

Furniture & cabinetmaking

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A3 41



A3 31



A3 41 A

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Welcome to...

...the bigger picture



Ash and walnut coffee table by Robinson House Studio student Sally Banks

It's around about now that I start dropping hints designed to steer you into the path of our lead feature article or project, typically to be found about halfway through the magazine. Not so this month as I want to share with you something off the beaten track by way of a road trip book review on page 75 and a quick fire round of "I say 'blah blah', you say the first thing that comes into your mind". Are you ready? Mid-century Modern. Sideboard. Thought so. As furniture makers it's no surprise that we tend to gauge the world through a series of everyday objects like chairs and cabinets and tables, to fill the wide open spaces in our interior canvas. And as such it's all a little too convenient if you ask me to seek out more furniture for inspiration, followed by more pieces and more again. I am of course as guilty as the next man but have made it a

priority this year to look beyond the parlour for inspiration. The book review in question reveals some real architectural treasures hidden in plain sight that are seen but never looked at in the real sense because they're out in the open. So my challenge to you this year is to seek the blindingly obvious beauty in everyday objects, especially architecture, to influence your next creation. Share your ideas with me and I'll tell 25,000 other people, give or take a few thou. No pressure.

On full display, however, this month and to get you in the mood we have two galleries for you to enjoy; the annual Wood Awards winners and a collection of work from the latest group of students to pass through Robinson House Studio. If I don't hear at least one expletive from you maybe it's time you put down the planes and chisels and take up knitting instead.

When it comes to technique it's often the little details that make the biggest difference so we're really happy to see David Barron back with us to share his process for cutting dovetails into sloping sides, but most important of all we're seeing in the New Year with what will be the last ever review of the last ever plane from the legend that will be Karl Holtey. The 984 is Karl's magnum opus and represents the pinnacle of more than 30 years' research and development into producing the finest hand planes imaginable. Page 28. There's your steer, now go forth and multiply.

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Furniture & cabinetmaking

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**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.**

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Front cover image by Derek Jones/GMC Publications

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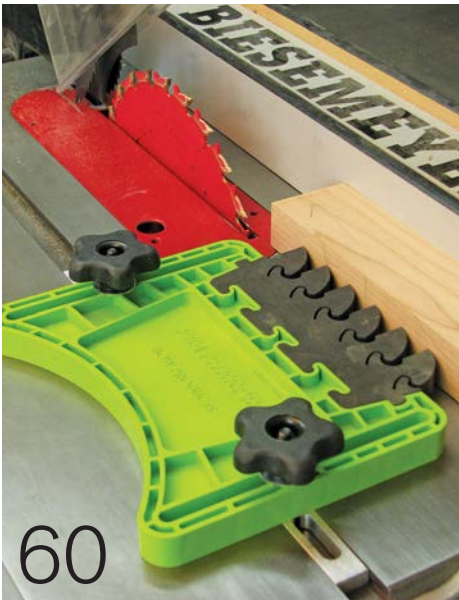
www.woodworkersinstitute.com



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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

Finland take cabinetmaking gold at EuroSkills

From December 1–3, 2016, Europe's largest skills competition took place in Gothenburg, Sweden. Over 500 young skilled workers representing 28 countries competed in 35 skills over the three days.

The long awaited results were made official during a spectacular Closing Ceremony where medals of gold, silver and bronze were awarded to the competitors in each skill category, as well as a 'Best of Nation' from every participating country. A special award was given to the competitor with the overall best result, making her the 'Best of Europe'. This award was given to Lisa Janisch from Austria in the skill Painting and Decorating. Out of the 28 nations that competed Austria came in first, followed by Finland and France.

In cabinetmaking, the gold medal was awarded to Jakko Jarvi from Finland, while Michael Henry of France won the silver medal and Reinis Gusts of Latvia took bronze. The British competitor Angus Bruce-Gardner, whose preparations for the competition we covered in *F&C 252*, was unfortunately not successful this time. However, Angus was awarded a Medallion of Excellence for his work, which is given only to those competitors who reach the international standard in their skill – a fine recognition of Angus' talents. Although disappointed not to win a medal, he can now focus on making the team for WorldSkills 2017 in Abu Dhabi. Angus was a student at Waters & Acland furniture school and is now employed on a three-year apprenticeship scheme at W&A. The team at W&A are immensely proud of his achievements at EuroSkills and will be supporting his bid to compete at WorldSkills.

