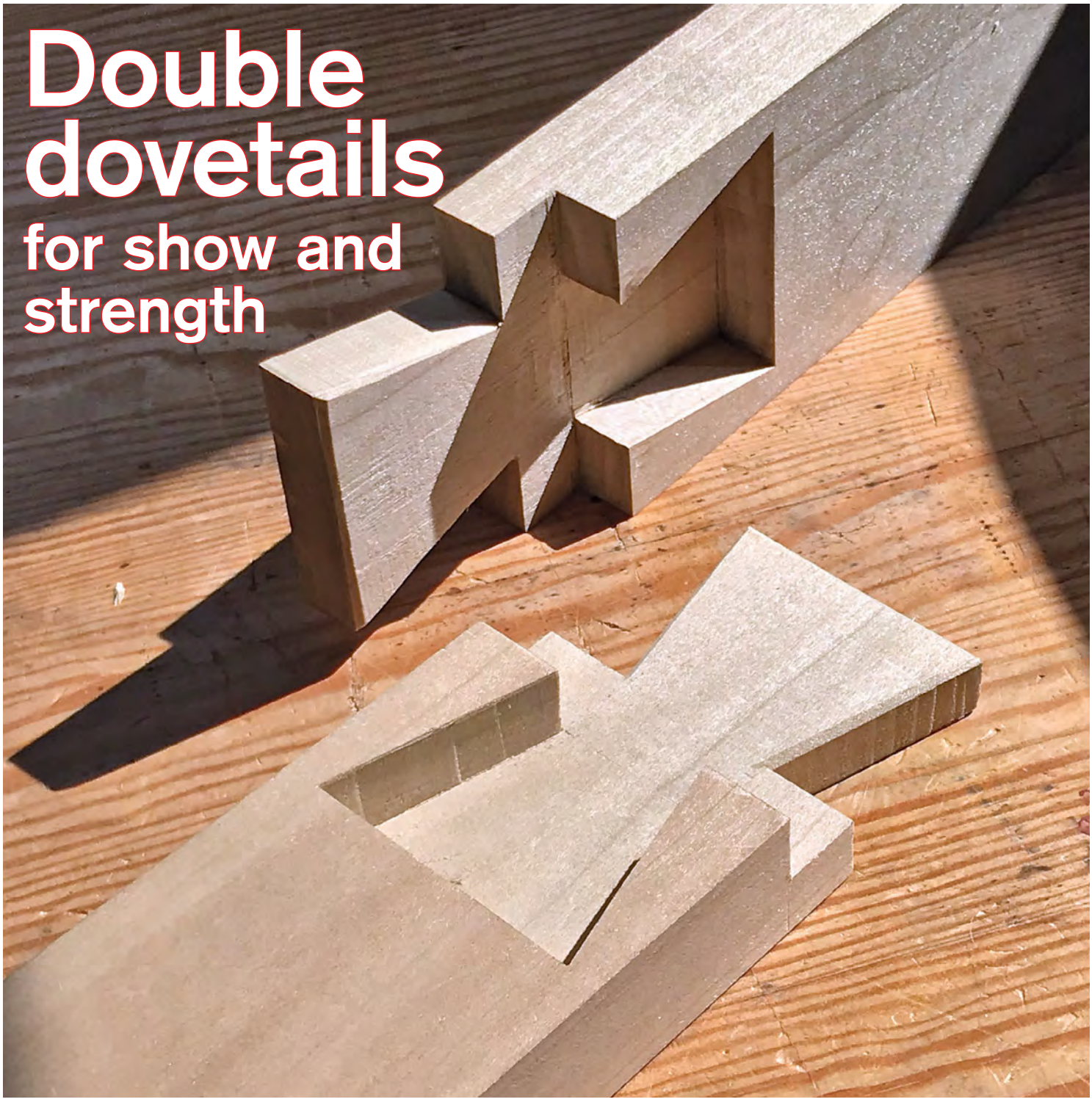
# Furniture & cabinetmaking

DESIGN ▪ INSPIRATION ▪ PROJECTS ▪ TECHNIQUES ▪ TESTS ▪ NEWS ▪ EXCELLENCE



# Double dovetails

## for show and strength

### Made to measure

Make Charles Mak's Veritas Combination Plane storage box

### Bevel angle roulette

Terry Gordon explains why some angles stay sharper for longer

### Front, back & sides

David Barron gets maximum impact from a single board

# Hammer

## *Safety is essential...*
### *...and you get great results*
*Peter Sefton*

**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.felder-group.com**

✆ Request your free catalogue now!


## *Quick change Spindle moulder with an array of options*

Exhibition 2018
Joinery & Furniture Manufacturing Show
30 Sept - 3 Oct NEC, Birmingham
Join us on stand F810, F910, G810, G910

### *Peter Sefton's Woodworking Machines*

***Hammer F3***
Spindle Moulder

***FELDER K 700***
Sliding Table Saw

***Hammer N4400***
Bandsaw

Watch the full testimonial on FELDER GROUP UK TV

YouTube

# Welcome to...

## ...misrepresentation

As grateful as I am to receive the number of press releases each month, the truth is most of them get shown the door before they've been opened. I've even been known to treat cold callers with the same casual disregard. Slipping through the net this week was a very flowery effort from a contemporary bespoke furniture maker claiming to be making the antiques of the future. Intrigued, I investigated further only to find on their website the usual assortment of instantly disposable solutions for storage of which none looked particularly bespoke. Adaptable perhaps, but definitely not bespoke. I mulled the phrase over in my head a few more times reaching the conclusion that such a claim would ultimately represent a serious breach of contract.

Of course one man's antique is another man's kindling and the criteria that distinguish one from the other are in a constant state of flux. On Wikipedia the meaning of the word antique is described as being 'an object that represents a previous era or time period in human history'. What a depressing thought that is. So dear reader, it's up to us I guess to change the course of history and get busy in the workshop making things that will show this period in human history in a more favourable light.

To kick things off I ventured out to the timber yard this week in search of material for my next couple of projects; a chair, a settee, a pair of tables and some marking gauges. Not a stick of MDF in sight but instead good old fashioned solid timber. With a good wind there's a real chance some will pass through the pages of *F&C* as either technical content or a full blown project but let's not get ahead of ourselves. I've got to find the time to build the stuff yet and that precious commodity is in short supply.

Flying the flag for handmade furniture and definitely in the running for producing the antiques of the future are the entrants in this year's Somerset Guild Competition, which is the subject of our gallery feature this month. Other items that are surely destined to be treasures are our two projects, a CD cabinet from David Barron and a dovetailed combination plane storage box from Charles Mak. On second thoughts, perhaps we're in better shape than I thought.

PHOTOGRAPH BY DEREK JONES/GMC PUBLICATIONS

Derek Jones

**Derek Jones**
derekj@thegmcgroup.com

# Contents

Issue 276 November 2018

*Don't forget there are plenty more articles and discussions to be found on the Woodworkers Institute & Forums*
***www.woodworkersinstitute.com***

**Woodworking is an inherently dangerous pursuit. Readers should not attempt the procedures described herein without seeking training and information on the safe use of tools and machines, and all readers should observe current safety legislation.**

## Projects & Techniques



## Design & Inspiration



## Your *F&C*







# Meet the contributors

**David Barron**
David is a fine contemporary furniture maker and the producer of a popular range of hand tools. He also regularly teaches woodworking courses at West Dean College, produces DVDs and uploads videos to his YouTube channel.
**Web:** www.davidbarronfurniture.co.uk

**Kieran Binnie**
Kieran's passion for woodwork started at the end of law school when he enrolled at the Totnes School of Guitarmaking. His focus has since expanded to include furniture making as well as lutherie. Kieran writes a regular blog at www.overthewireless.com, and is currently researching and writing a book for Lost Art Press about Welsh stick chair maker John Brown.
**Web:** www.overthewireless.com

**Terry Gordon**
Terry is a toolmaker based in Alstonville, New South Wales. He was a keen woodworker and navigator in the Air Force when he decided to follow his passion in the woodwork industry. Hand plane problems were a constant struggle in his woodwork projects, so he set out to find different alternatives and new designs. He established HNT Gordon and Co. Classic Plane Makers Australia in 1995.
**Web:** hntgordon.com.au

**Charles Mak**
With previous careers in hospital management and corporate compliance, Charles semi-retired in 2005, the same year he joined Lee Valley Tools/Veritas as a part-time Customer Advisor. He became interested in hand tools after realising that his customers were often more knowledgeable than he in traditional woodworking. To fix that, he bought many of the tools he sold, put them to use in his own shop and made mistakes until he could write or teach about them.

**Miranda Salmon**
Having spent 20 years working in youth work, training and management development, Miranda returned to college to revisit her earlier interest in art and design. She trained at Rycotewood College between 1997–99 and designs and makes mainly to commission. She has recently moved to Dartmoor and is in the process of setting up a new workshop.
**Web:** www.mirandasalmon.co.uk

**Chris Tipple**
Having spent a lifetime working as an architect, Chris needed a change and enrolled on a furniture design and manufacturing course at Bridgwater College. At the end of the course he entered the Somerset Guild of Craftsmen's Furniture Prize exhibition and won! He then joined the Guild in 2012, and a year later was asked to organise the continuation of their Furniture Prize Exhibition, and has continued to do so since then.
**Web:** www.somersetguild.co.uk

*F&C* reflects the interests and aspirations of our customers with some of our best articles coming from readers.
If you'd like to propose an idea for an article drop me a line at: derekj@thegmcgroup.com

EDITOR Derek Jones
Email: derekj@thegmcgroup.com
Tel: 01273 402843

DESIGNER Oliver Prentice

SUB-EDITOR Jane Roe

GROUP EDITOR – WOODWORKING Mark Baker
Email: markb@thegmcgroup.com

SENIOR EDITORIAL ADMINISTRATOR Karen Scott
Email: karensc@thegmcgroup.com Tel: 01273 477374

ILLUSTRATOR Simon Rodway

ADVERTISING SALES EXECUTIVE
Russell Higgins, Email: russellh@thegmcgroup.com

ADVERTISEMENT PRODUCTION & ORIGINATION
GMC Repro Email: repro@thegmcgroup.com
Tel: 01273 402810

PUBLISHER Jonathan Grogan

PRODUCTION MANAGER Jim Bulley
Email: jimb@thegmcgroup.com
Tel: 01273 402810

PRODUCTION CONTROLLER
repro@thegmcgroup.com

MARKETING Anne Guillot

SUBSCRIPTIONS
Tel: +44 (0)1273 488005
Email: pubs@thegmcgroup.com

PRINTED IN THE UK
Stephens and George Print Group

DISTRIBUTION Seymour Distribution Ltd
Tel: 020 7429 4000

Furniture & Cabinetmaking magazine (ISSN 1365-4292) is published every four weeks by Guild of Master Craftsman Publications Ltd

Subscribe from £25.65 (including free P&P)

Save 10% with 6 issues
Save 15% with 12 issues
Save 20% with 24 issues
Plus UK subscribers can save an extra 10% by choosing Direct Debit

Cheques made payable to GMC Publications Ltd
Current subscribers will automatically receive a renewal notice (excludes direct debit subscribers).

Post your order to: The Subscription Department, GMC Publications Ltd, 166 High Street, Lewes, East Sussex BN7 1XU



**Problems finding F&C? Call Jonathan Grogan, our Publisher, on 01273 477374. Alternatively, save up to 20% on the cover price by subscribing. Visit www.thegmcgroup.com/publications**

# NEW Axminster Trade machines

…surpassing the expectations of the trade user!

**Quality has never been so affordable**


## Machines designed and built to meet the growing demands of trade customers and serious woodworkers.

They have all been chosen for their uniqueness and/or build quality. Perfect for bespoke furniture and joinery makers, small scale kitchen and bathroom producers and keen home woodworkers wanting a higher specification machine.

Axminster Trade

**HW615E Bandsaw** 230V

**£2,099.00** Inc.vat Code **104482**

3 YEAR AXMINSTER GUARANTEE

Designed to be the best premium 350mm bandsaw on the market with many exclusive features. The oversized, welded steel frame possesses exceptional rigidity, allowing very high blade tensions. The T-square style fence gives maximum accuracy and is completely adjustable for aligning to the blade. Uniquely, the precision ground cast iron table has a titanium nitride coating creating a smooth surface and protecting the table from rust.

- **Extra large aluminium fence plate provides high and low cuts**
- **350mm depth of cut with 365mm throat**
- **Worm-geared trunnion system for table tilt to 45°**
- **Blade guides with tool free adjustment for extra stability and accuracy**
- **4-sided blade guard gives complete security**

Prices are subject to change without notice.

Exhibition 2018
Joinery & Furniture Manufacturing Show
30 Sept - 3 Oct NEC, Birmingham
Join us on stand E910

AXMINSTER
Tools & Machinery

Call **0800 371822**, search **axminster.co.uk/axminster-trade** or to see the quality of these machines and arrange a demonstration, **visit one of our stores**.

For the complete Axminster experience and to keep up with Skill Centre courses, events, news and much more, browse our website or follow us on social media.

**Axminster • Basingstoke • Cardiff • High Wycombe • North Shields • Nuneaton • Sittingbourne • Warrington**

Trustpilot 9.7/10

# Walnut CD cabinet

**David Barron makes an arts & crafts-inspired cabinet using some very special timber**

PHOTOGRAPHS BY DAVID BARRON

The client for this cabinet lives in the Cotswolds, home to Gimson and the Barnsleys in the early 1900s; my client was keen on using some timber that came from Alan Peters' workshop, giving a link back to those pivotal times in the arts & crafts movement. (Mary Comino wrote a fascinating book in 1980, titled *Gimson and the Barnsleys* which can still be hunted down on Amazon). The style of this cabinet with its tapered sides, dovetailed corners and through wedged tenons is sympathetic to their work, as is the use of solid English walnut.


FRONT ELEVATION
Scale 1 to 12

SIDE ELEVATION

SECTION

BACK ELEVATION

## Marking and cutting

To make the most of the precious walnut, the tapered sides were cut from one thick board, carefully marked and even more carefully cut! This was left to settle for a couple of weeks before planing flat and cutting to final length. The top and bottom were both cut to identical lengths and then the base lines were marked out for the pins (on the top) and the tenons (on the bottom) with the same setting on the gauge. This meant the cabinet would be exactly the same width internally all the way up. The top was later reduced in width by 7.5mm on each end to take account of the tapering sides. The mortises and the tenons were also marked out using the same settings on the gauge, using the bottom edge as well as the sides to reference from.

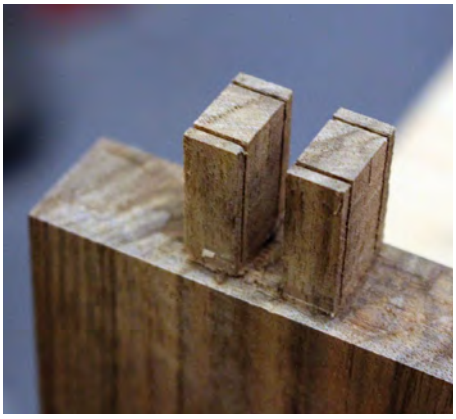
I cut the tenon shoulders using my 90° magnetic guide to ensure squareness and sawed out all the waste very close to the base line. The final waste was cut back to the line using a sharp chisel and was undercut a fraction to ensure the joint fully closed. I cut the slots for the wedges at an angle so that they opened up easily when the wedges were inserted. This is the best way of preventing the wood from splitting when the wedges are knocked in. The mortises were chopped out by hand and cleaned back to the gauge lines. The outside ones are longer, to accommodate the flared tenons, and are tapered down using a bevel gauge as a reference for the chisel. The same setting on the bevel gauge is also used to make a jig for cutting the contrasting wedges to ensure a perfect fit.

The dovetails were cut on the tops of both sides using my usual dovetail kit, 1:6 magnetic guide, 372 Japanese saw, Knew Concepts fretsaw and, of course, a nice set of sharp chisels. As mentioned earlier, the ends of the pin board were cut down to match the width of the tapered tops and the pins were marked out using my dovetail alignment board to keep things square and steady.

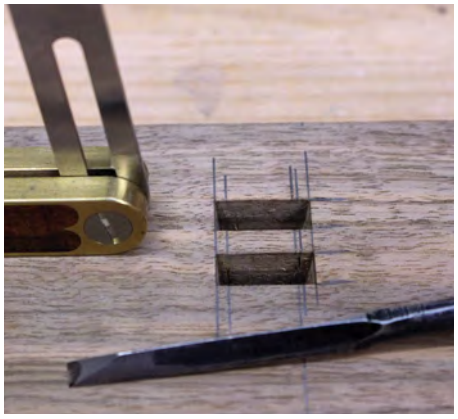
**Carefully cutting the tapered sides on the bandsaw, from a single thick board**

**Marking out the base lines for the through tenons and dovetail pins. Although these boards will end up a different width, due to the tapering sides, I've cut them identically so that the base lines are a perfect match**

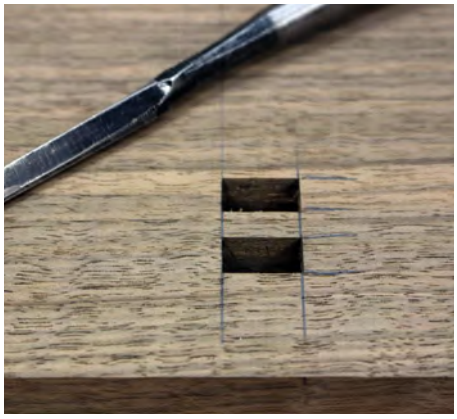
**Cutting the tenons with my 90° magnetic guide**



**Tenons cut and waste cleaned back to the base line. Angled cuts have also been made for the wedges**



**Angled mortise using a sliding bevel as a guide**



**Smaller mortise on the inside of the cabinet**

**Two sets of perfectly square tails, courtesy of my magnetic 1:6 guide**

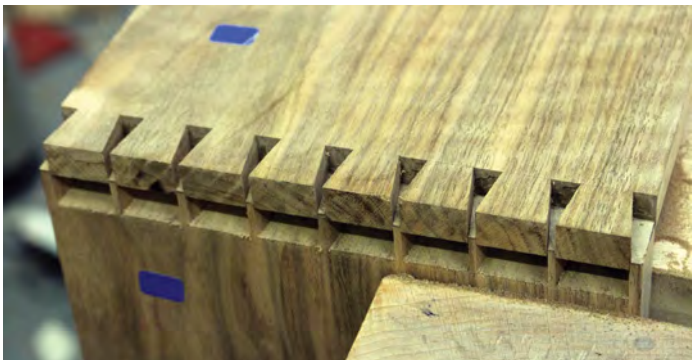
**Before marking the pins on the top each end was reduced by 7.5mm to take account of the taper in the sides**

**Marking the pins from the tails using my dovetail alignment board**

## Glue-up

With the fit checked it was time to glue up the carcass, always a nervous time. As there was a lot to do in a short time I double-checked I had all the parts and tools needed and made sure everything was in the right place and the right way round. The dovetails and the tenons all went together fine, but care was needed with those contrasting tenons, all 16 of them!

To get an even finish they all needed to be knocked in the same distance with lots of careful tapping and kept square to the tenon. I'm always surprised how the wedges have a tendency to move off to one side as they are tapped in. As long as they are tapped back square as you go, all will be well, if it's left until they've gone all the way in, it's too late!



**Testing the fit, a perfect result straight from the saw RIGHT: The sliding bevel setting used for the angled mortise was also used to make a simple jig for cutting the wedges on the tablesaw. A zero clearance sled is essential to do this safely**

**Identical wedges tapped in the same distance should give an even looking result**

**The result after cutting off and planing flush**

## Back panel construction

The back was made with frame and panel construction using bridle joints (open mortise and tenons) at the corners, which were cut on the bandsaw. The panels were a pair of book-matched solid walnut pieces kept to the same thickness as the frame. Bridle joints need to be clamped across the corners as well as pulled in tight to the base lines on both sides, hence all the clamps used in the pictures. The rebate for the back panel was cut with a router and fence, packers were used to give extra support for the router to prevent tipping. The rounded corners were cleaned out with a chisel. Fitting the back panel was done carefully on the shooting board to make sure there were no unsightly gaps. The back, with its floating panels, could be screwed into place and this gave total rigidity to the cabinet.

Before the doors were fitted the adjustable shelf holes had to be drilled. I had a commercial jig for doing this, but a few years ago found this low-tech method to be much more flexible and accurate. I marked out a grid on ¾in plywood, using an Incra ruler and then drilled all the holes on my drill press. This was used as a guide to drill all the holes on one side and then moved across and used from the other side, this way all the pairs of holes are in perfect alignment with the pairs on the opposite side.

**Clamping up the back panel**

**Two pairs of book-matched bandsawn veneers**

**Back panel fitted into a rebate in the carcass**

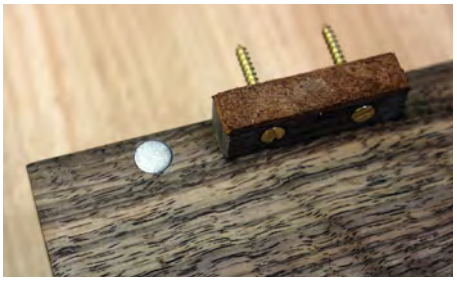
## Door construction

The doors were next and the choice for the panels was a lovely board of crotch walnut. Simply book-matching the walnut would have given a nice result on the outside but not on the inside as the grain on display would have been from either side of a 1½in thick board. So I decided to re-saw the wood into four pieces and glue two pairs back to back so that I achieved a book-match on both the outside and inside. I used a vacuum press to do this and left each panel under pressure for 24 hours to make sure it stayed as flat as possible. The crotch has grain going in every direction so controlling movement was always going to be challenging. The doors were made in the same way as the back, with bridle joints, and left to settle before final flattening.

Each door was fitted with three butt hinges, made by Brusso. Aligning three hinges is harder than two, so I made sure everything was dead square and flat before marking out the depth with a marking gauge. I adjusted the gauge 2mm less for the mortise on the doors, so that they sat back 2mm from the sides of the cabinet. I do this with all my doors and drawers as it gives a nice reveal – this was a tip from Alan Peters that I read years ago. The doors were shot to a nice even gap and all went well. The handles were made from African blackwood and attached from the rear with two small screws in each.

To match the small scale of the handles, I wanted the catches to be equally as delicate. I'm surprised just how strong and clunky some catches seem to be made, even on some very high-end pieces at exhibitions. I used small magnets embedded in both the catch and the door and covered with soft leather discs, cut with a hole punch. Once in place, these hold each door with just enough pressure and they close almost silently.

**Thick veneers for door panel being glued up in a vacuum press**



**The two parts of one of the magnetic door catches. Soft leather was added to reduce the pull of the magnet as well as give a nice soft close**

**Shell drilling jig**

**The African blackwood door handles**

**Doors open showing the book-matched panels**

**Detail of the walnut crotch**

## Finishing

Now it was time to finish the cabinet. The inside had been pre-finished before assembly with two coats of melamine lacquer cut back with 600 grit Abranet. I wanted to use an oil finish on the outside but test pieces on the bare wood were blotchy, particularly on the reversing grain of the crotch panels. So to start I used two coats of melamine lacquer, which sealed the wood nicely. I then followed this with two coats of matt Osmo Hard Wax Oil, which was cut back smooth with 600 grit Abranet. The matt finish was then lifted with three hand-rubbed coats of Auro Oil Wax, which buffed up to a nice low sheen. *F&C*

**Wedged tenon detail**

**The finished cabinet**


FESTOOL

# Copes with **high volumes** of dust.

**Efficient, simple and reliable.**
**The new CT pre-separator with cyclone technology.**

Large sanding areas and large quantities of dust place a great amount of strain on the main filter, which in turn affects the suction power. Mineral sanding dust from renovation sanders or long-reach sanders such as RENOFIX and PLANEX clogs the pores of the filter system and consequently reduces the suction power.
The CT pre-separator separates and collects approx. 80% of the accruing quantity of dust before it reaches the mobile dust extractor. This takes the strain off the main filter and guarantees consistently high suction power throughout the entire work process.

**For more information, go to www.festool.com**

# LOVED IN THE INDUSTRY, CHOSEN BY PROFESSIONALS

scm

# EVERYTHING YOU NEED TO DELIVER!

**SC 3 CLASS**
Robust, professional and a precise circular saw

**CU 300 c**
Universal combined machine that offers the best value for the everyday workshop

**S 45 n**
A small Band Saw with great capabilities that is perfect for either the joinery workshop, schools, furniture restoration or renovation

**FS 41 elite s**
Heavy duty, compact and created to meet all planing demands of workshops

**T 55 W elite s**
A Spindle Moulder with great versatility for many tasks


**ECO 300 D**
An efficient low cost dust extractor

**SCM Group UK**
Tel. +44(0)115 9770044 - scmgroupuk@scmgroup.com - www.scmwood.com

scm woodworking technology

*is more*

# News&Events

**Contribute to these pages by telling us about matters of interest to furniture makers. Call Derek Jones on 01273 402 843 or email derekj@thegmcgroup.com**

**Please accompany information with relevant, hi-res images wherever it is possible**

## Young professionals complete Furniture Makers' industry experience

Five young industry professionals have been given a unique insight into the UK furnishing industry by completing The Furniture Makers' Company's Young Professionals Industry Experience.

Launched in 2014, the Young Professionals Industry Experience brings together some of the best and brightest young talent in the furnishing industry to take part in an intensive three-week learning programme. The group is given access to all areas of the industry supply chain, learning about raw materials and components, the complexity of manufacturing, retailing, buying criteria, pricing, marketing and merchandising, through to consumer law, after sales and customer service.

This year's participants were Josh Chadwick, graduate sales trainee at Herman Miller; Jonny Garth, junior management apprentice at Silentnight; Felicity Squires, business development executive at Axminster Tools & Machinery; Billie Watts, business trainee at Blum; and Greg Young, manufacturing graduate at Herman Miller. Sixteen leading industry companies opened their doors in June and July to give the five professionals an in-depth understanding of their businesses, including: Anti Copying in Design, Axminster Tools & Machinery, Blum, Cabinet Maker, DFS, Ercol, FIRA, Fishpools, The Furniture Ombudsman, Halstock, Herman Miller, Muirhead Leather, Parker Knoll, Panaz, Purves & Purves and Silentnight.

The professionals outlined what they learned from the experience and presented the forthcoming issues the industry faces to representatives of the companies they visited as well as other industry figures at Furniture Makers' Hall, London on 26 July. The issues the group highlighted were: Brexit, recruiting new blood into the industry, targeting younger customers, the effects of the digital age, sustainability and meeting customer expectations.

To support the professionals' continued development, each of them will be paired with one of the Company's members to act as their mentor.


PHOTOGRAPH COURTESY OF THE FURNITURE MAKERS' COMPANY

**From left to right: Josh Chadwick, Jonny Garth, the Master Hayden Davies, Felicity Squires and Greg Young**

If you are interested in sending one of your employees on this unique experience in 2019 as part of their continuous professional development, contact George Cooper by emailing marketing@furnituremakers.org.uk or by calling 020 7562 8523.

**Contact: The Furniture Makers' Company**
**Web: www.furnituremakers.org.uk**

## SEAS Young Craftsman of the Year Awards

The South of England Agricultural Society (SEAS) has announced the winners of its Young Craftsman of the Year Awards. The competition is open to anyone aged 14–21 years living or studying in Berkshire, East Sussex, Hampshire, Kent, Surrey and West Sussex. There are five categories: Woodwork, Metalwork, Ceramics, Textiles and Design & Technology.

This year, Mitchell Bridger won the Overall Gold award for his coffee table. In the Wood category, First Place went to Jack Tampion-Lacey for his chess board and chess pieces, Second Place to Ella Stockley-Rogers for her cherry jewellery box and Third Place to Aiden Ford for his small coffee table with inlaid top.

PHOTOGRAPHS COURTESY OF SEAS

**Mitchell's coffee table with a glass top and copper details**

**Contact: South of England Agricultural Society**
**Web: www.seas.org.uk**


**Mitchell Bridger received the Overall Gold award**

# Events

Information correct at time of publication, check websites before planning your visit

EVENT OF THE MONTH

## UK Construction Week

UK Construction Week (UKCW) is the UK's largest built environment event; bringing together 35,000 construction professionals and over 650 exhibitors at the NEC Birmingham. UKCW is free to attend and consists of nine shows: Timber Expo, Build Show, Civils Expo, Plant & Machinery Live, Energy 2018, Building Tech Live, Surface & Materials Show, HVAC 2018 and Grand Designs Live.

UKCW showcases innovation from all sectors, and making it easier for any professional to update their CPD, get inspired by amazing people and projects, and walk away with practical information on new technologies, systems, products and collaborations from around the world that would otherwise take months to research.

The Timber Expo showcases the latest products, innovations and developments across the timber sector – not just from the UK but from an increasingly exciting and diverse international market. The show covers a breadth of timber applications from timber frame, sawmills, merchants, glulam, SIPs, CLT, fixings and fastenings, timber cladding, doors/windows, mouldings, skirtings and flooring.

PHOTOGRAPH COURTESY OF UK CONSTRUCTION WEEK

**Timber Expo is the UK's biggest event dedicated exclusively to timber**

**When: 9–11 October**
**Where: NEC Birmingham, North Ave, Marston Green, Birmingham B40 1NT**
**Web: www.ukconstructionweek.com**

### The Tool Show

The biggest brands will be in attendance at the Tool Show, showcasing all the latest products, as well as holding demonstrations and masterclasses. Show entry and parking are free.

**When: 12–14 October**
**Where: Kempton Park Racecourse, Staines Road East, Shepperton, Sunbury-on-Thames TW16 5AQ**
**Web: www.thetoolshow.com**

### Midcentury East

The East London edition of the Modern Shows will have the usual mix of design classics from 55 of Europe's top dealers in Midcentury furniture, ceramics, glass, wallpaper, vintage fabrics, industrial, clocks, collectable posters and more.

**When: 14 October**
**Where: Haggerston School, Weymouth Terrace, London E2 8LS**
**Web: modernshows.com**

### MADE LONDON – Marylebone

At MADE LONDON – Marylebone the very best of national and international designer-makers present and sell their work to the public. Over 120 exhibitors across all media (ceramics, wood, silver, gold, glass, textiles and more) showcase their original, unique and exceptional work.

**When: 18–21 October**
**Where: One Marylebone, 1 Marylebone Road, London NW1 4AQ**
**Web: madelondon-marylebone.co.uk**

### Lost Treasures of Strawberry Hill

This exhibition brings back to Strawberry Hill some of the most important masterpieces in Horace Walpole's famous and unique collection for a once-in-a-lifetime exhibition. Walpole's collection was one of the most important of the 18th century but it was dispersed in a great sale in 1842. For the first time in over 170 years, Strawberry Hill can be seen as Walpole conceived it, with the collection in the interiors as he designed it, shown in their original positions. Items on display will include a Boulle cabinet, a limewood cravat carved by Grinling Gibbons and the rosewood Walpole Cabinet, designed by Walpole himself.

**When: 20 October 2018–24 February 2019**
**Where: Strawberry Hill House & Garden, 268 Waldegrave Road, Twickenham TW1 4ST**
**Web: www.strawberryhillhouse.org.uk**

PHOTOGRAPH © V&A IMAGES/VICTORIA AND ALBERT MUSEUM, LONDON

**Cabinet of miniatures and enamels designed by Horace Walpole, possibly with William Kent, perhaps made by William Hallett. Carving by James Verskovis and Giovanni Battista Pozzo and anonymous hands, 1743, padouk veneer, set with carved ivories**

### Woodworking & Power Tool Show

Returning for its third year, the Woodworking & Power Tool Show will feature demonstrations of woodturning and carving. Power tool companies such as Festool, Makita, Chestnut Products, Trend, Axminster and many more will also be displaying their latest products. A spoon carving course will be available during the show; spaces can be booked in advance.

**When: 26–27 October**
**Where: Westpoint Centre, Clyst St Mary, Exeter EX5 1DJ**
**Web: www.wptwest.co.uk**

### Made by Hand, Cardiff

Made by Hand showcases the work of 135 makers and artists. There will also be a variety of workshops, masterclasses and demonstrations.

**When: 2–4 November**
**Where: City Hall, Cathays Park, Cardiff CF10 3ND**
**Web: www.madebyhand-wales.co.uk**

### The North of England Woodworking & Power Tool Show

The largest and longest established retail woodworking and power tool show in the country returns to the Great Yorkshire Showground this November. As usual there will be a comprehensive range of exhibitors and demonstrators, including David Barron, Peter Sefton, Nic Westermann, Shane Skelton, Vic Tesolin and many more. Other attractions include the display of a 3 x 1.5m panel of beautifully crafted carvings incorporating automata and sound.

**When: 16–18 November**
**Where: Great Yorkshire Showground, Railway Road, Harrogate HG2 8NZ**
**Web: www.skpromotions.co.uk**

# Young Furniture Makers Exhibition returns for 12th edition

**The Young Furniture Makers Exhibition 2017 attracted record numbers**

The Young Furniture Makers exhibition returns for its 12th edition this October, following the most successful and inspirational event yet in 2017. Around 80 up-and-coming young designers and makers will be showcasing their designs at the exhibition, which is organised by The Furniture Makers' Company and will take place on Wednesday 10 October (1pm–9pm) at Furniture Makers' Hall and the Dutch Church in Austin Friars, London.

**Hayden Davies, Master of The Furniture Makers' Company, will welcome guests from across the furnishing and design sector at 7pm before a prize giving. The awards include:**

- Young Furniture Makers Bespoke Award, sponsored by Festool
- Young Furniture Makers Design Award, sponsored by Crofts & Assinder
- Young Furniture Makers Innovation Award, sponsored by Knightsbridge
- The Blum Best in Show Prize, an all-expenses-paid trip to the state-of-the-art Blum factory in Austria for the most outstanding pieces of work in higher education
- The Timothy Oulton Best in Show Prize, an all-expenses-paid trip to Timothy Oulton's manufacturing base in Hong Kong for the most outstanding pieces of work in further education.

Sponsored by Axminster Tools & Machinery, Harveys Furniture, Bensons for Beds and The Furniture Ombudsman, the Young Furniture Makers exhibition was set up for schoolchildren, students and graduates to showcase their work to members of industry and potential employers.

This year's exhibition will include pieces from talented GCSE and A-Level students through to BA and MA graduates from around the UK. Hayden Davies said: 'The Young Furniture Makers exhibition is an extraordinary and unmissable celebration of talented young designers, many of whom are still studying or in the early stages of their career. The show allows them to learn from the other participating exhibitors but also gain insight from those already working in the design and furnishing industry. We look forward to welcoming everyone at what is one of the highlights in The Furniture Makers' Company's calendar.'

**To register for free, go to: http://bit.ly/yfm18**

PHOTOGRAPH COURTESY OF THE FURNITURE MAKERS' COMPANY

The Furniture Makers' Company
the furnishing industry's charity

The Furniture Makers' Company is a City of London livery company and the furnishing industry's charity. **www.furnituremakers.org.uk**

mafell

Quality • Innovation • Performance

Beyond all expectation

WARRANTY 3 THREE YEARS On all advertised products.

# P1 cc

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

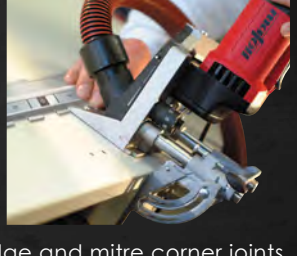
## Revolutionary Precision Jigsaw





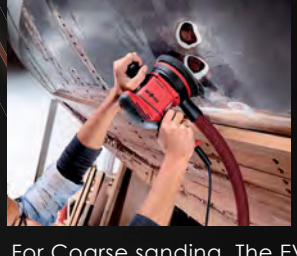
## DD40
Duo-Doweller

"There are a number of portable jointing systems on the market, but this has to be the best there is!"
Andy Bailey, Furniture & Cabinet Making.

Fast and Accurate: Edge to edge and mitre corner joints. Quick and Eonomical: Making carcasses with the DD40 and dowel template.

## EVA 150E
Orbital Disc Sander




For Coarse sanding, The EVA is the Ideal Choice. 5mm Stroke and a speed of 12,000 rpm represent the perfect combination for this kind of work


NMA AGENCIES LTD

CONTACT US:

01484 400 488
01484 711 012
sales@nmauk.com
www.nmatools.co.uk
Unit 1, Brookfoot Business Park. Brighouse, West Yorks, HD6 2SD

FOLLOW US:

YouTube NMATOOLS
@NMA_TOOLS
mafell_uk

# Somerset Guild of Craftsmen Furniture Prize 2018

**Chris Tipple, organiser of the Somerset Guild of Craftsmen's Furniture Prize 2018, reflects on this year's exhibition**

Now in its eighth year the Somerset Guild of Craftsmen recently held the Furniture Prize 2018 exhibition, showing work exclusively designed and made by students from schools and colleges around the south-west.

The Furniture Prize 2018 exhibition was held in the Somerset Guild of Craftsmen's gallery at 23 Broad Street in Wells, between 23 June and 28 July. The aim of the exhibition is to give the participating students a platform to show their work, probably for the first time, to the greater public. We think of it as a stepping stone to their future.

At the Guild we regard our Furniture Prize exhibition as a little acorn from which we hope to grow a giant oak tree. Taking a step at a time, our aim is to develop and steadily expand the exhibition to cover not only the south-west but beyond. Through the Furniture Prize the Somerset Guild is hoping to encourage young designer-makers to breathe new life into the art of furniture design and making.

The Furniture Prize started eight years ago, when the Guild set a challenge to student furniture makers of Bridgwater College to create the finest piece of work for the year. Year by year since then the exhibition has grown, so that this year there were entries from five schools and colleges, Bridgwater & Taunton College, City of Bristol College, Cornwall College, Williams & Cleal Furniture School and The David Savage, Rowden Farm, School of Fine Furniture.

For the third year the Guild has been fortunate, and very grateful, to enjoy continued support for the exhibition from Axminster Tools & Machinery. The company clearly has a similar philosophy to encourage emerging designer makers, and Alan Styles, the MD commented: 'As always we are keen to encourage the excellent design and craftsmanship associated with the Somerset Guild of Craftsmen. This year the Guild is celebrating its 85th anniversary and once again the Furniture Prize competition has had an extremely high standard of entries from individuals at colleges and furniture schools across the UK. Axminster is proud to be a part of this and continues to support the skills and training necessary to sustain such quality furniture making.'

As organiser of the exhibition one of my many roles is to coordinate the students from


**Jack Pawsey's ATEN smoked eucalyptus credenza won first prize in the Full Time category and was also named Overall Winner. Jack said, 'I want to give thanks to the Somerset Guild of Craftsmen for giving me a chance to showcase a piece of furniture that I am very proud of. It was a tough draw with so many excellent designers and makers, that I'm honoured and excited to have won. I feel this award gives me real momentum and the confidence to set up as a designer-maker offering fine bespoke fitted and free-standing pieces of furniture.'**

**Marten Rostel won the Part Time first prize with his Whisky Cabinet. He said: 'I've always wanted to make a piece of furniture that has the purpose of displaying and housing precious objects, for me there are few things more precious than good quality single malt whisky. I set out with the intention of building a small, delicate display cabinet to house a modest collection of whisky; although I've tried, I've never managed to own more than four to six bottles of good whisky at any one time!'**


the participating schools and try to ensure that their completed work is in the gallery at the start of the exhibition. A simple task you would think? Oh no! It is a task very similar to trying to carry water in a colander, there always seems to be something you thought was sorted that disappears through one of the holes! But somehow, and I really am not sure how, in the end it always seems to come together. As it has done in previous years, it all came together once again this year, and when it does I am left with a warm glow of both pride and satisfaction, and renewed motivation to start down the road to organising next year's exhibition. With lessons learned and a hope that it will be even better next year than it was this year.

Yes, I can breathe a sigh of relief that the Furniture Prize 2018 has been a very good exhibition but now that it is over I am sorry to see the stunningly beautiful work, produced by the students taken from our gallery.

As one by one the student makers arrive to collect their work I have time to reflect on the incredible standards of both craftsmanship and design that went into the exhibits. I wonder how such exceptionally high standards were achieved by the students, many of whom, only a year before, as they started their course, had little or no experience of working with wood; hadn't so much as cut a dovetail!

To reach that standard it is clear that a natural talent is a prerequisite, but that talent has to be nurtured, encouraged and guided. As much as I admire the student's achievements I am also amazed at the skill and dedication of their teachers and mentors for guiding them to produce exhibits such as those in this exhibition.

I will not spend a lot of time thanking everyone that helped keep the exhibition 'on track', but there are a few that I would like to mention. First, the teachers and mentors at the various schools and colleges whose time, skill and dedication allows the students to realise their best potential. Their reward is mainly satisfaction, and not a lot else. Out of these I make a special mention of the staff at Cornwall College, who seem to be particularly adept at encouraging their students towards originality and innovation. Whatever it is you are doing, keep it up.

Second, our thanks to Axminster Tools & Machinery for their sponsorship of the Furniture Prize, without that support the Furniture Prize Exhibition would be really struggling. I am not sure what their reward is, because they only give.

Third, a very special thanks for the unenviable task of judging, which was once

**Jamie Gill's Stóllhuggan chair was voted the People's Choice. Commenting on his work Jamie said: 'The inspiration for this piece came from my love of Viking craftsmanship, in particular Viking ships. I love the way the curves flow, culminating in the ornate prow and I wanted to incorporate these ideas into a chair design. The name comes from an amalgamation of the old Norse words for chair (stóll) and comfort (huggan).'**

again undertaken by Tom Kealy and Martin Lane, to whom we are especially grateful. They have given their precious time to select winners based on design quality, originality and craftsmanship. Once again the standard left the judges with a real dilemma and it was only the finest detail that made the difference.

## The awards

The exhibits are judged in two categories, Part Time and Full Time and the judges awarded a first and second prize in each category, together with a prize for the overall winner, and two commendations for design innovation. As well as the judges' awards, visitors to the gallery have taken an active part in the selection, by voting for another prize, the People's Choice.

The overall winner and winner of the first prize in the Full Time category was Jack Pawsey, from the David Savage, Rowden Atelier, School of Fine Furniture. His ATEN smoked eucalyptus credenza set an exceptionally high standard. It was a technically challenging piece, beautifully executed, with a well-proportioned, minimalist design and an impressive 'star burst'.

Winner of the Part Time first prize was Marten Rostel, from the City of Bristol College, with his arts & crafts style Whisky Cabinet, in black walnut and European oak, inspired by the work of James Krenov and George Nakashima.

Winner of the People's Choice was Stóllhuggan, a Viking ship inspired chair made from elm by Jamie Gill from Cornwall College.

Alex Curry, from the David Savage, Rowden Atelier, School of Fine Furniture, won the second prize in the Full Time category with a cherry cabinet on a stand. It was a very nice simple design with lovely proportions, and beautifully executed. Will Appleby, from the City of Bristol College, won second prize in the Part Time category with a glass-fronted bookcase. Ben Penfold, from Cornwall College, won a Commendation for Design Innovation with his Webbing Easy Chair, and Robert Searle, also from Cornwall College, won a Commendation for 'Design Innovation' with his Trinket Box.

**Alex Curry's cherry cabinet on a stand took second prize in the Full Time category. She commented: 'Winning second prize at the Somerset Guild was great to receive, as it was recognition from experts outside of Rowden School, so it confirms that I am doing something right! And I am also grateful to have received the prize just as I am trying to set up in business – the publicity will be very useful.'**

## Next year's exhibition

Largely thanks to the support of Axminster Tools & Machinery the Furniture Prize Exhibition is free to enter and the Somerset Guild of Craftsmen wants to encourage enquiries from any students, apprentices, schools or colleges who may be interested in entering the 2019 Furniture Prize.