Overall the event was a success for Team UK who had their best ever performance at a EuroSkills competition. The 22-strong team won four gold medals (in three disciplines), one silver and three bronze medals (in two disciplines), as well as eight Medallions of Excellence.

Contact: WorldSkills

Web: www.worldskills.org



The cabinetmaking gold medal went to Jakko Jarvi of Finland (centre) while Michael Henry of France (left) won silver and Reinis Gusts of Latvia (right) took bronze



Team UK enjoyed its best ever performance at the EuroSkills finals

Fungi furniture

Ecovative has teamed up with cement-growing company bioMASON to create sleek furniture grown entirely from microorganisms and mushrooms; the collection was unveiled at Biofabricate 2016.

MycoBoard is a biofabricated, certified sustainable, form of engineered wood. It is grown using mycelium – ‘nature’s glue’ – which is formaldehyde-free, safe and healthy and produces panels that are strong, machinable and fire-resistant.

Ecovative CEO Eben Bayer said in a statement: “With the launch of Ecovative’s new furniture line and the addition of a collaborative table, we have shifted the conversation from ‘what if’ to ‘where can I buy?’ biofabricated products for the home and office. Having produced more than a million pounds of biofabricated furniture and packaging this year alone, it is clear consumers and business customers are driving demand for these well-designed and earth-friendly products.”

While Ecovative and bioMASON have already shown that biofabricated furniture is possible and pretty, they’re now working to slash costs with affordability in mind.



Mycoboard is a biofabricated form of engineered wood

Contact: Ecovative & bioMASON

Web: www.ecovativedesign.com & www.biomason.com

British Furniture Confederation publishes action plan for government

The British Furniture Confederation (BFC) 2017 manifesto calls for strong action from government to bolster the furniture, furnishings and bed industry. The manifesto was developed in response to an industry-wide survey conducted by the BFC in the wake of the EU referendum. The manifesto outlines a specific action plan across four key areas: skills and training, exporting, the flammability regulations and sustainability. The full manifesto can be downloaded from the campaigns page of the BFC’s website.

Contact: The British Furniture Confederation

Web: britishfurnitureconfederation.org.uk

Furniture Makers’ Company backs proposed new apprenticeship standards

The Furniture Makers’ Company has announced its backing of a new furniture apprenticeship standard submitted to the Government.

The Employer Trailblazer Group, led by Senator International, has made a submission to develop a new Level 3 Furniture Apprenticeship Standard following the successful Level 2 Furniture Apprenticeship Standard which was approved in 2016. In December 2016 the Government ran an online consultation for the approval to develop the Level 3 Furniture Apprenticeship Standard.

Ben Burbidge, Master of The Furniture Makers’ Company, said: “The Furniture Makers’ Company is wholeheartedly backing the development of the Level 3 Furniture Apprenticeship Standard and would encourage the entire furnishing industry to support the campaign. The Level 2 Furniture Apprenticeship Standard was successfully developed and given ministerial approval earlier this year, thanks to the support of the furnishing industry. We now need the industry to rally together in order to get approval for the development of the Level 3 Standard.”

Contact: The Furniture Makers’ Company

Web: britishfurnitureconfederation.org.uk

Ultimate Handyman hits milestone 100k subscribers on YouTube

An expert in all things DIY has hit the 100,000 subscriber mark on YouTube proving that his combination of straightforward advice, unbiased reviews and light-hearted style is the winning formula when it comes to connecting with those faced with a tricky project. The YouTube channel, Ultimate Handyman, has proven so popular that it’s beating the likes of large DIY retailers, including B&Q and Wickes.

The Ultimate Handyman’s jargon-free videos cover everything from impartial product reviews to easy to follow step-by-step processes. Among the most popular videos are clips explaining how to install a shower tray, use a diamond core drill and fit a ceiling light, all of which have over 760,000 views each. The substantial library means that DIYers are likely to find exactly what they’re looking for but if they can’t, the Ultimate Handyman is also home to a forum full of tips, advice and other DIY enthusiasts sharing their knowledge. The YouTube channel is also updated regularly with fresh, useful content.

Contact: Ultimate Handyman

Web: www.ultimatehandyman.co.uk

AAW put woodturning library online

The American Association of Woodturners (AAW), a nonprofit organisation dedicated to education and advancing the art and craft of woodturning worldwide, has just made exploring the most extensive online woodturning library in the world, quick and easy. Whether it’s to solve a problem, research a new technique, or start a new woodturning project, AAW members are only seconds away from getting precisely the information they seek using EXPLORE! More than 2500 items currently make up the expanding EXPLORE! collection, including articles from 30 years of the *American Woodturner* journal and AAW’s cumulative library of complementary publications. Nearly everything members want to know about woodturning is now at their fingertips.