**If you are interested please contact the Somerset Guild of Craftsmen at admin@somersetguild.co.uk**

**Will Appleby's glass-fronted bookcase won second prize in the Part Time category. Will's bookcase is designed to be a companion piece. It is made in similar proportions and overall design as an original cabinet, but with some changes to the ornamentation and finish so that it would suit a room with a ceiling of bare oak beams.**

**Ben Penfold's Webbing Easy Chair won a Commendation for Design Innovation**

**Robert Searle's Trinket Box won a Commendation for Design Innovation**

**A Bundai-influenced low coffee table, made by Henry Baltesz from the Williams & Cleal School of Furniture**

**Capstan coffee table made by Steve Adams from Cornwall College**

NMA AGENCIES LTD

scheppach Germany

# DESIGNED, MANUFACTURED & PROVEN IN MADE IN GERMANY

## Forsa 9.0
**3.2m Professional Panel Sizing saw**


Scheppach 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.)

## Forsa 3.0
**1.6m Panel Sizing Saw**

## Forsa 4.0 & 4.1
**1.6m & 2.1m Panel Sizing Saw**

## Forsa 8.0
**2.6m Panel Sizing Saw**


| 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 3.0 P1 | Workshop | Inc Professional STC + TWE + TLE + Scorer | 5.2 / 1.0 / 415v | 87 mm x 1.6 m | £2,895.00 | £3,474.00 |
| Forsa 4.0 - P1 | Workshop | Inc Professional STC + TWE + TLE + Scorer | 6.5 / 1.0 / 415v | 107 mm x 1.6 m | £3,895.00 | £4,674.00 |
| Forsa 4.1 - P1 | Workshop | Inc Professional STC + TWE + TLE + Scorer | 6.5 / 1.0 / 415v | 107 mm x 2.1 m | £3,995.00 | £4,794.00 |
| Forsa 8.0 - P3 | Professional | As Illustrated above | 6.5 / 1.0 / 415v | 107 mm x 2.6 m | £5,420.00 | £6,504.00 |
| Forsa 9.0 - P3 | Professional | As Illustrated above | 6.5 / 1.0 / 415v | 107 mm x 3.2 m | £5,575.00 | £6,690.00 |

NMA AGENCIES LTD
01484 400 488 sales@nmauk.com www.nmatools.co.uk
Unit 1, Brookfoot Business Park.
Brighouse, West Yorks, HD6 2SD

# Resizing boards

**Derek Jones considers some options when you've found the perfect board but it's not quite long enough**

I'm sure there have been times when I've actually heard a sigh of relief rising in the dust behind me as I've pulled out the drive at my favourite timber yard. Hunting down the perfect board can be tough on yard hands so I'm always mindful of approaching the task with a fair degree of realism, if not for my own sanity then at least for those that are required to come along for the ride. By its very nature timber selection is neither an exact science or in any way consistent. And while there are moments when we stand gaping at the swirly pattern on some wondrous species whose name we can't pronounce, it's worth remembering that sometimes less can be more. It's interesting that, in the past, colour was used to express all manner of emotion in decorative ware, and with regards to the wooden components of furniture this generally took the form of either naturally contrasting timbers or dyed veneer. At a time when candles were the only source of artificial light and colour of any kind was considered a luxury and the height of sophistication, it's not hard to imagine the impact that highly decorated pieces would have had. Coupled with gilded bronze motifs and the reflective qualities of glass and shellac, they would have created quite an impression. To the modern eye and specifically in western cultures however, such explosions of colour are likely to have the opposite effect as the trend is to favour less fussy designs.

As designer makers there's definitely a phase we all go through and if the following sentence isn't one you've used personally, no doubt you've heard it before: 'I wanted to use a contrasting wood to offset the beauty of the whateverwood burr'. I make no judgement here of course, we are all at different points along the same journey of discovery after all, and as we're not always heading in the same direction, it's good to see other makers working their way through the repertoire of endless possibilities.

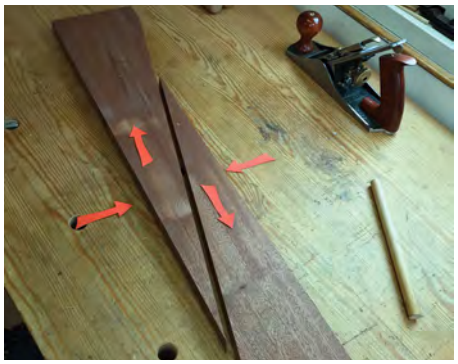
## Realistically optimistic

I think it's fair to say that woodworkers have a slightly different relationship with the material compared to that of our customers. Having that extra layer of technical knowledge invokes a little geekiness at the sight of medullary rays and ripples and knowing that something is made out of matched quartersawn boards, however plain they are, is a level of quality that's hard to explain to the uninitiated.

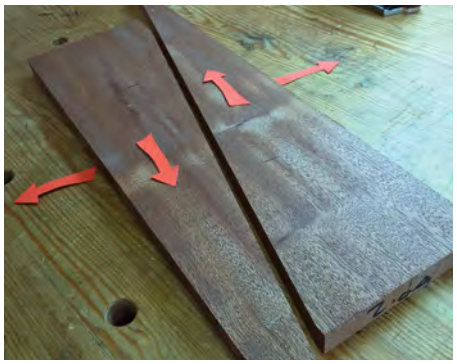
When you consider the checklist of desirable attributes when searching for the perfect board it's a wonder anything gets made at all; we want to avoid bends, splits, knots and stains but still have the required grain for the purpose with a uniform colour. With so many variables it pays to keep an open mind and a willingness to compromise certain details to avoid disappointment but above all learning to accept the material in all its glory, is the best piece of advice I can offer. On the occasions where I have stumbled across the perfect board it's usually when I'm not looking for it. Learning to recognise components such as panels or legs or case sides while they're still in the plank is a great advantage and I encourage you at least once a year to venture into the timber yard without a project in mind but leave with a definite plan. In this article I'm going to look at a few ways in which you can harvest the best out of the boards you have when the dimensions aren't what you need. First we'll look at a method for stretching a board along its length or across its width to gain material in either direction. It involves cutting the board in two first, which I know sounds a little drastic but trust me, if the timber gods are smiling down on you, nobody will ever see the join. The second option has the potential to be a decorative feature as it involves some exposed joinery. The last is more of a conundrum really that's just fun to try out and see where your sawing skills might need improving.

## Smoke and mirrors

Every workshop has an offcuts pile, some are more evolved than others and include racks with a grading system of sorts but it's generally where you start looking for the perfect board before tucking (reluctantly) into a pristine full plank. Depending on how you rate your space, and by that I mean are you paying for it by the square metre or squatting in the corner of the spare room, an offcuts pile will either be an unending supply of treasures or a couple of sticks you can't bear to part with. Whichever category you're in, there will always be a time when the board you want is the perfect species, colour and grain match but either a fraction too short or not quite wide enough. Here then is a technique you can use to gain a little in either direction but unfortunately not both at the same time. To understand how this technique works you'll need to be familiar with the basic principle of a pair of sliding wedges. With the thin edges pointing in opposite directions and the wedges placed back to back, when you move them in a straight line away from each other the combined width increases. And with the wedges similarly positioned, if you slide them in the opposite direction the width decreases while the length of the two combined wedges increases.



**This board can stretch from 620mm long x 140 to 850mm x 750…**



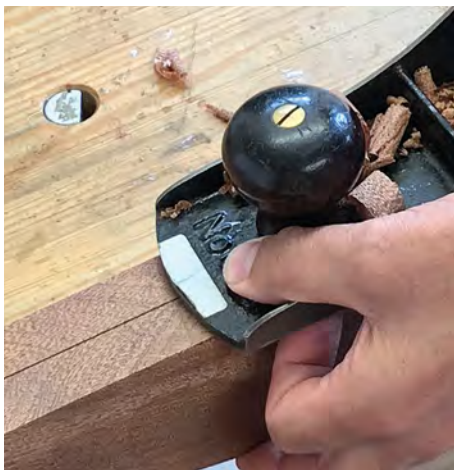
**…or 290mm x 200mm**

## Best edge joints you can manage

The success of this technique relies as much on the characteristics of the wood as it does your ability to create the perfect edge joint. Start by sawing the board diagonally in half at the most acute angle you can achieve. Then choose whichever method you find easiest to plane an edge joint on both sedges. Even though the saw cut was more or less in line with the direction of the grain, ie a rip cut, the result is two edges that, when planed, behave more like end grain. To avoid tearing the surface to pieces orientate the boards in your vise so you are planning away from the grain. If you are working with a cambered blade in your jointer you'll need to plane them individually. Having a straight edged blade will allow you to plane them back to back.

Depending on the angle you may find clamping the boards back together a little tricky as they will want to slide apart under pressure. The alternative therefore is to opt for a rubbed joint using hide glue. You'll often find that with some timbers, soft woods especially, end grain tends to suck the glue away from the joint resulting in a weak joint. To avoid this you can dilute the glue with a little with water and wipe some over the two joint faces and allow to dry. Then apply full strength glue to the joint and proceed as normal. For these mahogany boards I applied a coat of full strength glue to both faces then wiped most of it off before repeating the application for a normal glue up a few minutes later. The result is an almost seamless joint.

**Split the board in two corner to corner**



**Joint the edge of both halves**

**No sprung joints here please, just straight**

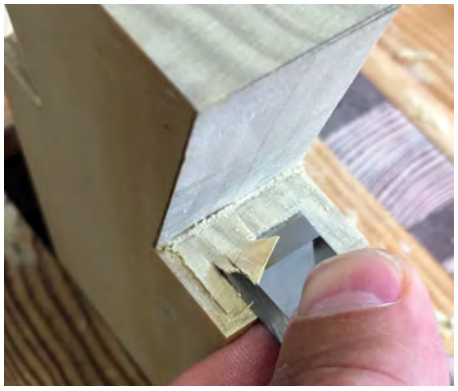
Square across both boards is also important

When cleaned up the joint is barely visible

## Double dovetails

I'm fairly sure this next solution for joining two boards end to end has its roots in temple building where there's a need to create components in manageable sizes before putting them together. Given that we can usually source timber in the lengths required for most straight components means it has little practical advantage for the furniture maker. That said and with the trend for exposed joinery there's no reason why such a joint shouldn't be used based on its decorative appearance.

The process begins with cutting two identical dovetail pins on the ends of the boards. One thing you'll have to make sure of is having clean crisp shoulders. A method that helps with this is to knife the line well below the surface before making any saw cuts. Gently pry away the loose material around the edge to reveal a continuous and level band on which you can rest a chisel to remove the rest of the waste, a slither at a time.



**ABOVE RIGHT: Place your chisel in the knife line to create a reference surface**
**RIGHT: Remove small slithers of material away to match the surrounding level**

### Further examples

There are similar interlocking joints used in the construction of the back rail on the classic Chinese horseshoe chair that are worth investigating. See *F&C* 247

## Divide and level

On one of the ends mark a centre line down the middle of the pin and a full width shoulder line. Remove the waste with a saw then use the other board to support a router plane and level the cut face of the pin. Also trim the shoulder line with a shoulder plane if you need to. Now secure the two pieces on your bench top end to end with the thin pin on top of the remaining full thickness one and tight up to the shoulder. Then use the end of the pin to scribe the shoulder on the mating component and mark off the thickness for the second pin. Repeat the steps necessary to level off the pin and transfer the shape of both pins to their corresponding tail boards. You can now remove most of the waste with a Forstner bit set just shy of the full depth to accommodate the tip of the bit.

Level off the first pin with a router plane using the uncut components for support

Cut the shoulder and trim square

Use the first component to mark the shoulder on the second

Remove as much waste as you can with a Forstner bit or similar

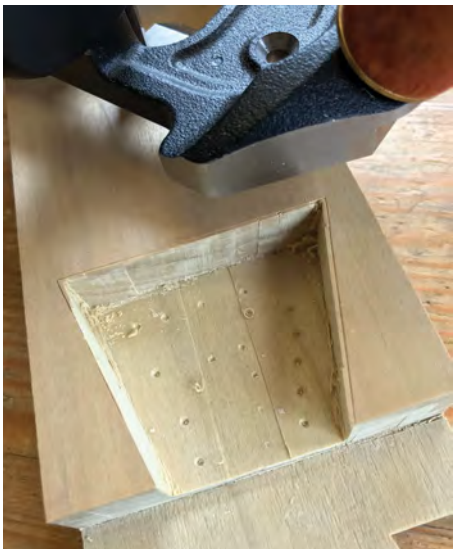
## Allow for the point

It's not absolutely necessary but you may want to set your drill to a depth that accommodates the point of the drill bit in the waste so that the pin prick marks can be removed later.

Leave enough material to accommodate the point of the Forstner bit

# Make light work of levelling

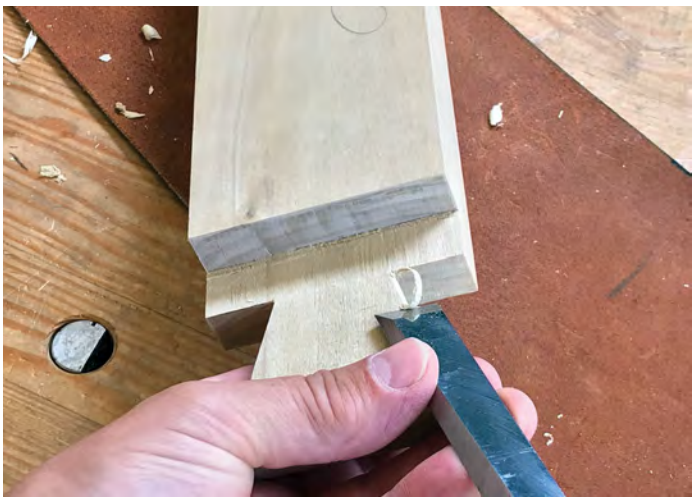
Router planes are very good at removing waste across the grain but can come in trouble when working with the grain. As you can only really excavate the waste from the pin socket in one direction you'll want to make very fine cuts at first to gauge how the wood is likely to respond. A single full width pass straight down the middle followed by a succession of thinner shavings gets the best results and minimises the risk of tearout. The bottom of the socket needs to be flat and level with the adjacent pin. The final stage is to trim into the corners with a skew chisel and around the edge. Before assembling the joint apply a small chamfer to the under side of the pins to avoid damaging the edge of the socket.



Go lightly with the grain to minimise the risk of tearout

Take thinner shavings each side of the initial cut


A pair of skew chisels are great for accessing those tight corners



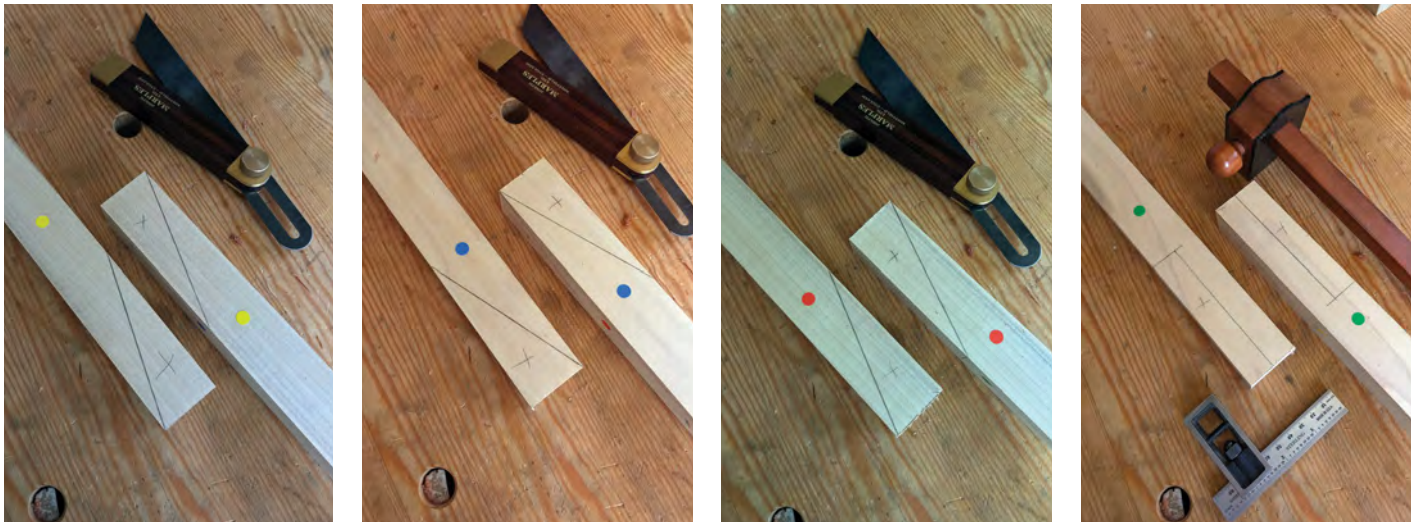
Soften the edge of the pin with a small chamfer to the under side edges

# Lapped bird's mouth splice

This joint combines a couple of principles relating to basic joinery; scarfing and lapping. A scarf joint typically features a matched angle to be cut on the adjoining faces of the mating components, much like the edge joint shown at the beginning of this article. As they progress in complexity they can also feature wedges, locking pins and dowels. Like the double dovetail they are primarily used in timber frame construction. A joint that is lapped consists of one component lying over the other and are generally used at the corners of a frame or where a T section is required. The shape of the lapped sections vary considerably depending on the stresses imposed on the joint. They include mitres, dovetails and 90° overlays. This joint features three scarf cuts and one lapped cut, a simple version would feature two pairs of opposing scarf cuts.

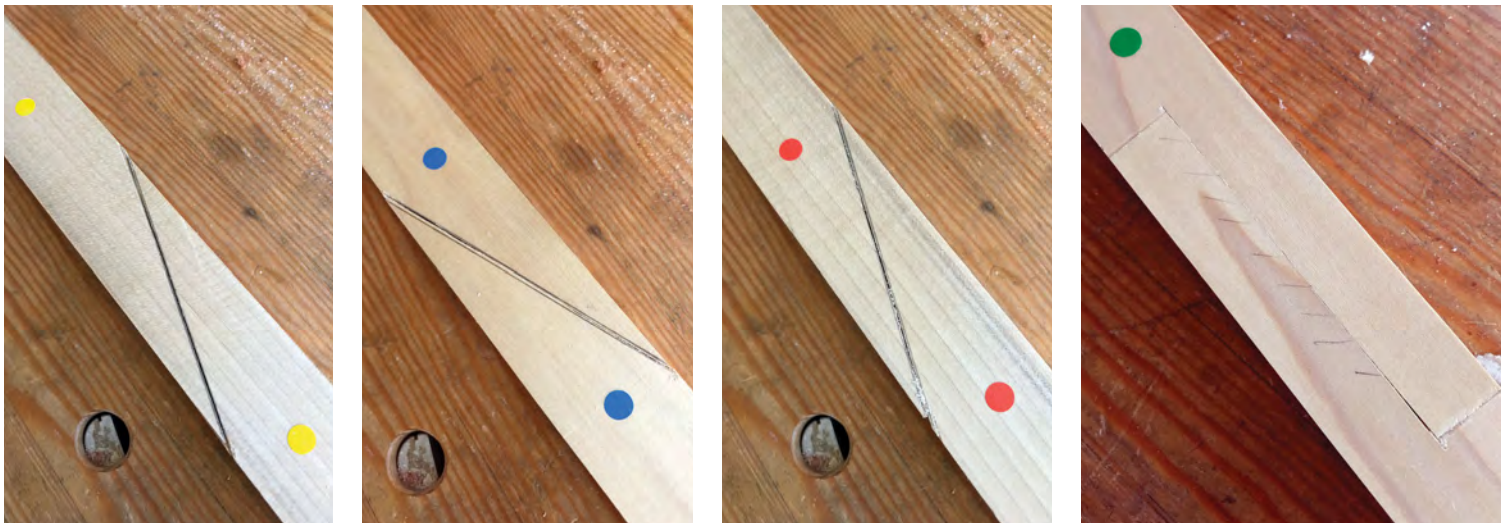
The trick here is to complete the joint straight off the saw with a minimum of re-shaping afterwards. For this you'll need to focus on cutting the exact same distance from your pencil line with every cut. To begin with it doesn't matter if that's one millimetre or two, just keep them equal. It's a good exercise in sawing consistently.

It's important to make sure the angles are all the same so set a sliding bevel to an acute angle and don't adjust it. Identify the mating faces on both components and mark them out as shown in the photographs. In this sequence the first set of marks are the yellow dots, the second blue, the third red etc. rotating the components one quarter turn in the same direction at a time. Tip – identify the waste immediately and mark it before turning the components over. The final side requires a marking gauge and a square to mark the lap.



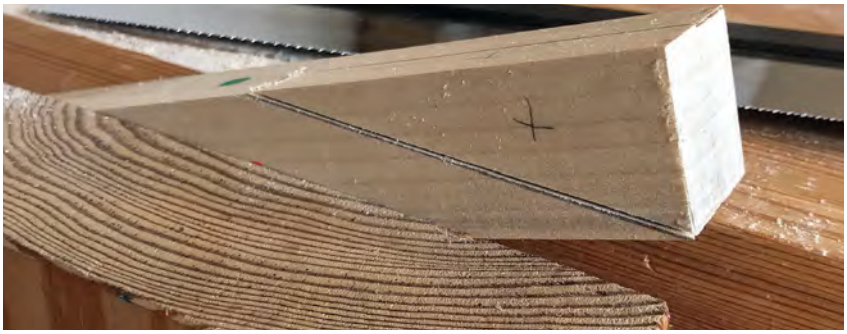
**Mark each component and include the waste**

# Sawing consistently



**Cut consistently close to the line on each joint**

I find that a systematic approach to sawing helps with accuracy, along with having marked the waste sections beforehand. I make all the cuts on one component and don't stop to check anything. The idea is that once my hand–eye coordination is locked in to the line I don't want to risk breaking the relationship by checking the joint every time. Trust your marks and saw with confidence. Positioning the components in the vice so at least one side of the cut is parallel with your bench top will also help. You may need to return to the cuts a second time to remove the waste.



**Angle the components in the vice for reference where you can**

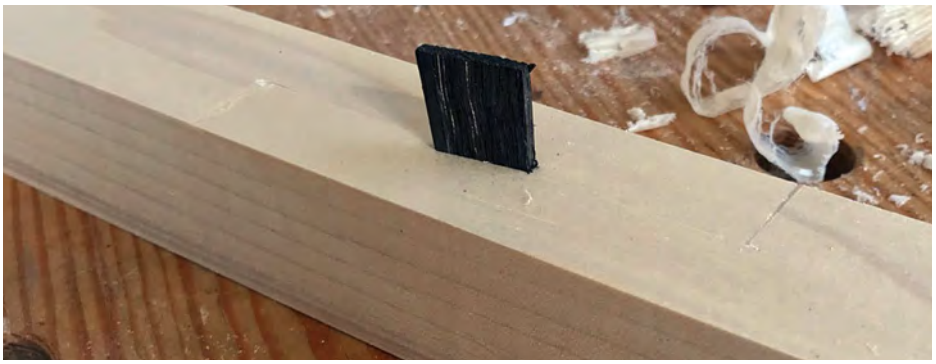
## Final fit

If you need to make adjustments, creep up to a good fit slowly. A shoulder plane will come in handy but be careful not to under cut any of the mating faces. At this stage it's more important for these surfaces to come together cleanly than worrying about the outside edges. Undercutting will show up as gaps when you trim the outer faces of the joint afterwards. The extreme tips of the scarf cuts are very delicate and easy to round off if you're not careful. For this reason try to avoid taking too much material off in this area as the joint will close up when the two parts are knocked together. If anything, aim for a slight hollow in the middle of each joint. When you're happy with it, glue it together and plane the edges flat afterwards.

**Trim the mating surfaces if required**

**Ready for glue**

**Flush up the joint afterwards**



**For a dry or knock-down joint leave the locking pin long**

## Knock-down version

For a knock-down version of this joint you can introduce a locking pin to the lapped part of the joint which prevents any lateral movement. In fact, that's the reason for the lap in the first place. F&C

**Pick a spot in the middle of the lap joint to locate a locking pin**

**Cut a slot across the joint with a chisel to accommodate the locking pin**


# Quality is contagious

**Bridge City Tool Works enjoys a worldwide reputation for designing sophisticated, highly functional woodworking tools. As leading designers in the industry, they have been innovating how to make traditional hand tools for 35 years.**

These tools are crafted to the highest of standards using the finest materials. And once in the hand and in use, a Bridge City tool will give you the ultimate woodworking experience.

Founder John Economaki brings inventive genius and artistry to all his work when designing and creating these inspirational tools.

***"Nothing is more important to a woodworker than his tools… They are as much about design as they are about function… A tool should be as compelling when not in use as it is when serving its intended purpose."***

John Economaki

Axminster has selected some of the most prestigious measuring tools from the Bridge City range, including try squares, mitre squares and multitools.

*in the UK


BRIDGE CITY TOOL WORKS

AXMINSTER Tools & Machinery

Call **0800 371822**, search **axminster.co.uk/bridge-city** or **to feel the quality of these tools visit one of our stores**.

For the complete Axminster experience and to keep up with Skill Centre courses, events, news and much more, browse our website or follow us on social media.

**Axminster • Basingstoke • Cardiff • High Wycombe • North Shields • Nuneaton • Sittingbourne • Warrington**

Trustpilot 9.7/10

# SUBSCRIBE TO OUR OTHER TITLES FROM ONLY £11.48*


From £22.95* (6 issues) Monthly publication

From £22.95* (6 issues) Monthly publication

From £11.48* (3 issues) Bi-monthly publication

Save up to 30% on any of these magazines

+44 (0) 1273 488005

www.thegmcgroup.com/offer/woodwork

IMAGE COURTESY OF SHUTTERSTOCK/REINHOLD LEITNER

Offer expires 22/12/18

scott+sargeant the machinery experts

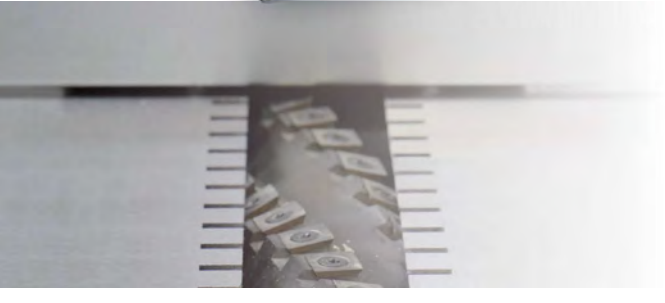
# 260SS Planer
## with Spiral Cutter Block

iTECH 260-SS Planer Thicknesser complte with spiral cutter block and digital readout on thicknesser

Technical Specification:

| | |
|---|---|
| Motor : | 2.0kw 1ph |
| Planing table size : | 1050 x 250mm |
| Maximum planing Capacity : | 250 x 180 mm |
| Maximum cutting depth : | 3mm |
| Feed speed : | 4.8 m/min |
| Packing size : | 1,150x640x950mm |
| Net/gross weight : | 176/ 214kgs |

only £1698



# 310SS Planer
## with Spiral Cutter Block

iTECH 310-SS Planer Thicknesser complte with spiral cutter block and digital readout on thicknesser

Technical Specification:

| | |
|---|---|
| Motor : | 2.2kw 1ph |
| Planing table size : | 1600 x 310mm |
| Maximum planing Capacity : | 310 x 220 mm |
| Maximum cutting depth : | 5 mm |
| Feed speed : | 6 m/min |
| Packing size : | 1,1670 x 680 x 1040 mm |
| Net/gross weight : | 292 / 357 kgs |

only £2670 Inc VAT

Blatchford Rd, Horsham
RH13 5QR
**01403 273000**

scosarg.com

# UNDER THE HAMMER:

# Modern Decorative Design

**We look at some of the best lots from Bonhams' recent auction of decorative design**

Bonhams' Modern Decorative Art + Design auction was held at the Los Angeles salesrooms in April. The sale consisted of 20th century and contemporary ceramics, glassware, rugs, prints, lamps and other accessories. Here, we take a closer look at some of the furniture from the sale.

**$75,000**

**Skyscraper bookcase by Paul T Frankl. This lacquered wood bookcase was made ca. 1926. Frankl's work had a huge effect on the aesthetics of American modernism. Originally trained as an architect, Frankl moved from Austria to the USA in 1914 and began to design furniture and decorative art. He introduced his skyscraper-inspired furniture in the 1920s.**

PHOTOGRAPHS COURTESY OF BONHAMS

## $4000

**French bistro table made in beech, ca. 1970. This table was made for the Drouant restaurant in central Paris.**

## $6000

**Oak cabinet with glazed and enamelled ceramic details. It was made by Jacques Adnet ca. 1945, most probably for la Compagnie des Arts Français, in collaboration with ceramicist Maurice Savin.**

## $3750

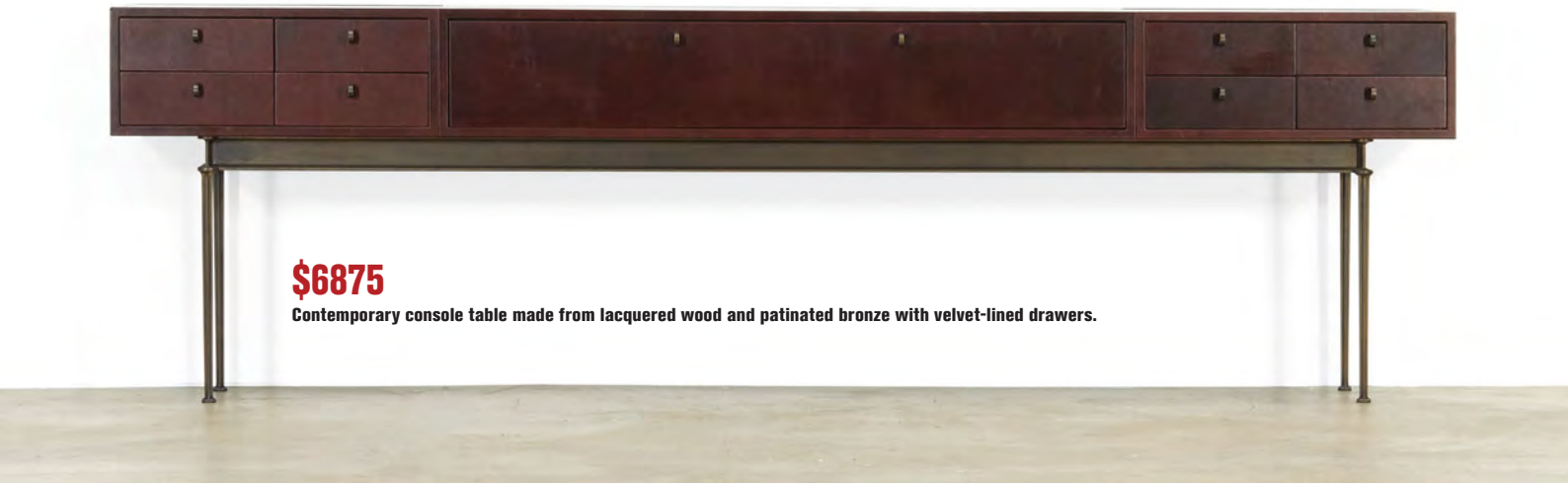
**Python Table made by Harvey Probber ca. 1950. Probber was one of America's leading designers of the mid-20th century, pioneering the 'modular' approach to furnishings. His work is characterised by its use of curved lines and geometric shapes.**

## $5000

**Pair of Swan chairs designed by Arne Jacobsen ca. 1958 and manufactured by Fritz Hansen. Jacobsen originally designed the Swan chair for the lobby and lounge areas of the SAS Royal Hotel, Copenhagen.**

## $2500

**Tank chair designed by Alvar Aalto for Artek. Aalto designed the Tank for the Milan Triennale in 1936.**



**$6875**
**Contemporary console table made from lacquered wood and patinated bronze with velvet-lined drawers.**

**$11,250**
**Three-seat walnut settle made by Sam Maloof ca. 1968. Maloof was described by the Smithsonian Institution as 'America's most renowned contemporary furniture craftsman'.**

**$35,000**
**Double rocking chair in walnut made by Sam Maloof in 2006.**

SEDGWICK WOODWORKING MACHINERY

# SM210 SPINDLE MOULDER

**Building on over forty years' experience in the design and manufacture of spindle moulding machines, our latest entry level machine lives up to its proud heritage, offering outstanding build-quality, performance, reliability and value for money.**


## FEATURES INCLUDE:

- Cast iron horseshoe assembly, bearing housing, rise & fall assembly and motor mounting. 850x650mm table with anti-friction planed finish.
- Fully adjustable precision-ground steel fence plates with movement indicators.
- Interchangeable top spindle - allowing the choice of 30mm and 11/4″ tooling, as well as the flexibility of optional router and tenoning spindles.
- Robust steel cutter guard; shaw guard set with hexagonal mountings and steel ratchet handles; twin dust extraction outlets; automatic braking; emergency footstop and power feed socket.
- Optional Sliding Table; Tenoning Hood; Table Extensions & Ring Fence and Safety Guard.

DESIGNED & MADE IN BRITAIN

**For further details of this & our complete range of woodworking machinery please visit www.sedgwick-machinery.co.uk, or contact us at:**

**M. Sedgwick & Co. Limited, Stanningley Field Close, Leeds LS13 4QG**

**E: admin@sedgwick-machinery.co.uk Tel. 0113 257 0637 Fax. 0113 239 3412**

# A mitred dovetailed plane box

## References

Kirby, Ian. *The complete dovetail.* Linden Publishing, Inc. 2001.

**This heirloom quality box by Charles Mak will inspire you to try your own take on the design and execution of your next dovetail project**

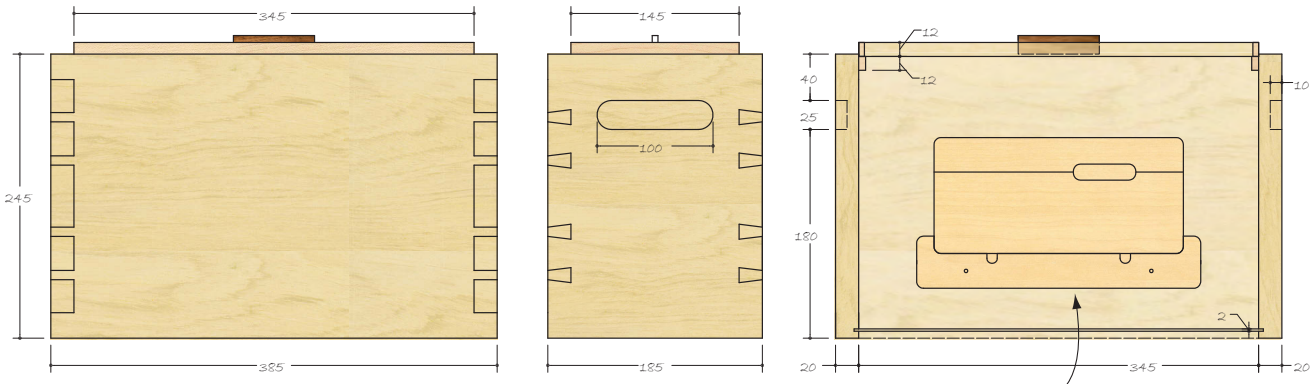
A new combination plane – designed and built to do the job of a Stanley #45 with better precision and user-friendliness – was introduced to the market last autumn. The refined plane made its way to my shop in no time as I had had a few projects that could use some decorative details. After finishing those projects, I was convinced that the new plane deserved a better storage box.

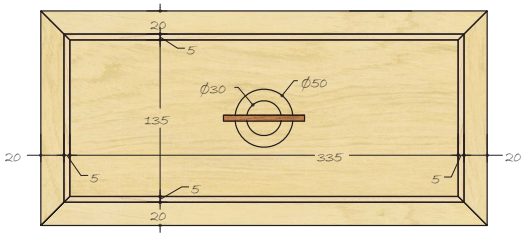
I designed a dedicated box (24.5cm [H] x 18.5cm [W] x 38.5cm [L], maple and sapele) to store the plane and a few other things such as the blade box (see diagram opposite). After several revisions, I settled on a box that features the following:

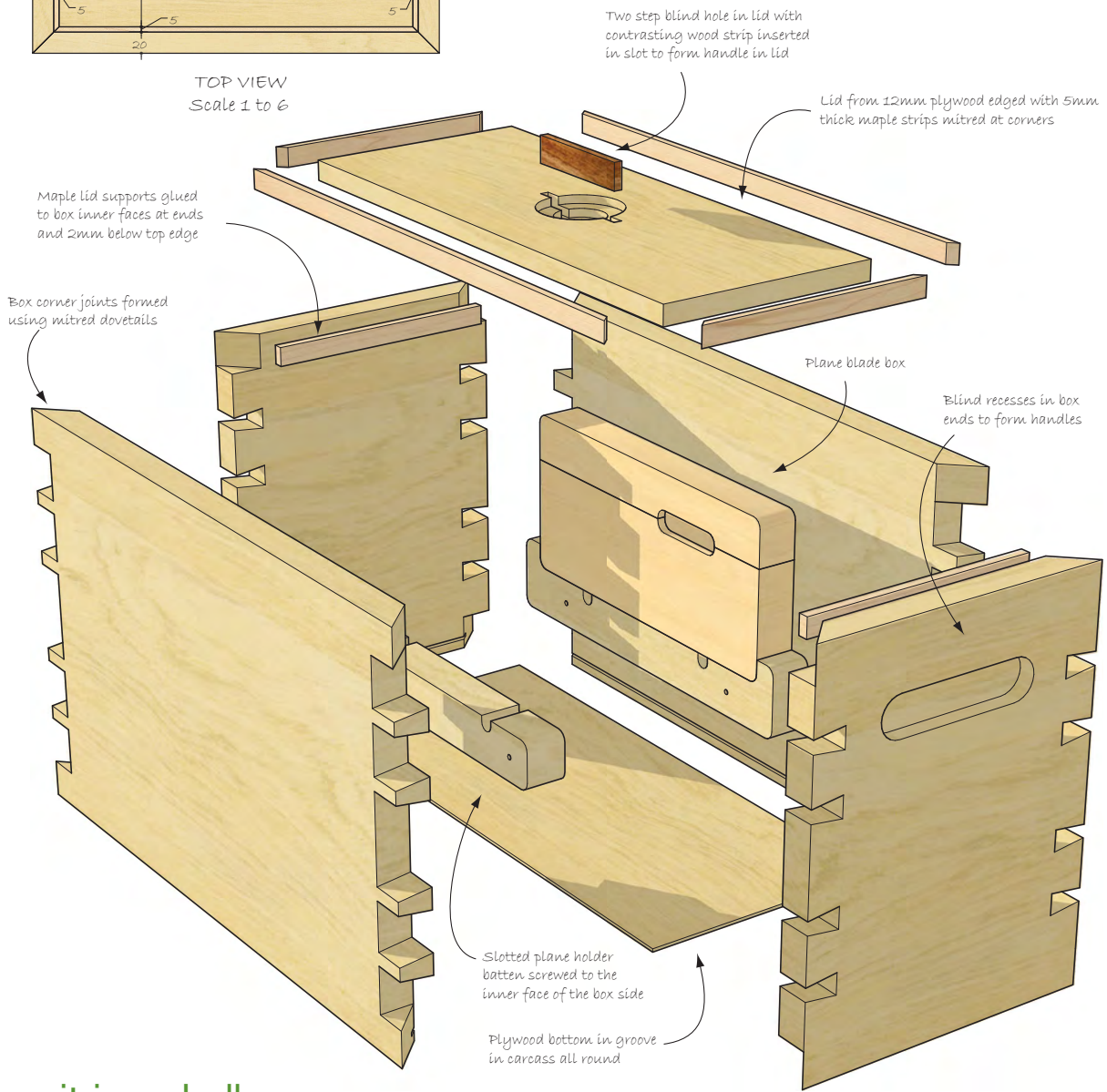
- The box keeps the assembled plane upright, ready for use when taken out with no need for assembly
- For a refined look as well as for added challenges, the dovetail joint is mitred in all corners, top and bottom
- With the mitred joint, only through grooves are needed to house the bottom panel
- As for my coopered keepsake box (*F&C* 238), the front and back form the pin boards for the end grain to stand out in the piece (while the tails on the sides are variably spaced to achieve a symmetrical but handcrafted feel)
- The floating lid, also mitred, is designed to be simple but harmonious and elegant.

PHOTOGRAPHS BY CHARLES MAK

**The lid's mitred corners line up nicely in harmony with the mitred shoulders**




## The mitring challenge

A mitred dovetail does look daunting to cut even to a seasoned dovetailer. The common approach I have seen is to cut the dovetails, saw the mitres, pare them and kerf the two mitres together through a series of saw cuts until the joint closes up. This trial-and-error process sometimes leaves a rough joint edge from the sawing, or worse, a gappy joint. If you have eight joints, rather than just one corner, to mitre and fit as is the case in this box, the precision challenge becomes obvious.

I use a different technique, and as you will see, the trick for precision results lies in laying out the mitres without guesswork. The first step to this elegant joint is, of course, to start with the laying out of the tails (or the pins if you cut pins first).

## Setting the marking gauge

As explained in my previous article ('Cutting dovetails – proud, flush or shy?', *F&C* 215), I always set my marking gauge less than the thickness of the pin board so the tails will sit a hair proud of the pins. This approach dispenses with the use of any odd-shaped cauls in the assembly stage. Once dried, you plane everything to the end grain.

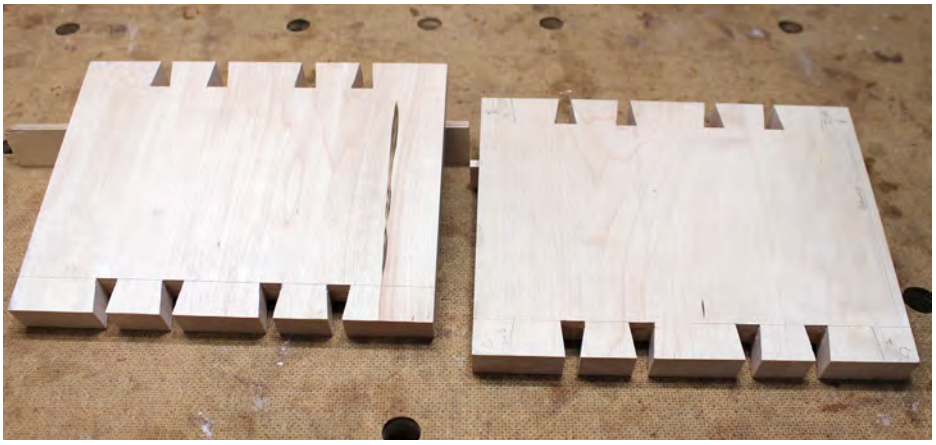
**Set the gauge slightly less than the thickness of the board so the pin's end grain is a hair below the tail's surface when assembled**

## Marking out the tails

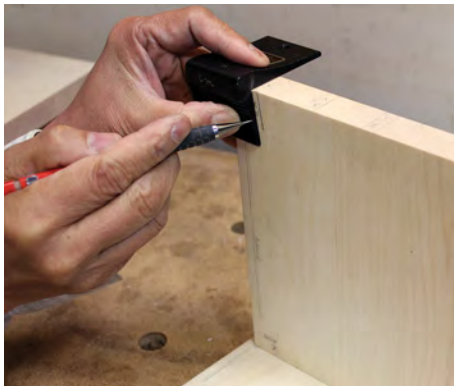
First, don't start off marking your tail boards as usual (I learned that by mistake!). If you do, you will have scribed and left some unnecessary shoulder lines on the top edges. Laying out a mitred dovetail is different in two aspects:

i) When you lay out the baselines, don't scribe any shoulder lines on the top and bottom edges of the boards. Leave those edges alone for the mitre lines that will be scribed – later.

ii) Second, lay out a half tail instead of a half pin at the top and bottom edges of the tail board. When laying out the slopes for the outer edges, mark them on the inside faces. This is critical as the 45° kerf must be sawn on the inside of the workpiece. With the layout done, let's do some cutting.