Contact: American Association of Woodturner

Web: www.woodturner.org

Open furniture month: Innovation in 18th-century French cabinetmaking

The Wallace Collection in London includes 25 galleries of 18th-century French furniture, paintings and porcelain. These pieces were collected in the 18th and 19th centuries by the first four Marquesses of Hertford and Sir Richard Wallace, the son of the 4th Marquess. The collection was bequeathed to the British nation by Sir Richard's widow, Lady Wallace, in 1897.

Open Furniture Month at the Wallace Collection offers visitors a unique opportunity to look inside some of the museum's most important pieces of furniture, including works by Jean-Henri Riesener, Jean-François Oeben and Jean-François Leleu. The month-long display will show off the colourful interiors, secret compartments and ingenious mechanisms of many remarkable 18th-century cabinets, desks and armoires. Admission to the museum is free of charge.

When: 1–28 February, 2017

Where: The Wallace Collection, Hertford House, Manchester Square, London W1U 3BN

Web: www.wallacecollection.org

EVENT
OF THE
MONTH



Lacquer cabinet made in Kyoto (probably), Japan and Paris, France, c. 1680

Northpoint

Northpoint is the new furniture and interiors exhibition for the northern UK. Over 80 companies representing various industry sectors will be exhibiting, including upholstery, living room, occasional, dining, mirrors, pictures, lighting, accessories, bedrooms, beds and floor coverings.

When: 29–31 January, 2017

Where: Highland Hall, Ingliston, Edinburgh EH28 8AU

Web: www.thenorthpointshow.co.uk

Open day at West Dean College

West Dean College's School of Creative Arts and School of Conservation are hosting an open day on 4 February. Visitors will be able to explore the workshops and facilities

and meet with programme leaders and current students.

When: 4 February, 2017

Where: West Dean, Nr Chichester, West Sussex PO18 0QZ

Web: www.westdean.org.uk

Spring Fair

Spring Fair is the UK's number one trade show for gift and home, welcoming more than 60,000 visitors through the doors of Birmingham NEC, over the course of five days. Established over 40 years ago, the Fair attracts over 2500 exhibitors within 14 different sectors including DIY & Home Improvement, Home and Kitchen, Dining & Housewares. A series of talks cover useful topics such as techniques for selling online, promoting your

business on social media and how to increase sales with better product photography.

When: 5–9 February, 2017

Where: NEC Birmingham, North Avenue, Marston Green, Birmingham B40 1NT

Web: www.springfair.com

Stockholm Furniture & Light Fair

The Stockholm Furniture & Light Fair provides the world's largest meeting place for Scandinavian design. Over 700 companies will be presenting their latest furniture and lighting products. There will also be a series of talks from high-profile designers, plus over 100 design-related events will be taking place throughout the city as part of Stockholm Design Week.

When: 7–11 February, 2016

Where: Stockholmsmässan, 125 80 Stockholm, Mässvägen 1 Älvsjö, Sweden

Web: www.stockholmfurniturelightfair.se

Ambiente

Ambiente is a leading international trade fair for consumer goods which is attended by around 136,000 trade visitors from 143 countries. Exhibits are arranged in three sectors: Dining, Giving and Living.

When: 10–14 February, 2016

Where: Messe Frankfurt, Ludwig-Erhard-Anlage 1, 60327 Frankfurt am Main, Germany

Web: ambiente.messefrankfurt.com



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Fly Wheel Dia: 380 mm



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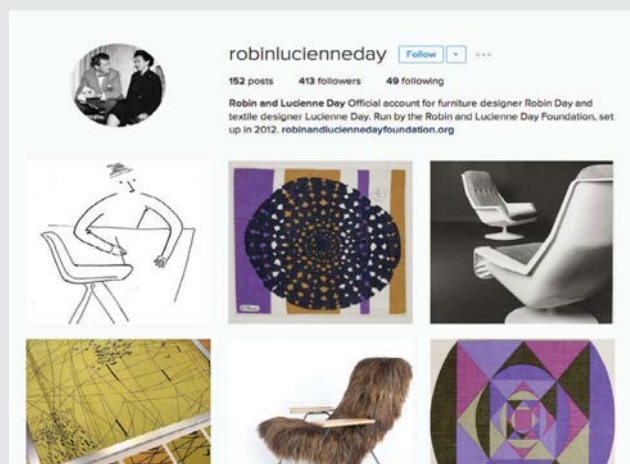
We bring you a round-up of the best from the online world plus the latest from the Woodworkers Institute forum

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'll also feature 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

Instagram: Robin and Lucienne Day Foundation

This Instagram account features images from the archives of furniture designer Robin Day and textile designer Lucienne Day, as well as the latest events and projects organised by the Foundation.