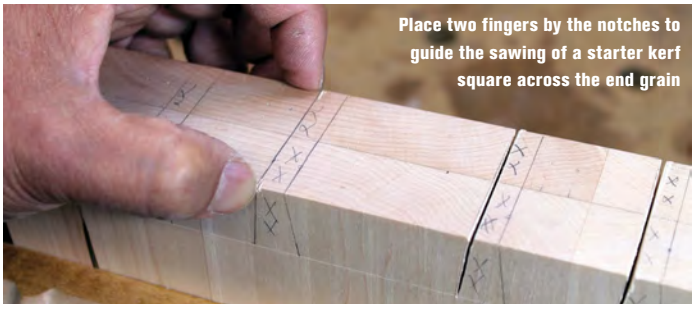
**To mitre a dovetail, mark a half tail instead of a half pin at the top and bottom edges of the tail board. The middle tails are sized larger than the rest by design to give a truly bespoke look**



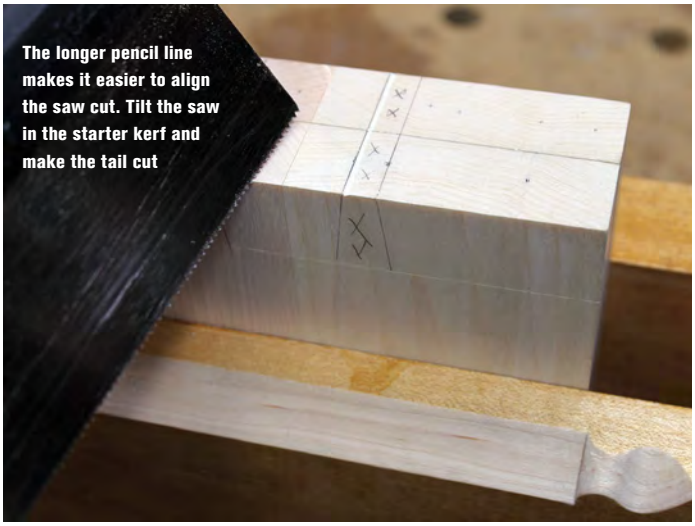
**The outer slopes are marked on the inside because the 45° kerfs are cut on the inside**

## Cutting the tails

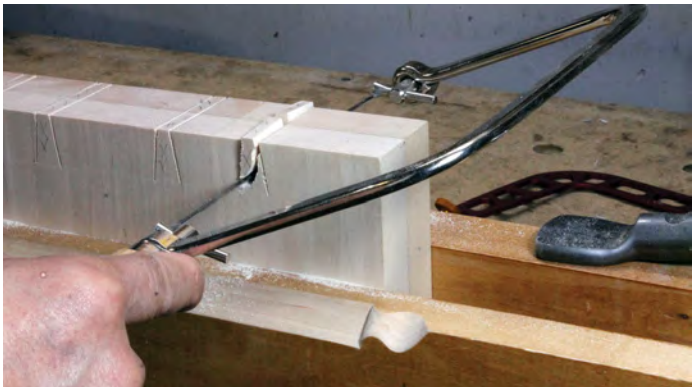
Gang sawing is my way of dovetailing. Some people struggle with sawing square across the end grain. Try this: saw two small notches by the line on the end grain at the front and back edges, and place two fingers against the notches to guide the saw. Make a shallow kerf square across end grain, tilt the saw to match the slope and saw down. Remove the bulk of waste in the sockets with a coping saw and finish the tails with paring or chopping. Now you are ready for the mitre challenge.



**Place two fingers by the notches to guide the sawing of a starter kerf square across the end grain**



**The longer pencil line makes it easier to align the saw cut. Tilt the saw in the starter kerf and make the tail cut**



**Use a coping saw to cut in pull strokes, as pull-stroking tensions the blades, and if the blade breaks, it won't injure your fingers**

## Laying out the mitres

This is the step that will set you apart from many others who have tried this tricky joint before you. Most woodworkers would use a combination square to scribe the mitre angles on the edges. That method is only as accurate as your eyes' ability to position the square, and you have to maintain that accuracy twice for every corner!

I use a foolproof method – attributed to Ian Kirby, a British-trained furniture designer and teacher – that avoids guesswork and delivers accurate results. To use his technique, you'll need a double mitre square (a modest investment of about £12), in addition to your usual marking knife.

To start, clamp the tail board horizontal in the vice with the inside face towards you and place the tip of your knife in the baseline on the inside face close to the edge. Rest the mitre square on the edge and slide it until the base touches the knife. Lastly, scribe the mitre line on the edge. This method lays out the mitres with precision and reliability based on the shoulder line – and no guesswork. After you scribe all the mitres, bring out your favourite dovetail saw.

**Register the knife tip in the shoulder line on the inside and near the edge**

**Butt the mitre square's base against the tip of the knife**

**Scribe the mitre line on the edge in three strokes with progressive force**


**I labelled the waste to remind myself to not make the 45° cut right through the board**

## Cutting the mitres

I have tried two different methods to kerf-fit the mitred dovetails in this project. In the first method, you'll mitre the half tail by sawing close to the line and then paring to the line freehand. First, clamp the work vertically in the vice with the inside face towards you, and saw a 45° kerf on the tail line. Turn the board on edge and saw down the mitre close to the line.

Instead of trimming the full mitre in one go, Kirby's technique is to vertically pare the mitre a little away from the face edge. The pared flat then serves as a guide for the chisel to slice off the remaining small waste at the edge. This two-step method gives you better control of your cuts.

In the second method, the mitre is sawn on the waste side of the line as before, but the mitre is cleaned up by paring on a mitre block. The mitring results depend on the mitre block you use, so spend the necessary effort to make your mitre block dead accurate.

**Cut a 45° kerf on the half tail down to the shoulder line, stopping just short of the outside edge**

**Saw on the waste side of the mitre line on the top edge until the waste falls away**

Pencil a line about 3mm away from the front edge and remove the waste up to the pencil line

Register the chisel against the pared flat and trim off the last bit of waste in the final stroke

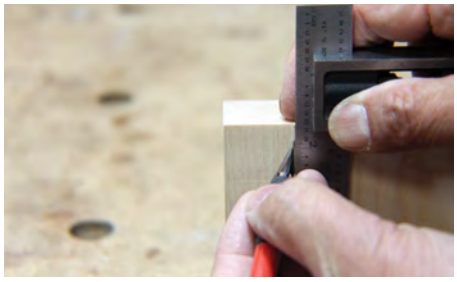

Clamp the mitre block at the shoulder line and pare with the chisel flat on the block. Take a thin cut each time if the waste is too much to remove in one paring

After sawing a block close to a mitre bevel, I held the block in the mitre jack and planed the block's face to a perfect mitre

## Transferring the tails

As usual, I transferred the tails to the pin boards using a dovetail alignment board. To scribe the mitre on the half pin, use a sharp pointy knife so it can reach the far corner inside the enclosed space on the end grain. Then on the inside face of the pin board, align a square with the knife mark on the end grain and mark a vertical line down to the baseline for cutting the 45° kerf. It cannot be emphasised enough that the line must be marked on the inside face of the board, and the 45° kerf made stopping short of the outside corner of the end grain.

Transfer the outer tail line onto the pin's end grain, holding the knife tight to the tail face



Aligned with the knife mark on the end grain, run a vertical line for the 45° kerf cut

## Finishing the pins

The full pins are cut as usual, followed by joint-fitting. To locate the high spots, rub pencil on the leading edges of the tails before dry-fitting. Stop hammering when the test-fit starts to bind and remove the pin board to see where to pare. When paring, leave the show edges intact and trim the centre portion of the waste first to prevent overdoing the fix. I also pare across the grain to avoid following the grain, instead of paring down. Finally, learn to make the sawcut-to-sawcut joinery advocated by Alan Peters to keep your paring work to a minimum.

The half pins are mitred in the same manner as the mitred tails where the 45° kerf is cut on the inside face down to the shoulder line, stopping short of the corner of the end grain. In the final step, the mitre on the edge is then sawn and pared clean freehand or with a mitre block.

ABOVE: Trim off the excess as highlighted by the pencil mark left on the sides of the pins

RIGHT: Use a hammer for dry-fitting, listening to the tap sound for resistance or seating

## Cutting the recessed handle

I chose a recessed cut-out style for the handles for better dust protection and an added feel of craftsmanship. To make the recessed handle, drill out the waste and clean the bottom with a router plane or chisel.

**LEFT: I blunted the tip of an old Forstner bit to leave a lighter centre point mark**
**ABOVE: To clean up the recess bottom, hold a bench chisel bevel down to pare with the grain**

## Cut the bottom grooves

**Plough grooves on the inside faces and reference the fence against the bottom edges**

The beauty of a mitred dovetail lies not only in the clean corners, but also in its concealment of the panel grooves. In practice, it means that you have no stopped grooves to cut. Naturally, I cut all the grooves with my new combination plane. The techniques for using a combination plane are similar to using a plough plane (see *F&C* 202, 'Taming the plough' for instructions).

## Making the lid

**The shooting board was used for squaring the plywood core and mitring the edgings – with laser precision**

After experimenting with a few designs, I settled with a lid that features a handle with a two-step cut-out. A little chisel work goes a long way fitting the handle into the cut-out. To deal with potential wood movement, the lid, sized slightly smaller than the box's opening, is made of plywood edge-banded with maple strips. The lid supports are narrow maple strips glued to the inside faces of the sides, about 2mm from the top edges.

## Making the tool holders

**The user manual is tucked away under the cork sheet, and the box still has room for other future add-ons**

To keep the plane from shifting around when the box is carried, I screwed slotted battens as a rest to either side to hold the plane upright. One of the battens also has a notch cut out on the top to keep the blade box. In its final configuration, the box will have self-adhesive cord pads added to the bottom, and, to protect the content against moisture in the air, a silica gel dehumidifier placed inside.

## Assembly and finishing

In assembling, I tried a glue-up trick gleaned from American furniture maker Chris Becksvoort: engage the dovetail joint slightly so you can apply glue with the box in place. Sign and date the piece, and it is ready for the finishing room.

This kind of box can also be used to hold books and magazines, or as a kindling box. No matter what plans you may have for your box, you will draw immense pleasure from knowing that, with your neat mitre and lid work, it is not just another dovetailed box you have cut! *F&C*

**Dry-fitting and checking for squareness are instrumental to a glue-up success**

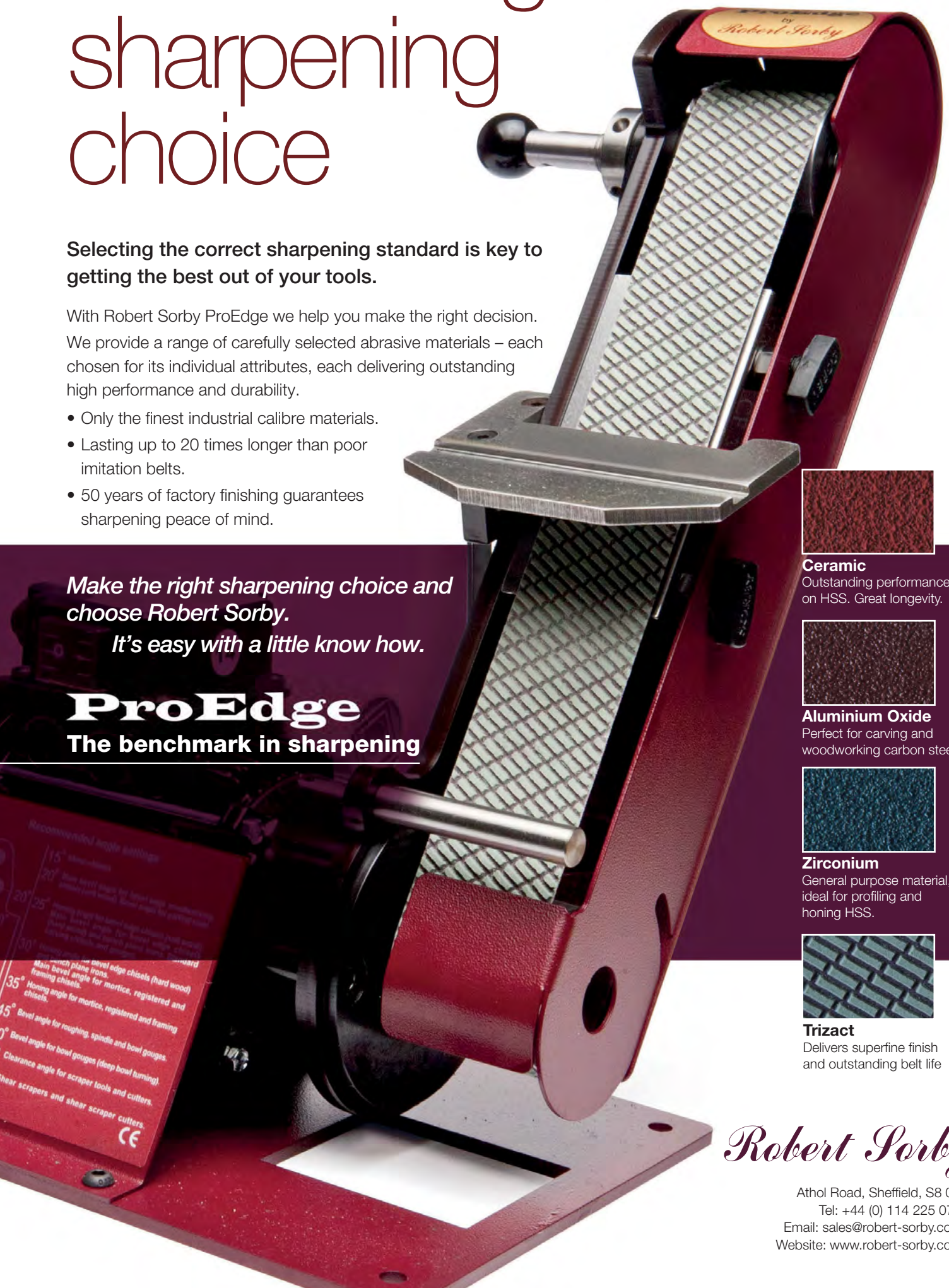
**The retractable vinyl window shade protects the workbench from oil or stain drips**

# Make the right sharpening choice

**Selecting the correct sharpening standard is key to getting the best out of your tools.**

With Robert Sorby ProEdge we help you make the right decision. We provide a range of carefully selected abrasive materials – each chosen for its individual attributes, each delivering outstanding high performance and durability.

- Only the finest industrial calibre materials.
- Lasting up to 20 times longer than poor imitation belts.
- 50 years of factory finishing guarantees sharpening peace of mind.




*Make the right sharpening choice and choose Robert Sorby.*
*It's easy with a little know how.*

**ProEdge**
**The benchmark in sharpening**



**Ceramic**
Outstanding performance on HSS. Great longevity.



**Aluminium Oxide**
Perfect for carving and woodworking carbon steels.



**Zirconium**
General purpose material, ideal for profiling and honing HSS.



**Trizact**
Delivers superfine finish and outstanding belt life

Robert Sorby

Athol Road, Sheffield, S8 0PA
Tel: +44 (0) 114 225 0700
Email: sales@robert-sorby.co.uk
Website: www.robert-sorby.co.uk

# Bevel and clearance angle geometry in hand planes

**Using some simple cardboard cut-outs, Terry Gordon shows what occurs at the blade edge and how it affects your plane's performance**

## Resources

**For information relating to the raw data used in this article use the following websites:**

- bladetest.infillplane.com/html/wear_profiles.html
- www3.telus.net/BrentBeach/Sharpen/index.html

For guidance on maintaining the correct bevel angle and some simple experiments to help you better understand clearance angle, visit: www.hntgordon.com.au

This article first appeared in *Australian Wood Review*

PHOTOGRAPHS BY TERRY GORDON

The bevel angle you put on your plane blade makes a big difference to the effort required to plane wood and how long that blade will remain sharp enough to give you a nice smooth surface. This is the one angle in a plane that woodworkers control and how you do it affects the performance of your plane. This article will also look at the consequences for clearance angle in your plane as the blade edge goes from sharp to blunt. This also affects the performance of your plane, which is not generally well understood or written about.

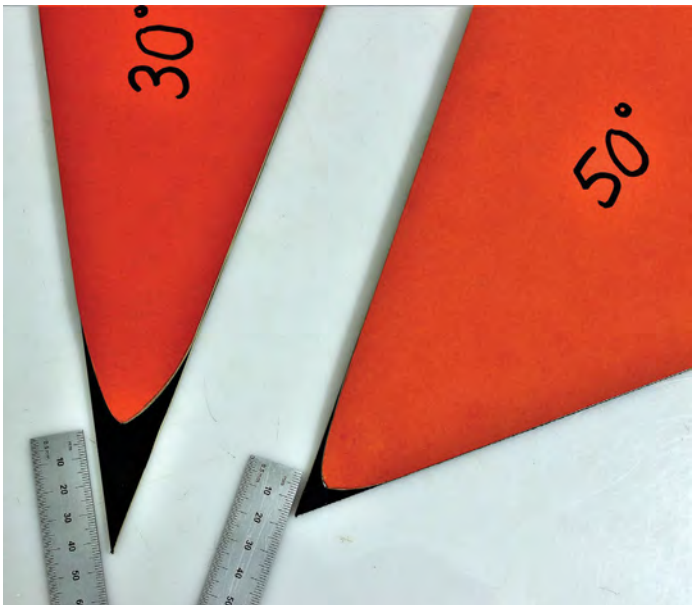
# Bevel angle

What is the bevel angle? As far as the function of your blade goes, it is the final bevel you put on the blade. So if you put a 45° micro bevel on a 30° primary bevel, your bevel angle is 45°, irrespective of how small the micro bevel is.

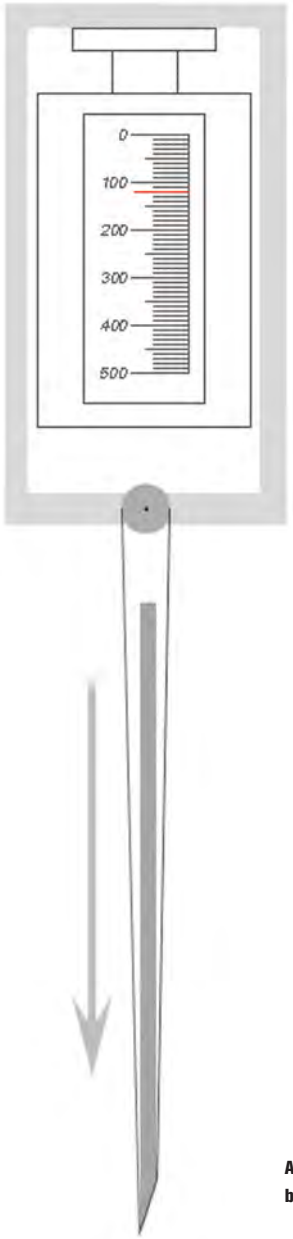
What is the optimum bevel angle for a plane blade? The correct answer is 'as acute as possible without the blade edge chipping in use'. I will give a more practical answer later after we look at some simple geometry, a sharpness test and some comprehensive blade testing results by two woodworkers, Steve Elliot and Brent Beach, who should be congratulated on their independent significant bodies of work.

The photo on the right shows a blade bevel sharpened at 30° (in black) overlaid with a blade bevel that would be considered blunt (in red) and another blade sharpened at 50° with the blunt blade overlaid. The shape of the rounded-over blunt edge represented by the red cardboard cut-outs was extracted from Steve Elliot's website where he took side-on magnified photos of a blade bevel after planing 800 lineal feet (245 lineal metres) of cherry wood. Both red cardboard cut-outs showing the blunt edge have been made to exactly the same size and shape at the edge so you can compare the amount of usable sharp edge on a 30° bevel and a 50° bevel.

From these magnified representations you can clearly see that a 30° bevel has three times the usable sharp edge when compared to the 50° bevel. The edge retention benefits of the 30° bevel are obvious and should be very good motivation for woodworkers to keep their blade bevels as acute as possible if they want to minimise the amount of sharpening they do and to improve the performance of their plane.




**Blade bevels sharpened at 30° and 50°**




**An illustration of Steve Elliot's blade sharpness testing device**

## Sharpening the blade

Deciding when a blade is blunt is a subjective call by woodworkers but Steve Elliot took this to another level and quantified it by using a sharpness testing device. This device can accurately measure the force required for a blade edge to cut a piece of string. This gave him the means to make objective assessments of the optimum bevel angle that should be used in a plane and accurate assessments of when a blade edge is blunt. In essence, the more acute the blade bevel is the less force is required to cut the string, and the blunter the blade edge gets, the force required to cut the string increases. His results can be read in full on his website, but for planing American cherry he concluded a 31° bevel (including any micro bevel) gives the best results. When planing cherry he made the observation that going less than 31° would produce chipping at the blade edge and to go beyond 31° reduces the amount of wood in lineal feet (metres) that can be planed before the blade is blunt.

For woods harder or softer than cherry the optimum bevel angle may change slightly but if you develop a rule whereby you make plane bevels 'as acute as possible without the blade edge chipping in use' you will always be sharpening your bevel at the correct angle to get the best performance out of a sharp blade.

## Blade steel

The type and quality of the steel in blades also affects edge holding. Steve Elliot's and Brent Beach's websites have lots of information about the different types of steels they used in their testing and how they sharpened them for the tests. It is definitely worth reading and you can judge for yourself which steels are the best from an edge retention and ease of sharpening perspective.

From my experience, if you have a reputable brand of plane, the blade steel will serve you well. To get the best performance from your plane you simply have to sharpen the blade bevel at the optimum angle, which for most woodworkers will be 31°. This is because you have maximised the usable sharp edge on your blade. To make this simple to remember, I grind and hone a 30° primary bevel and finish with a 1° micro bevel on fine grit stones.

# Clearance angle

As you can see in the cardboard cut-outs, the bevel angle at the blade tip is constantly changing as the blade goes from sharp to blunt. This also changes the clearance angle geometry behind the blade, which has the most profound effect on the performance of planes of various designs.

The angular space between the blade and the wood being planed is called the clearance angle. What is the optimum clearance angle? The correct answer is, positive clearance (any angle greater than zero) until the blade is blunt. As the bevel angle changes, so too does the clearance angle which has serious consequences on the performance of your plane if the clearance angle goes below zero.

A sharp blade profile using a 30° bevel with 12° clearance above the wood will work very well as it has positive clearance with a freshly

sharpened blade. When the same blade is blunt, when the edge of the blade (represented by the black line in the photo) is in a position to cut wood there is a large curved area below the wood surface being planed, this is what is referred to as negative clearance.

Unless you can force this worn curved surface down into the wood to allow the edge to re-engage, this plane will not take a shaving. In practice, you may have the strength to make this blade take a shaving on a narrow piece of softwood but you will struggle to make it cut a full width shaving on a harder piece of wood. Most likely, before you get to this stage you would assess the blade as blunt and resharpen. But in essence you will have resharpened because you have lost clearance and not because your blade is actually blunt.

A sharp blade profile using a 30° bevel with 30° of clearance above the wood will work very well as it has positive clearance. As you can see, when this blade becomes blunt, a small negative clearance angle develops and the plane's performance will start to degrade because of this. However, by starting with 30° of clearance the blade is basically blunt at about the same time the blade loses clearance so you have maximised the life of the edge before you need to resharpen.

Comparing the plane that started with 12° clearance to the plane with 30° clearance you can see for the same amount of planing, the lower clearance angle plane will have its performance degraded by loss of clearance about three times faster than the high clearance angle plane. The important concept to take from these profiles is: the more clearance angle you start with, the longer you can plane before the constantly changing blade edge develops a negative clearance, which in turn will degrade the performance of your plane. If your blade edge becomes blunt at about the same time as it goes to a negative clearance angle, you can say that you started with the optimum clearance angle and have minimised the amount of sharpening you do.

**Freshly sharpened blade with 12° positive clearance**

**Freshly sharpened blade with 30° positive clearance**

**A blunt blade with significant negative clearance**

**A blunt blade with small negative clearance**

## Practical applications of plane geometry

So what does this all mean to the woodworker? If you use planes to do small chamfers, narrow edges and end grain in softwoods you may have never noticed any degrade in your plane's performance, simply because you can easily overpower the loss of clearance in these circumstances. However, if you use planes to smooth large flat surfaces (particularly in harder woods) you will have most likely come across this issue, e.g. your plane would not willingly take a shaving after a short period of planing. I hope you didn't self-doubt and conclude you were doing something wrong. If you are constantly sharpening your blade to make your plane perform well, you don't have a blade quality issue you have either a clearance angle issue where the design of your plane is probably not suited to the task or you are allowing your bevel angle to get well over 31°.

Twenty-five years ago, when I planed my first large surface which required taking many full width shavings, I was confused about the plane's performance as the blade went from sharp to blunt. At first I was getting nice full-width shavings, the plane was easy to push and I had no trouble maintaining a continuous shaving. Then I had to start to push down on the plane to make it take a continuous shaving, but it was still taking a nice shaving indicating the blade was still sharp. The longer I planed the more difficult it got to take a shaving, so I was constantly resharpening my blade. This was a frustrating sequence of events, particularly when the grain would tear as I pushed down harder. I didn't know if it was me or the plane, but in any case I went out and purchased a belt sander. This made it worse, but that is another story.

Five years later while on a military deployment to Malaysia I was introduced to wooden planes with a higher blade pitch that had 30° clearance angle compared to my original plane, which had 15° of clearance. These high pitch planes didn't have the issue of having to push down hard to make the blade take a full width shaving even though I sharpened my blades the same way. This was great and I didn't give a second thought as to the 'why', I was just enjoying my woodwork so much more and I didn't have to sharpen my blade all the time.

Fast forward to about 2013, I had a wealth of experience in making and using planes but I never really looked into why my first plane performed the way it did, until people started to ask me about the same issues I had as a beginner woodworker. During this time I came across the independent blade testing carried out by Steve Elliot and Brent Beach. After studying their work I was able to fully understand why my first plane gave me so much grief and why the high 60° blade pitch planes I was introduced to in Malaysia solved my problems. And more importantly I could explain this to woodworkers having the same issues.

Lastly, some practical advice if you plan on making furniture using hand planes. Take control of what you can and that is to regularly re-grind your blade bevel at 30° and hone the sharp edge to 31°. Irrespective of which type of plane you use, if you are getting the desired results for what you are making at the moment then just keep on doing it. Happy days! On the other hand if you take on more demanding projects and you start having issues with your plane's performance (e.g. tear-out and having to push down to take a shaving), then understanding the geometry of bevel and clearance angles will prevent self-doubt and will lead you to sharpening better and/or selecting a plane suited to the task. F&C

# Long board support

**Miranda Salmon has a neat and stable way to support long timber at the right height**


PHOTOGRAPHS BY MIRANDA SALMON

I was getting fed up of finding ways to support timber while edge planing on the bench and decided there must be a better way! Looking around the workshop I spotted some spare twin-slot shelf support and realised it would be both more secure and give a wider option of heights.

I had also been frustrated with my vice cheek being proud of the front of the bench, therefore not giving timber much lateral support, so decided to solve both problems at once. A full-length bench cheek, with a groove on the underside for a tongue on the top of the upright creates a secure temporary joint.

**The set-up in action**


**The bracket and upright**

PHOTOGRAPHS BY MIRANDA SALMON

## Method

When choosing and thicknessing your timber remember that the upright timber needs to both accommodate the thickness of the metal bracket with a suitable depth behind it for strength and fixing; and allow for any overhang of the bench top to the frame. I added extra depth and strength by adding a piece of ply to the back (with a rebate to fit around my drawer front!).

Create and fit a long bench cheek to suit your bench with a 5mm x 5mm groove (or similar) routed in the bottom edge. Remember to include enough for any end vice you also have. On the end vice you may want to make it wider or add an extra piece to enable you to clamp longer pieces to it for added stability.

Create a full width tenon on the top of the timber upright to match the slot and to bring both front faces into line. Rout a groove into the middle of the front of the upright timber just wide and deep enough to fit a piece of standard twin-slot shelving cut to your desired length – available online or from DIY stores if you don't have any odd bits lying around.

**Groove the underside of the full-length bench cheek and add an extra piece or two to the end vice**

**The matching tongue on the top of the upright**

## Securing the bottom of the upright: initial design

You need to ensure that the dowel in the back of the base of the upright timber is long enough to be secure and is accurately in line with the holes in the bottom rail of the bench. However, as you need to fit the top tenon in first this will mean that the 'radius' from the top of the upright to the end of the dowel will be longer than that to the point at which it meets the back of the upright, by about 1mm. To make this work create a slight bevel on the dowel's bottom edge, allowing it to 'rock' into the dowel holes drilled along the bottom rail of the bench. Ensure the dowel is lined up accurately and is a tight fit.

You can drill as many holes as you prefer though I've found that 4–5 along the length gives as much flexibility as I need. This push fit has generally been fine though those among you with a more engineering mind might have fun developing a sprung dowel system for more security. Alternatively, a rail screwed along the bottom may also help.

**Holes along the bottom bench rail to accept the dowel**

### New design

I've recently come up with a potentially better method for the bottom fixing which I have yet to implement. Create a long rail to fit along the front of the bottom of the bench frame, rout a rounded groove along the length and fit it about 1mm below where the base of the upright will come. In the base of the upright fit one – or perhaps two – ball bearing catches. This should then hold the base firmly in place.

## Bracket

I cut down a standard short twin-slot bracket, so it didn't stick out too far. I cut, fitted and glued a section of timber into the hollow so I could securely fit a thinner piece of timber and cork on the top. Remember that there needs to be space left for the fork to lift to slot into the upright. I've therefore also made an ancillary piece that sits over the bracket to bridge the gap for thinner pieces of timber.

**Remember to allow for the tilt required to fit the bracket**

**The bracket and ancillary 'bridge'**

## Clamping the timber to be planed

For extra stability and to reduce 'wobble' when planing a longer or wider piece of timber, fix a second upright so it just overhangs the outer side of the leg of the bench to clamp the timber too. F&C

**The extra upright to clamp the timber**

**In use**

# Building a furniture business

**In this extract from *Guild News*, Andrew Ward tells Nigel Huddleston how his high-end furniture-making company has evolved**

It's been a rollercoaster ride, but you get the feeling from talking to Andrew Ward that after 34 years in the trade his company, Jacob Furniture UK, is getting close to being the finished article. 'We've been through the recession and the trauma of getting over it by doing every type of work we've been asked to do,' says Andrew, 'but now we're narrowing down our services to what we specialise in, which is high-end bespoke furniture.'

Specifically, the high-end, Cheshire-based furniture manufacturer is branching out with its own stunning, contemporary and traditional ranges to supplement the established side of the business in bespoke cabinetmaking and upholstery.

And when he says Jacob Furniture is called 'bespoke', it really is. 'We find it very difficult to get people to understand what we do,' he says. 'A lot of companies describe themselves as bespoke furniture makers when really they're offering the same piece of furniture in different fabrics. 'With a chair from us, for example, the seat will be as deep or as high as you want it, with your choice of interior filling, based on your comfort requirements. Every piece of furniture we supply is made from start to finish, by us at our workshops in Cheshire.'

## The early years

Andrew studied furniture making and design at the Manchester School of Furniture: 'There were only 12 students in the year and six lecturers. I was very lucky really for the one-on-one teaching. It was a very traditional course in hand cabinetmaking and traditional upholstery using horse hair, hand-sewn upholstery and traditional polishing. The first year we studied English and Irish designers, and then had three years doing restoration work. The teachers were all old craftsmen who had worked in the fields of cabinet making, traditional upholstery, French polishing and restoration.'

When he left in 1983 he set up his first business with a friend, buying up antiques in need of some TLC from

‘With a chair from us, for example, the seat can be as deep or as high as you want it, with your choice of interior filling, based on your comfort requirements.’

big fairs around the country, restoring them and selling them on. ‘Unless you were at a really high level the antique market just died in the late 1990s and it was hard to make a living, so I reverted back to making furniture and the business grew from there.’

What has since become Jacob Furniture UK – named after his son – began life in a 20ft shed in Andrew’s back garden. ‘I started off working for the trade, for interior designers, which is still a lot of what we do now,’ he says. The business had a major jolt with the global financial crisis of the late 2000s. ‘We’d just invested £240,000 to buy new machinery, but it was about a month before the Icelandic bank went under and that put us under tremendous pressure. We struggled through but managed to keep the wolf from the door and our heads above water.’ He goes on to say: ‘In the past, we’ve taken on work which we hadn’t done before, but it meant we have learned all manner of new skills. We now use an array of materials, Perspex, metals, laminates, glass and woods that we wouldn’t have dreamed of using before.’

It took until this year for the company to join The Guild of Master Craftsmen. Andrew says the appeal was ‘recognition by other people of what we as a company produce.’ He adds: ‘We were thinking about how we could get realisation for true bespoke furniture making and to believe what we say is what we do. Often clients find it difficult to visualise a piece of furniture, when it is not right there in front of them’

## Traditional and contemporary work

At the start, Andrew says, his work was very traditional in style and materials, but times have changed, and both the bespoke work and their own designs now fuse the old and the new. ‘When we started, MDF a was word that people would turn their noses up at, whereas now we use it on a regular basis, due to its ideal properties.’

Among the first of the company’s own designs is the Domeba

range, comprising a sofa and armchair with a teardrop shape for its arms that's carried through to the platform of a footstool. 'We want to push forward into creating art furniture, pure one-off pieces,' says Andrew. 'We want to forge our own branding and image, to become known for making this particular type of "off-the-wall" furniture. We're aiming high end, keeping quality as our main priority.' He continues: 'My son Jacob and I encountered the owner of acres of forest in Wales. After visiting it, we purchased a large amount of oak, of which we have made several pieces of furniture, and have now begun designing others. We have combined these natural materials with man-made to produce art pieces, bespoke in the true sense of the word.'

While a contemporary influence is strong in the designs it's the UK's long tradition of cabinetmaking from which Andrew draws most inspiration. 'I love the English walnut period of the early 18th century and my tastes have changed over the years, so I love Art Deco and the Arts & Crafts movement as well.'

## The future

The company has a team of five and is looking to add more staff as they grow. This includes Jacob, the now grown-up boy the firm is named after. 'He started in the workshops, learning with me from the age of six,' says Andrew. Recently he has trained in photography and CAD drawing with 3D design, to move with modern times. Andrew continues: 'I still use a drawing board, old school. I design working drawings and pencil sketches, then Jacob converts them to 3D designs and renders them for customers to help visualise the design.'

The range of skills in the business and its flexibility in approach to design and materials has led to some unusual commissions, including sofas and tables for branches of a major high street retailer, furniture for a steam ship, silver thrones for those who can't be named and magic furniture for a magician.

The spectrum of modern materials to work with means it's a constant process of learning and exploration for Andrew and his team. 'We have come across an innovative technology to adhere Perspex to fabrics without any adhesive,' he says. It means we'll be able to make beautiful panelling and apply it into furniture and wall art.' He goes on to tell us: 'We're also working with solid surface products, laminates, veneers and exquisite fabrics from around the world enabling us to produce beautiful bespoke furniture at its highest level. '

**Jacob Furniture UK**
**01925 419121**
**jacobuk.co.uk**

The Guild has a long tradition of supporting Masters in their crafts in over 400 trades, services and professions. To find a Guild approved Craftsman in your area or if you could benefit from being part of an established brand such as the Guild please visit: **www.findacraftsman.com**

A selection of planes by Ollie Sparks

# A community together – Richard Arnold's Open House 2018

**Kieran Binnie reports from the annual open day and fundraising event**

Every summer in the ancient market town of Market Harborough, Leicestershire, celebrated joiner and furniture maker Richard Arnold holds an open house event. The format is very simple. At the open house, Richard and plane maker Ollie Sparks (whose workshop is a few doors down from Richard's) open their doors and welcome the public as well as like-minded makers and retailers. A charity auction of tools offers the opportunity to add some interesting pieces to your tool collection while supporting a good cause. The end result is a convivial and relaxed day of friends and makers coming together to talk woodwork and browse the treasure trove of Richard's antique plane collection, as well as the wonders of Ollie Sparks' workshop, all while fund-raising for Macmillan Cancer Support.

PHOTOGRAPHS BY KIERAN BINNIE

## From humble beginnings

As a keen collector of 18th-century wooden planes, Richard found that he was buying large lots at auction just to acquire a specific plane within the lot. As a result, he was building up a large inventory of surplus planes that didn't fit within his collection. Instead of trying to sell the planes on, he decided to open his workshop for a day and let people pick through the unwanted planes in return for donations to charity. Macmillan was identified as the charity of choice from the beginning, and so began an annual tradition.

Over the years, the open house has grown in scope. As word seeped out that something very special was happening, the event rapidly became a highlight of the woodworking calendar as makers benefitted both from Richard's knowledge of historic tools and from the strong sense of community engendered at the open house.

## The workshops

I first heard about the open house back in 2016 when Richard Maguire mentioned it on his blog (www.theenglishwoodworker.com), and my interest was piqued. Events had conspired against me on several years, but this year on 9 June I finally made the journey to picturesque Market Harborough. Enduring the predictable M6 gridlock was well worth it – both Richard and Ollie's workshops were buzzing with plenty of familiar faces and animated discussion of woodwork, tools and historic trades. Joining Richard and Ollie were Skelton Saws, Classic Hand Tools, Bill Carter and Mac Timbers (who I am happy to report are once again back in business after previously closing down in 2015).

Entering Richard's workshop, I was greeted with a stunning collection of vintage planes, including many 18th-century wooden planes. Not only does Richard collect vintage planes, but he also makes beautiful reproductions of some of them, and seeing modern and vintage versions of the same tool side by side is a wonderful experience. When I was able to tear myself away from Richard's tool collection (a feat which took real determination), I found plane maker Bill Carter and many of his beautiful planes, including several made from the brass backs of vintage saws: a signature style of Bill's. As an added bonus, on display this year was a Welsh stick chair made in 1992 by celebrated chairmaker John Brown.

If Richard's workshop is a study in wooden planes and vintage ephemera, then Ollie Sparks' workshop is the work of a genius mad scientist. As well as a display of many of his completed planes, Ollie also exhibited some of his prototypes and his design and sketch books. One particular highlight was Ollie's new Kimberly Patent Plane, which features a patinated phosphor bronze escapement fitted to a Macassar ebony body. As well as answering questions on tool making and hand planes, Ollie also demonstrated his metal casting techniques. If that wasn't enough, Skelton Saws were also set up in Ollie's workshop. It is always a pleasure to see Shane and Jacqui Skelton, and marvel at the beautiful saws Shane makes. The open house was no exception, especially as Shane had examples of his new Mallard saw (named after the Mallard steam locomotive, which had a significant influence on the appearance of the saw) and reproductions of some of the saws from the Seaton Tool Chest.


**The auction table, ready for bidding**

**A collection of vintage shoulder planes**

**Ollie Sparks demonstrates metal casting**


**A mitre plane by Bill Carter, made from a brass saw back**

## The auction

The auction this year extended to 37 lots comprising a wondrous variety of tools (both vintage and modern), classes, books and timber, all donated by supporters and tool makers. The generosity displayed by the donated auction lots, and the level of bids made in the auction, really emphasised the strength of community and also showed the profile of the open house – as well as bids from attendees, supporters from across the globe were also allowed to submit bids electronically. Some of the highlights of the auction included tools by highly sought-after boutique makers including Ollie Sparks, Philly Planes, Skelton Saws, Bill Carter and Jeremiah Wilding, along with classes with the London School of Furniture Making, and Derek Jones. The auction was presided over by the inimitable Jim Hendricks, whose fledgling tool museum in Kent is gaining a lot of attention (stay tuned for news of the grand opening in the hopefully not too distant future!).

## The community

The auction, and seeing the workshops, was wonderful. But what made the open house a truly special event was the sense of community. Catching up with many friends from previous classes and events, and becoming acquainted with like-minded woodworkers, can be a challenge in what can be a solitary trade or hobby. Events like the open house offer an important reminder of why it's so vital to make time for connections with the wider maker

community. I left Richard's workshop feeling invigorated and inspired as much by conversations with skilled craftspeople as by seeing the products of their crafts.

Richard's annual open house is a real highlight of the woodworking calendar – an opportunity to meet like-minded woodworkers, spend time in professional joinery and tool-making workshops, and raise money for an excellent cause. This year between the auction and cash donations over £7100 was raised for Macmillan Cancer Support. The open house will be a permanent fixture on my calendar, and I hope to see many of you there in future years. F&C

## Contacts

**Richard Arnold Traditional Joinery**
www.richarnold.co.uk

**Oliver Sparks**
oliversparks.co.uk

Richard's workshop contains a treasure trove of vintage tools and ephemera

I've never seen as many vintage planes as I have at Richard's workshop

Wooden planes made by Richard Arnold, and several vintage infill planes

The new Skelton Saws Mallard saw

Where else will you get to see prototypes of Ollie Sparks' planes?

Infill plane by Ollie Sparks

Welsh stick chair by celebrated chair maker John Brown

# Classic Hand Tools©

## Pfeil Carving Tools

We hold the largest stock of Pfeil wood carving tools & accessories in the UK.

Over 2000 tools in stock

Pfeil catalogue on request.

Flexcut
Arbortech
Abranet Sanding
King Arthur's Tools
Woodcarving Books
Auriou Rasps & Rifflers

Chris Pye Carving Tools
Kirjes Sanding System
Norton Sharpening Stones
Gransfors Bruks Carving Axes
Ron Hock Carving Knives

**NOW IN STOCK - SABURR TOOTH CARBIDE BURRS**
**1/8" & 1/4" shanks - all shapes • 2" wheels for Arbortech**
**4" wheels for Angle Grinders**
*Free catalogue on request.*


**CLASSIC HAND TOOLS**
**HILL FARM BUSINESS PARK, WITNESHAM, SUFFOLK IP6 9EW**
Email: sales@classichandtools.co.uk
Phone: 01473 784983 Fax: 01473 785724
**www.classichandtools.co.uk**

# KIT & TOOLS

**HAVING TROUBLE SOURCING THE RIGHT TOOL FOR THE JOB? HERE'S A SELECTION OF NEW AND ESSENTIAL EQUIPMENT FOR THE WORKSHOP**

***ALL STERLING PRICES INCLUDE VAT, CORRECT AT TIME OF GOING TO PRESS***


€23.90

PHOTOGRAPHS BY DEREK JONES/GMC PUBLICATIONS

## MINI TEST
## Dictum Bevel Knife

I've always found it hard to travel light to an installation job, preferring instead to pack one of everything in the away kit, just in case. Dividing your time between workshop and site usually means dividing your tools into those that can withstand the rough and tumble of being carted around and those that are reserved for best work. The downside here is twofold, namely a first and second selection of tools to choose from. Duplicating the number of tools to a quality you're comfortable working with on site and in the workshop can be expensive so wherever possible I've tried not to be too precious about the tools I own and whittle them down to just one of everything. By widening the scope of a 'fit for purpose' checklist, it's possible to reduce the number of tools you need.

Power tools present fewer issues obviously, so it's generally hand tools that pose a problem and edge tools in particular. A few years ago I had a friend run me up some leather sheaths to protect my spare blades and chisels whenever I was out and about. They've lasted well but a few have been lost along the way. This month I decided to replace them by making my own and in a prelude to an article planned for a future issue, here's a tool that I think you'll find great to have in the workshop.

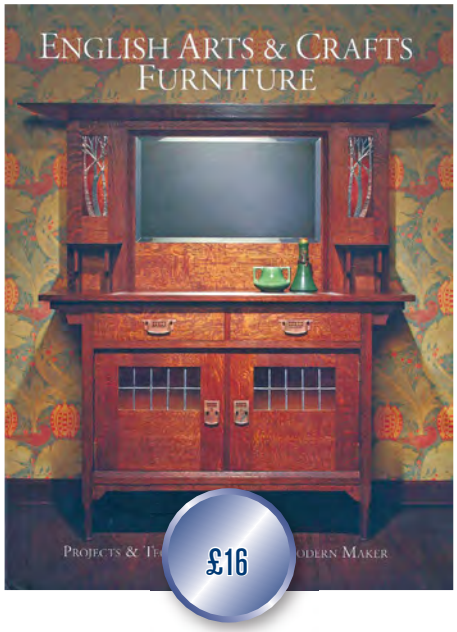
'Skiving' is the name used in leather working to describe the term we refer to in woodworking as 'scarfing'. In general terms it involves the thinning of two components in order to make a joint that is level on one or more faces. The process will typically require the removal of material from both components in equal measure and in corresponding areas. In leather for example this could mean reducing the material from 2mm down to 1mm on both pieces so that when joined together the overall thickness is still 2mm. While this knife is not specifically designed for this purpose, in the right hands and with a little practice, it will do the job quite nicely. Think of it as a paring chisel and you're on the right track. Bevelled on one side, it's also an excellent tool for cutting out components using a template or, because of its length, freehand in leather, paper or cardboard. You don't need to be quite as fussy about sharpening leather working tools as you do your woodworking ones but this carbon steel blade will take a very keen edge from any of your regular sharpening media. As a good all-round entry level tool for basic leather work such as lining out boxes or making tools covers, you'll find it hard to beat.

*Overall length – 270mm*
*Blade thickness – 2mm*
*Blade width – 22mm*
*Item No. – 704564*

*From: www.dictum.com*

## English Arts & Crafts Furniture: Projects & Techniques for the Modern Maker

*By Nancy R. Hiller, published by Popular Woodworking Books*




Just when you thought there wasn't a lot more to say about the origins of arts & crafts furniture, along comes a book that for some of us, myself included, puts a different spin on things. If you're a regular reader of *F&C* you'll be familiar with Nancy Hiller from the series of articles she has written for us on the subject of arts & crafts and American styles of furniture, including the Wooton Desk (*F&C* 273) and Hoosier Cabinet (*F&C* 274). As a professional furniture maker, Nancy just happens to be one of the best communicators in our business, often relating the stories that we think we understand with elements that take us deeper into the subject. Revealing and entertaining in equal measure, *English Arts & Crafts Furniture* gets to grips with the human story behind the movement through a series of discussions based around the founding principles established by John Ruskin and William Morris. In this context Nancy is able to explain why some of the more familiar forms of construction exist by rooting them deep within the philosophy of the movement. In fact it's highly likely that, along with the author and this reader, you'll discover names you'd never heard of and perhaps even find new ways to relate to the style. If walking a mile in another man's shoes is the fastest route to empathising with his cause, then the three projects included in this book will serve as your map. They are presented in order of complexity and consist of the Voysey Two Heart Chair, a Harry Lebus-designed sideboard and a Gimson/Barnsley hayrake table.

Each project is a step-by-step guide to building a standalone piece of furniture combining traditional techniques with more contemporary alternatives. The prelude to each build is an historical synopsis of the piece and its original maker and includes all the necessary scale drawings, plans and cutting list. There's really no excuse in fact for not diving in. At just over 140 pages with glorious colour reproductions and images throughout, this hardback book is available from Popular Woodworking or Amazon.

*From: www.popularwoodworking.com*

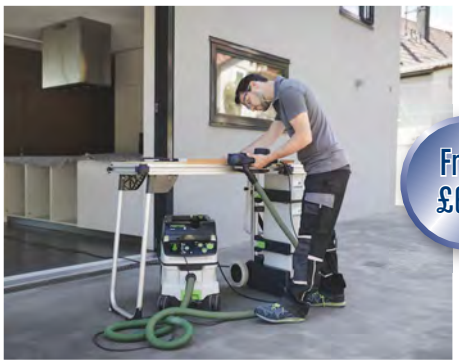
## Birdsmouth Professional Router Cutters

Trend have added two new birdsmouth profile tungsten carbide tipped router cutters to their range of jointing tools. The ½in shank cutters are designed for use in a router table and are ideal for creating barrels for coopering projects in six-, eight- or 12-sided configurations. The two flute bevel cutters give a clean finish on timber and are designed to create a notch or 'birdsmouth' on one edge of a piece of timber which is then used to mate against the square edge of the next piece of timber. The birdsmouth profile offers a larger gluing surface as well as an interlocking joint to aid positioning during assembly.

Two cutters are available, the 10/50X1/2TC for 30/60°, which will give 12 and six-sided barrel options. Six-sided projects can be made in stock up to 20mm thick and 12mm is the maximum thickness for 12-sided projects. The 10/51X1/2TC 45° cutter is used for an eight-sided barrel and can be used in stock up to 20mm thick.

*From: www.trend-uk.com*

## Festool Mobile Workshop



From £620

Festool is expanding its workplace organisation system and offering a new mobile workshop. The MW 1000 mobile workshop is ideal for transporting Systainers and, with its flexible worktop, creates optimum working conditions on construction sites and during assembly work. It can be set up individually and ensures that everything is put away neatly. Thanks to its flexibility and low weight, compact dimensions and ability to manoeuvre stairs, the MW 1000 is easy to transport and immediately ready to use – without time-consuming set-up and disassembly.

The MW 1000 is designed to be easy to transport while also enabling precise working results. Thanks to the large, fully rubber-lined and shock-resistant wheels, transporting the workshop up and down stairs is no longer a problem – no matter whether it is in a workshop, while loading it into a vehicle or on the construction site. The MW 1000 is equipped with a stable worktop, comprising a perforated top and an aluminium profile, which offers flexible clamping and attachment options. A full pull-out drawer for Systainers, with individual and tool-free height adjustment, ensures that all contents are easily accessible. Further pull-out drawers (available as accessories) make the mobile workshop into a customised workspace. In just a few steps, the Systainer and extension table are securely stowed for transport. The MW 1000 can be comfortably and easily loaded into a vehicle by just one person. Thanks to robust foldaway legs, the extension table is ready to use in just a few steps. The height-adjustable feet guarantee that the table is level even on uneven surfaces. Festool has integrated an additional compartment for a SYS-MINI 1 in the basic element, which is ideal for storing small parts.

The mobile workshop will be available at specialist retailers from October 2018.

*From: www.festool.co.uk*


## OmniBohrer multi-purpose drill bits

Makita's new OmniBohrer multi-purpose drill bits are suitable for use with a diverse range of materials including concrete, tile, brick, slate, limestone, wood, composite materials, aluminium and plastics, eliminating the need to switch between bit types. The collection of 25 drill bits, ranging from 3–14mm diameter and lengths of 60–400mm, feature a high quality tungsten carbide tip that can be used for different applications across various industries. The wide flutes of the OmniBohrer bits deliver quick and efficient material extraction.

*From: www.makitauk.com*

## Lock-Align Drawer Organizer System

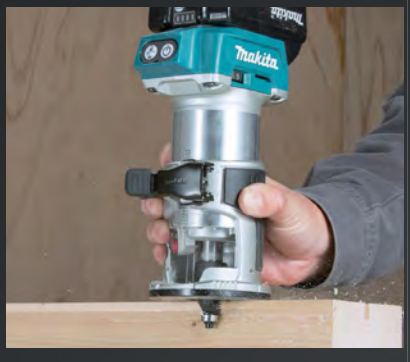
Rockler Woodworking and Hardware has introduced a modular drawer organisation system that can be customised to fit tool, craft and desk drawers of almost any size. The Rockler Lock-Align Drawer Organizer System features interlocking tray sections, bins and dividers that enable users to construct a grid of compartments tailored to fit both the drawer and its contents. The tray sections are made from synthetic rubber, so they offer protection for tool edges and can easily be cut to size.

Rockler has created a Lock-Align System Starter Kit, which includes three single-width tray sections, two standard bins, three standard dividers and one tray extension that can be cut to fill any empty drawer space. Available separately are a Wide Tray with Wide Divider, a two-pack of standard Bins, and a two-pack of standard Dividers.

*From: www.rockler.com*

From $1.99

# FOUR IN ONE



## 18V Router Trimmer
DRT50

18V LITHIUM-ION

BL MOTOR


Makita®

Visit our website for more information www.makitauk.com

THE EVOLUTION OF WOODTURNING, BRINGING CREATIVITY TO A WHOLE NEW LEVEL

EASY WOOD TOOLS
MADE IN AMERICA

100% MADE IN USA

# 3 Simple Rules

## for turning with Carbide Insert Tools:

1) Keep the tool flat on the tool rest.
   No angles, no tipping the bar to the side.
   Keep it flat on the rest for the safest and cleanest cut.

2) Hold the tool horizontal, parallel to the ground for the best control of your tool.
3) Always keep the tip of your tool on center line of your workpiece.

## That's it!

## Turn safely, turn effectively, have fun

AVAILABLE NOW:

**www.amazon.co.uk**

1365 Cahill Drive | Lexington, KY 40504 USA | 1 (859) 246-0294
www.easywoodtools.com

# Peter Sefton DVD giveaway

**WORTH £39.98**

**This month we're giving away a complete set of Peter Sefton's Ultimate Thickness Planer Series worth £39.98**

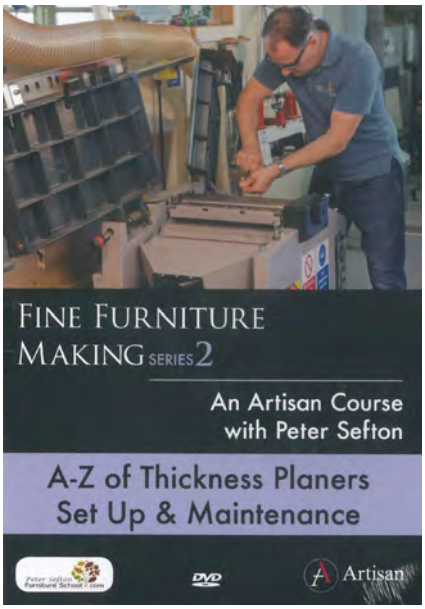
## Giveaway 3: Peter Sefton's Ultimate Thickness Planer series

The first DVD in the Ultimate Thickness Planer series covers commissioning and tuning up a machine, as well as maintenance and sharpening and setting blades. The second DVD covers a vast range of practical safe techniques.

In the *A-Z of Thickness Planers Set Up & Maintenance* DVD, Peter's 35 years of experience in planer set-up and maintenance is demonstrated, as he shows you how to understand and get the most out of your thicknesser. Learn how to recognise the function and upkeep of key elements to keep your machine performing to its full potential using Peter's detailed explanations. Including cutter changing and sharpening, producing front bevels for improved surface finish and dealing with snipe issues. Techniques for removing resin build-up, bed cleaning and rust prevention are revealed to ensure perfect results. Types of planers are described alongside related equipment for accurate size calibration.

Thickness planers are the most time-saving piece of machinery in your workshop, but are capable of so much more than just bulk timber removal. In *Thickness Planers: Practical Safe Techniques*, Peter demonstrates a vast range of safe, productive techniques from working with the grain, planing to width and thickness, cutting angles, tapers and producing very thin laminates. Calling on his many years of experience, Peter shows you ways to reduce snipe, tear-out and roller marks to produce clean accurate lumber every time.

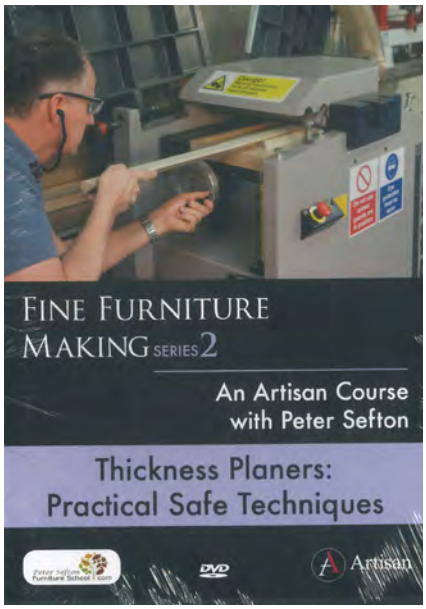
Make the most of your planer including flattening wide boards with this essential tour de force of planing.




### A-Z of Thickness Planers Set Up & Maintenance

**DVD Contents:**

- Mechanics of the thicknesser
- Feed speed
- Rollers & anti-kickback
- Thickness calibrators
- Using jigs to set blades
- Quick-change cutter blocks
- Cleaning & replacing cutters
- Slipping the cutters
- Helix cutter technology
- Tuning older machines
- Maintenance




### Thickness Planers: Practical Safe Techniques

**DVD Contents:**

- Thicknessing principles
- Preparing timber
- Avoiding snipe
- Flatnessing wide boards
- Wide hardwood boards
- Jigs for thicknessing:
- Thin laminates
- Tapering in width
- Compound tapers & angles

**To enter the competition and see full terms and conditions go to:**

**WWW.WOODWORKERSINSTITUTE.COM/C/DVDGIVEAWAY3**

Password: FCDVD3 Closing date for entries is 31 October 2018 Limited stock available

# Out & about:

# MAK Vienna

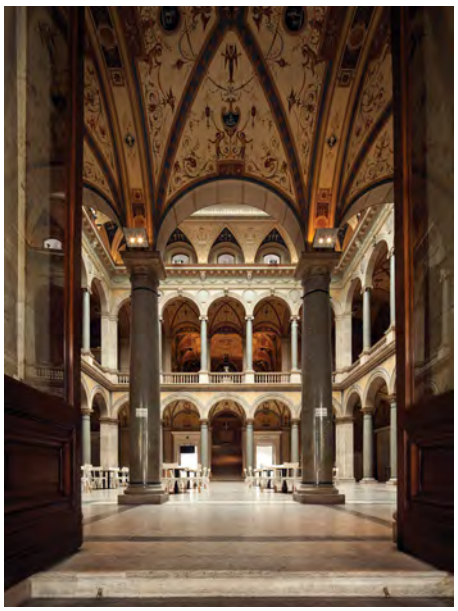
**This month we visit an Austrian museum dedicated to applied arts**

PHOTOGRAPH © MAK/GERALD ZUGMANN

The MAK museum in Vienna is home to an unparalleled collection of applied arts, design, architecture and contemporary art, which has developed over the course of 150 years. The museum displays furniture, glass, china, silver and textiles. Highlights of its collection include the complete archive of the Wiener Werkstätte and works from the baroque, rococo, Biedermeier and art nouveau eras.

## History

The museum was originally founded in 1863 when Emperor Franz Joseph sanctioned the establishment of the Imperial Royal Museum of Art and Industry. The inspiration came from London's Victoria and Albert Museum, which had been founded 11 years earlier. The museum opened to the public in May 1864, its display made up of loan items and gifts from the Imperial collections, monasteries, private collections and the Imperial Royal Polytechnic Institute in Vienna. In 1871 the museum moved to a purpose-built building on the Stubenring, the grand boulevard that runs around the city's Old Town. Heinrich von Ferstel designed the building in a grand Neo-Renaissance style with spacious halls providing space for the permanent displays. The buildings were completely renovated in the early 1990s and additional exhibition and storage space were added.



PHOTOGRAPH © MAK/KATRIN WISSKIRCHEN

**The main hall at the MAK was designed in an impressive Neo-Renaissance style**

PHOTOGRAPH © MAK/GEORG MAYER

**Armchair designed by Gustav Siegel in 1900**

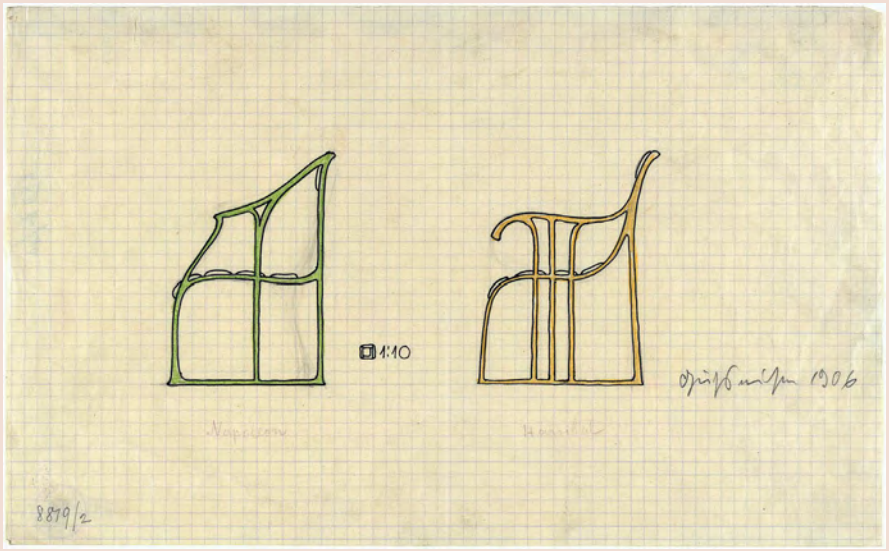
PHOTOGRAPH © MAK/GEORG MAYER

**The Vienna 1900: Design/Arts and Crafts 1890–1938 exhibition forms part of the MAK's permanent collection**

## Wiener Werkstätte

The Wiener Werkstätte was founded in 1903 by the architect Josef Hoffmann, the graphic designer and painter Koloman Moser and their patron Fritz Waerndorfer. The group broke with the traditional Historicist style and aimed to produce high-quality craftwork to fulfil everyday needs from all aspects of life. Collaborating with artists and craftsmen from all disciplines, the Wiener Werkstätte produced furniture, architecture, porcelain, glass and apparel. The workshop closed in 1932.

The Wiener Werkstätte's complete archive was donated to the MAK in 1955. It includes around 16,000 design sketches (including 5,500 from the hand of Josef Hoffmann) and around 20,000 fabric designs, as well as posters, designs for postcards, model books, photo albums and business correspondence. The MAK also has the world's largest museum collection of Wiener Werkstätte objects, covering the association's entire productive period. Among other things, the MAK owns the most comprehensive collections of furniture, objects and designs by Josef Hoffmann.



**Chair design by Josef Hoffmann, 1906**

# What to see

The MAK's permanent furniture collection covers a vast range of eras and styles, including Gothic, Renaissance, baroque, rococo, Biedermeier, Historicist and art nouveau. It includes furniture from the Austrian court as well as utilitarian furniture from the early 20th century. Highlights include works by Michael Thonet and David Roentgen, as well as pieces by contemporary makers such as Donald Judd, Ron Arad and Tom Dixon.

In the MAK Design Lab, the function and use of design objects take centre stage. Here, items are arranged by use rather than historical period or style. The sections include areas dedicated to seating, communicating, cooking, eating and drinking, transport and production. In the seating section, the series of chairs and stools give insight into the manifold possibilities of form for seating and allow comparisons to be made between furniture types, materials, functionalities and developmental stages.

Aside from furniture, the MAK's impressive collection includes Asian art, contemporary art, glassware, ceramics, metalwork, and textiles and carpets.

PHOTOGRAPH © MAK/GEORG MAYER

**One area of the MAK Design Lab is dedicated to seating**

PHOTOGRAPH © MAK/KATRIN WISSKIRCHEN

**The eating and drinking section of the MAK Design Lab**

PHOTOGRAPH © MAK/GEORG MAYER

**Cabinet by Otto Wagner made for his dining room in 1899**

The Reading Room at the MAK Library

PHOTOGRAPH © MAK/GERALD ZUGMANN

PHOTOGRAPH © MAK/GEORG MAYER

Display from the MAK's Post-Otto Wagner exhibition

## Information for visiting

**Address:** Stubenring 5, 1010 Vienna, Austria
**Website:** www.mak.at
**Opening hours:** Closed on Mondays
**Charges:** €12, €9 for concessions

Information correct at time of publication, check the museum's website before making your visit

PHOTOGRAPH © MAK/NIKA KNOSKRCHEN

The drawing room at the Geymüllerschlössel

PHOTOGRAPH © MAK

The Josef Hoffman Museum in Brtnice, Czech Republic

## WHERE ELSE TO SEE… Other MAK venues

**The MAK has several other branches in Europe and the USA:**

**The Josef Hoffman Museum**
Brtnice, Czech Republic
Set in his family home, displays designs and objects made by Josef Hoffman
www.mak.at

**MAK Branch Geymüllerschlössel**
Vienna, Austria
Displays decorative art from the Biedermeier period
www.mak.at

**MAK Center for Art and Architecture**
Los Angeles, USA
makcenter.org
A contemporary, experimental, multi-disciplinary centre for art and architecture

# Social media dashboard

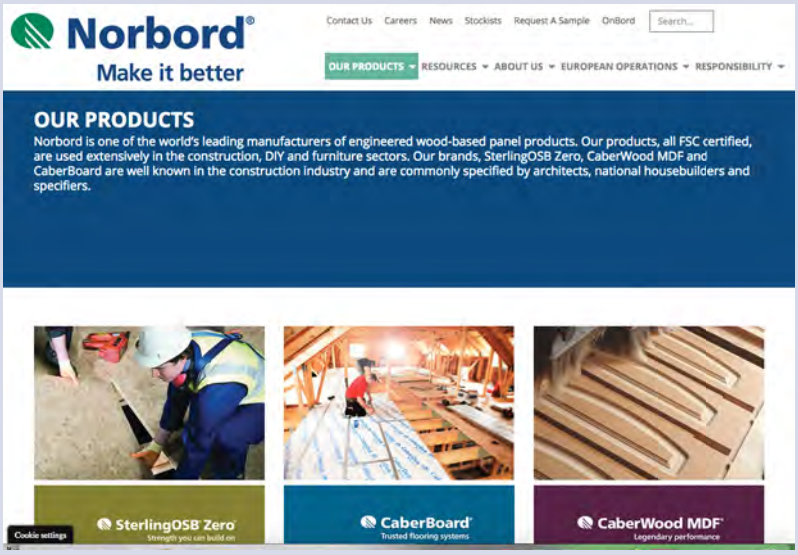
**Bringing you a round-up of the best from the online world, plus a selection of the latest projects that have caught our eye**

In this section of the magazine we bring together the best furniture and woodworking related content from social media. Here we'll recommend who to follow, where to comment and which online communities to join. We also feature projects we love, readers' letters, comments from the Woodworkers Institute forum and pictures of readers' work. If you'd like to see your furniture on these pages, email derekj@thegmcgroup.com

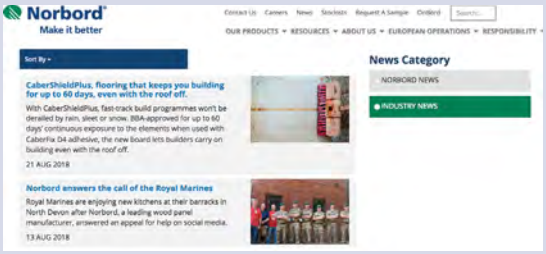
## Website: Norbord

Panel supplier Norbord has recently redesigned its website. The established Norbord brands – SterlingOSB Zero, CaberWood MDF, CaberBoard and ContiBoard – are highlighted with bold colours and iconography. The simplified site guides users to sample requests, product information, technical support, installation instructions, NBS specifications, documentation and case studies.

**Address: norbord.co.uk**



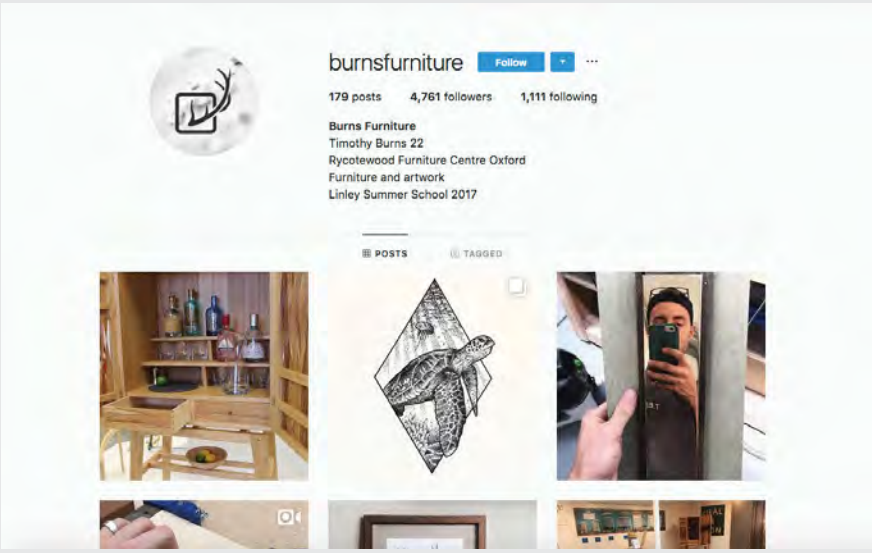


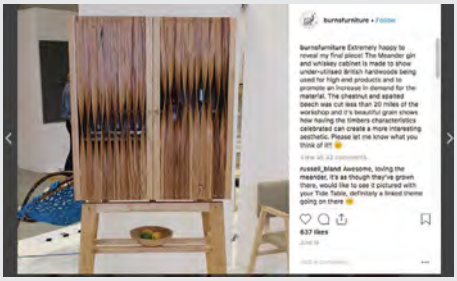



## Instagram: Burns Furniture

Rycotewood Furniture Centre student Timothy Burns is one of this year's recipients of the Alan Peters Award for Excellence. You can keep in touch with the career of this promising young designer via his Instagram account, where you'll see all his latest projects as they take shape. Timothy is an artist as well as a furniture maker and also showcases his artworks via Instagram.

**Address: @burnsfurniture**



# Projects we love

Here we highlight the latest furniture and woodworking projects from around the world that we think deserve to be shared with our readers. If you're a member of a collective or a student group and would like to see your work here, then submit a story to: **derekj@thegmcgroup.com**

## The best of Portugal

Associative Design presented the best of contemporary Portuguese Design at this year's Decorex and London Design Fair. Created by the Portuguese Association of Wood and Furniture Industries (AIMMP), Associative Design seeks to promote Portuguese design globally, exhibiting at many of the world's most discerning and distinguished shows.

The showcase included work by Corque Design, a company that combines sustainability and originality to produce well-designed objects using cork, one of Portugal's greatest natural resources. Nauu Design was created in the Portuguese port town of Setúbal. Producing luxury and bespoke furniture, Nauu Design's distinctive collection is imbued with personality, elegance and passion.

Other brands included in the showcase were Bateye, Defontes, Duquesa & Malvada, Muranti, OIA, Se7e and That Place.

**associativedesign.com**

**Associative Design gathered together the best in contemporary Portuguese furniture**

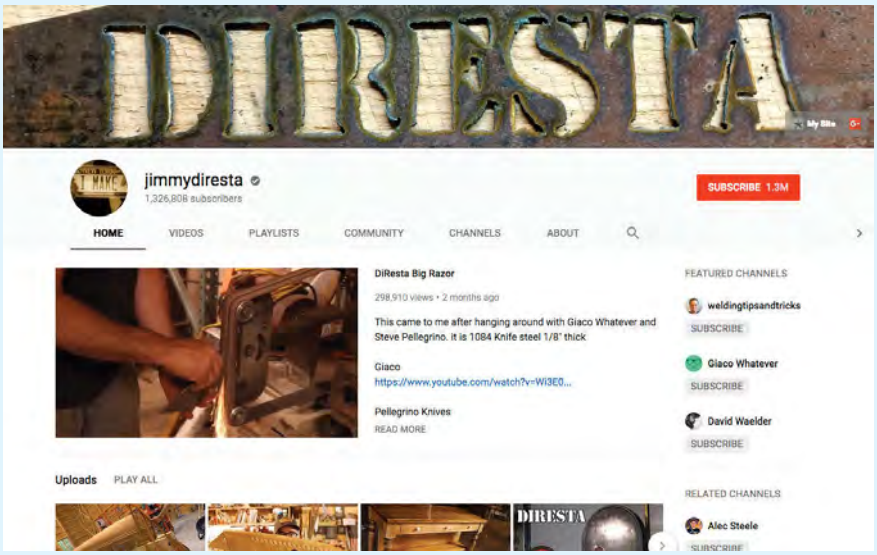

**Corque Design's Cellula bookcase is a clever modular storage system comprising six construction pieces**

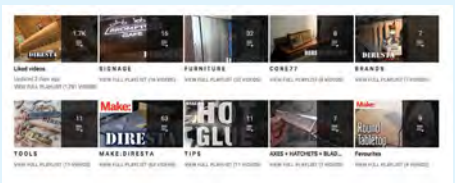
**Nauu Design's Armona sideboard is inspired by the sand dunes found on Armona Island in the Algarve**

## YouTube: Jimmy DiResta

One of America's best-known craftsmen, Jimmy DiResta is a New York-based designer, artist and video producer. His YouTube videos cover furniture projects, guides to tool use and care, blade making and general woodworking tips.

**Address: www.youtube.com/user/jimmydiresta/about**




GMC Publications does not endorse and is not responsible for third party content

# An airbrush with the past

**We're going back to July 1997 and issue 8 for this month's Airbrush with the Past and a look at William Kirkbright's Bonheur du jour**

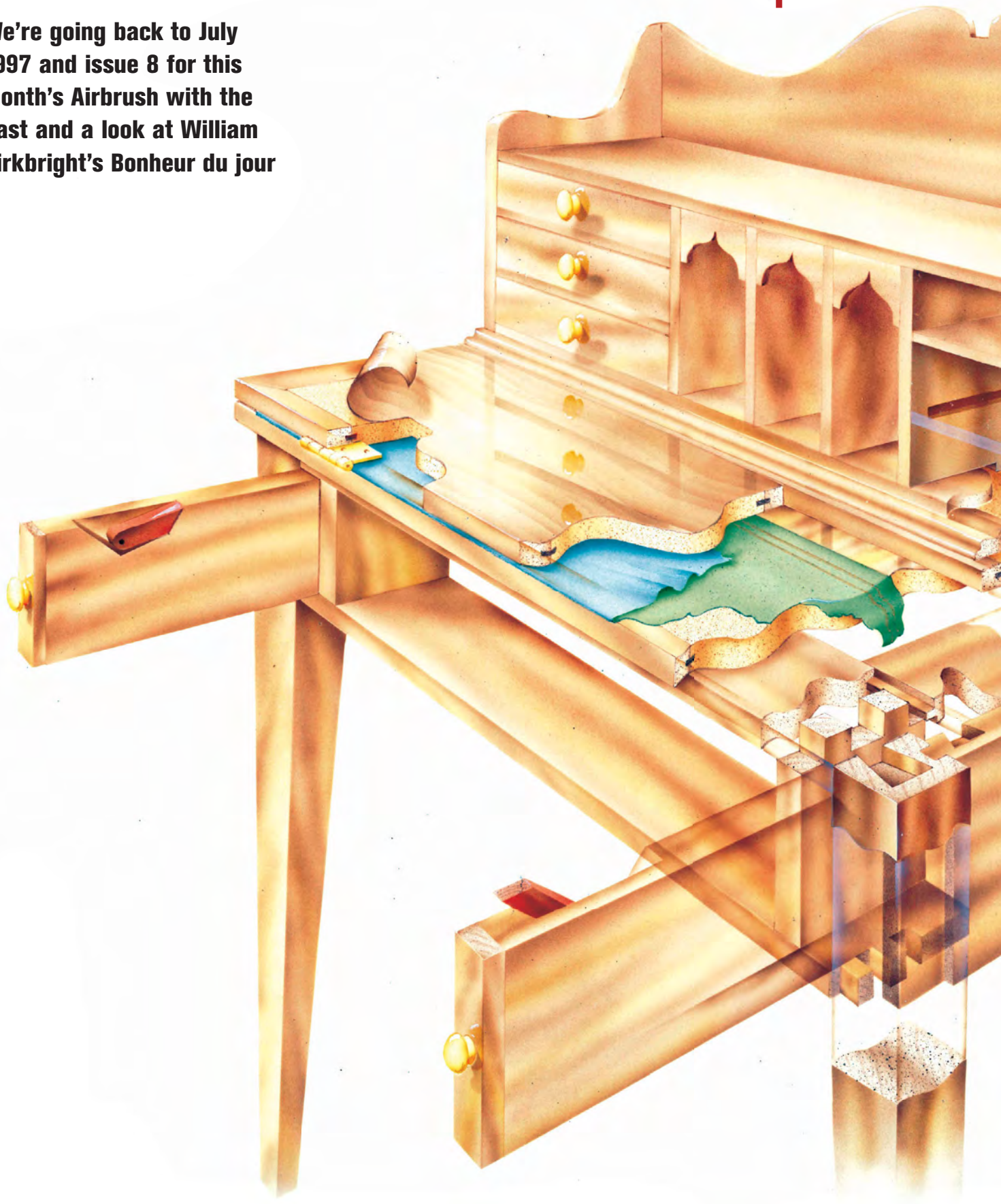
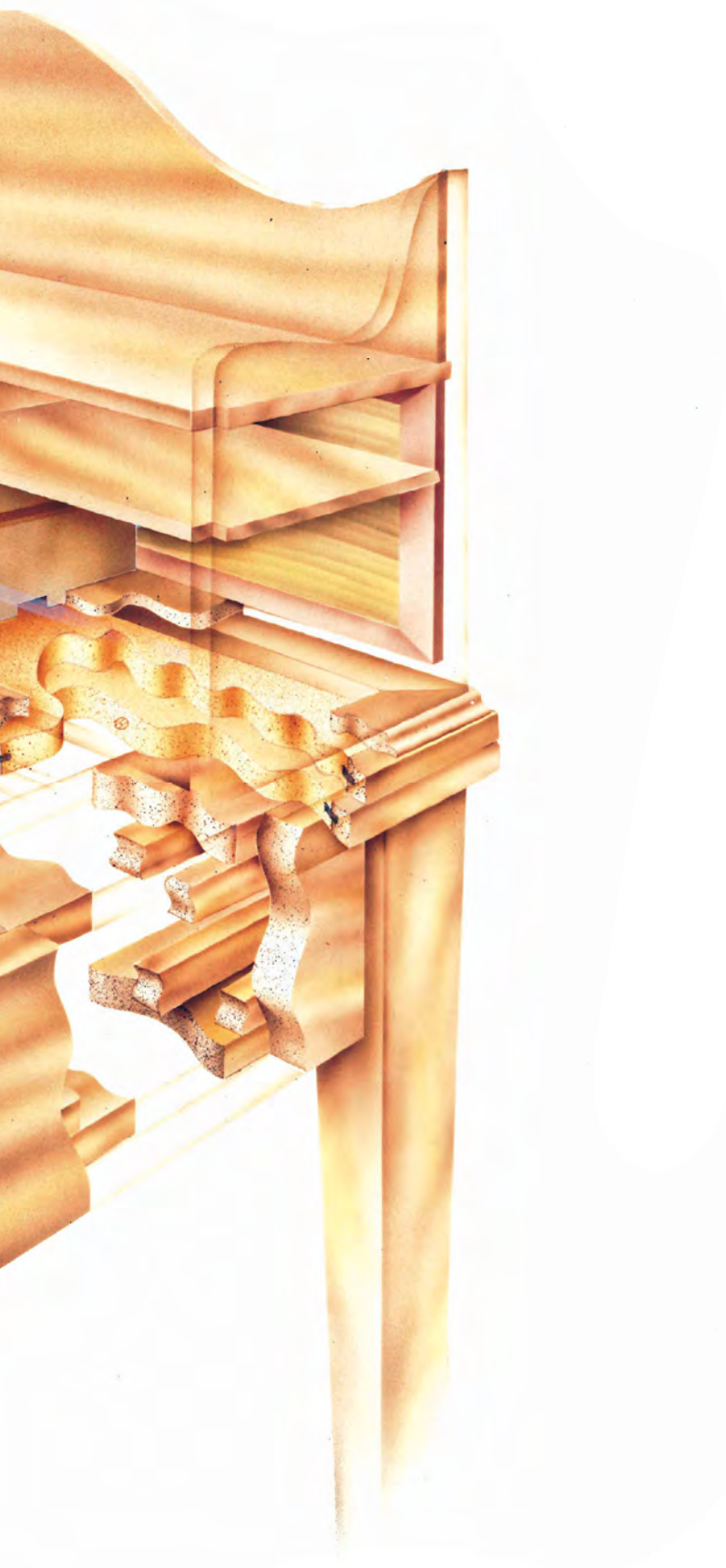


IMAGE BY IAN HALL/WILLIAM KIRKBRIGHT/GMC PUBLICATIONS

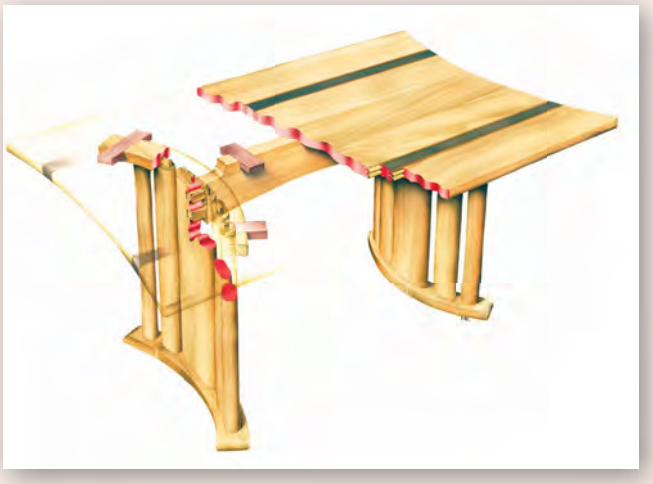


While stunning works of art in their own right, the airbrush drawings featured in this series can sometimes distort the proportions of the fine detailing present in the real object and William Kirkbright's Bonheur du jour is a good example. With a nod towards the 18th-century cabinetmaker Thomas Sheraton (1751–1806) William managed to capture the subtle proportions so typical of the Golden Age of furniture and Sheraton's unmistakable style. Though perhaps not quite so well known as Thomas Chippendale, Sheraton was in fact his equal in terms of influence and philanthropy publishing *The Cabinetmaker's and Upholsterer's Drawing Book* in 1791. Sheraton began his professional career as a cabinetmaker in the north east of England and traded as a journeyman in that area until moving to London in 1790 where he diverted his attention to teaching drawing and draughting skills. At the height of his success it's not known if he actually made any of the pieces of furniture listed in his book as no pieces that bear his name survive. Consequently when we refer to Sheraton it's his skill as a designer we're referring to and not his making skills.

William introduced a number of contemporary construction methods to build his desk including the use of MDF as the substrate material beneath the veneers and leather writing surface. In his article he also mentions using biscuits to align the solid edge lippings to these parts of the build as well. Twenty years later it's still among the most economical methods. There are plenty of traditional construction techniques used elsewhere in this project; stub tennons for example locate the bottom drawer rail into the sides of the legs. The cabinet sides are joined to the legs in the same way. Looking back through William's original article I can see there are two details absent from this drawing worth a mention. The back or upstand to the top section features a carved ribbon and leaf motif spanning the length of the board. All the surrounding material has been lowered to raise the detail. Look closely at the middle section of the pigeon holes and you'll notice they feature a small decorative frieze. Behind the frieze on the real piece are minute secret drawers; a detail that Sheraton would have approved of I'm sure.

## Next month

Next month we'll be going back to October 2004 and issue 94 for another look at Brendan Devitt-Spooner's Alan Peters inspired dining table.



# hand tools and wood chisels specialist

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

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

Tool Nut .co.uk

Henry Taylor 'Diamic' brand woodturning tools have been produced in Sheffield by skilled craftsmen, from the finest steel for more than one hundred and fifty years.

Kevlar Gloves (pair)
for only £5.00

Henry Taylor Decorating Elf Texturing Tool

Braces (50+ types)
from only £9.99

Natural Leather Chisel Rolls
10 pockets: £18.50
12 pockets: ~~£21.50~~

Ashley Iles York Carving Set
for only £137.00

Multi-Profile Japanese Sharpening Stones
280g: ~~£14.95~~
1000g: ~~£14.95~~
3000g: ~~£15.95~~

Joseph Marples 'Trial 1' Mortice Gauge
for only £45.00

Henry Taylor 6-Piece Starters Carving Tool Set
for only £84.99


for only £14.50

Coffin Shaped Mallets
from only £25.00

Joseph Marples Set
only £139.95

Japanese Saw Rasp
for only £15.95

Veritas Miniatures

Order online today at
www.toolnut.co.uk

saws

SHARPENING

Plane & Spokeshave Blades / Parts

punches

Rasps & Rifflers

OVER 90 DIFFERENT CARVING TOOLS

OVER 25 DIFFERENT CHISELS

Order online today at www.toolnut.co.uk

# TOMACO

THE TOOL MARKETING COMPANY

## DISTRIBUTORS OF QUALITY PRODUCTS

SHARP EDGE

Chisel and plane iron sharpener - take anywhere and sharpen in seconds.

narex®

Quality range of woodworking hand tools made in Europe.

COLT® PROFESSIONAL TOOLS

A quality range of professional Drill bits and accessories from Germany.

TOMAHAWK TOOLS

A quality range of professional tools and accessories.

VETO PRO PAC® TOOL BAGS THAT WORK

Range of the toughest tool bags with a 5 year downtime warranty.

CMT ORANGE TOOLS™

Quality cutting tool range which includes Router cutters, Spindle Moulding, saw blades, holesaws and many more from Italy.

FOR YOUR NEAREST STOCKIST VISIT

**www.tomaco.co.uk**

Next month in

# Furniture &cabinetmaking

**ISSUE 277**
**ON SALE 25 OCT**

## Design Inspiration
## The London Style

## The Collector's Guide to
The router plane

## Cut & Dried
The woodworker's guide to timber technology

## Construction Tech
Latest concealed cabinet hangers reviewed

## Giveaway Exclusive
Bridge City layout tools

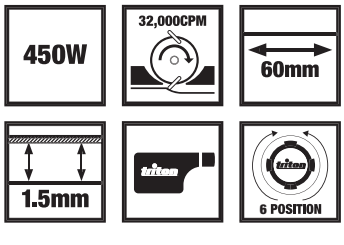
## Project
A staked leg desk with drawers

# Plane & Simple

## 450W MINI PLANER 60MM

**TMNPL**

Engineered Precision




The **TMNPL** Mini Planer is powerful, easy to handle, and includes all the features of a conventional-sized planer and more.

Utilising twin 60mm reversible blades, the **TMNPL** offers the perfect combination of power and balance. Equipped with excellent grip for safe, one-handed operation, while cutting at 32,000cpm.

The 400W motor and 60mm planning width make this planer ideal for fast material removal on small to medium-sized workpieces. Planing depth is adjustable: up to 1.5mm of material can be removed in one pass. Also features 'V' grooves for accurate chamfering in 2 different sizes.



**FIND YOUR NEAREST STOCKIST**

***tritontools.com***

triton® Precision Power Tools

# WOODWORKING Live

FROM

RECORD POWER
ESTABLISHED 1909®

## 12-14 OCTOBER 2018

Bringing together some of the UK's most well-respected and popular woodworkers for three days of inspiration, creativity and entertainment.

**Kempton Park Racecourse, Middlesex, TW16 5AQ**

Part of the 'The' Tool Show '18 from D&M Tools

D&M TOOLS 'THE' TOOL SHOW '18
THETOOLSHOW.COM

## www.woodworkinglive.co.uk

RECORD POWER
ESTABLISHED 1909®

Over 100 years
Experience • Knowledge
Support • Expertise

RECORD POWER ESTABLISHED 1909
STARTRITE
CORONET
CamVac
BURGESS

Incorporating some of the most famous brands in woodworking, Record Power's roots stretch back over 100 years.

**www.recordpower.co.uk Tel: 01246 571 020**