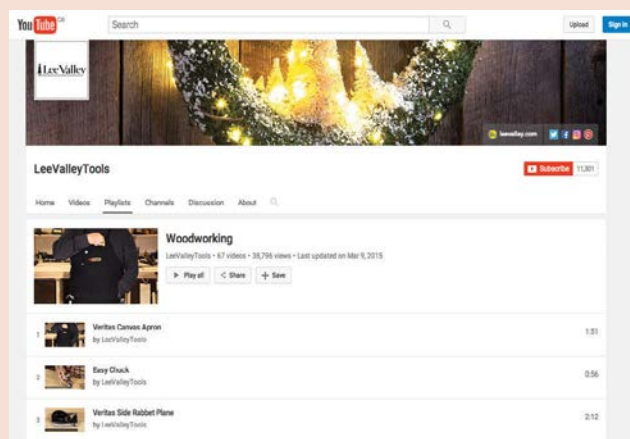
Address: @robinluciennday



YouTube: Lee Valley Tools

Lee Valley's official YouTube channel includes hundreds of short videos demonstrating the company's products. The videos are organised into 'playlists' with subjects including Woodworking, Home and Garden, Wera Tools, Veritas Custom Bench Planes, Gardening and more. The Behind the Scenes videos offer insight into the company's history and ethos and introduces viewers to Lee Valley staff.

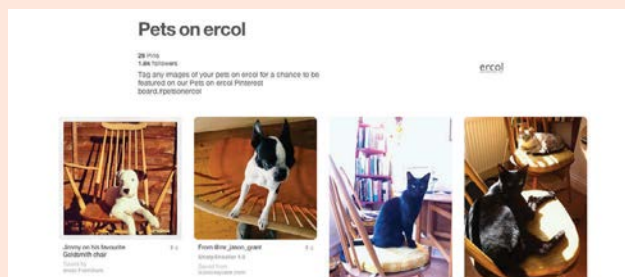
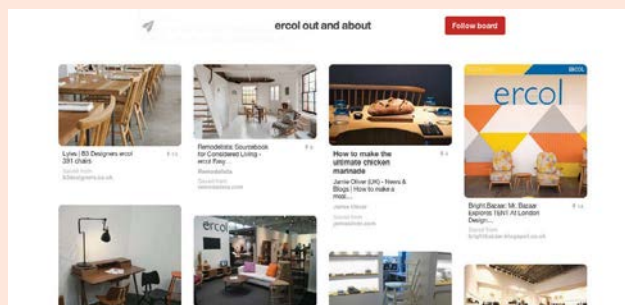
Address: www.youtube.com/user/LeeValleyTools



Pinterest: ercol Furniture

Iconic British brand ercol has a busy Pinterest account with several boards to follow. As well as vintage furniture, you can see ercol's latest projects and collaborations. You can also peek behind the scenes on the 'within the factory' board, and there's even a whole board of photos of 'pets on ercol'!

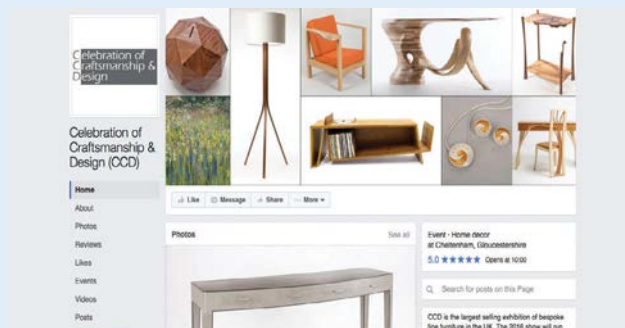
Address: uk.pinterest.com/ercol



Facebook: Celebration of Craftsmanship & Design (CCD)

CCD is the annual exhibition of bespoke furniture that takes place in Cheltenham in August. On the Facebook page you can see photos of work from previous exhibitions as well as keeping up to date with the 2017 show.

Address: tinyurl.com/ztgjfas

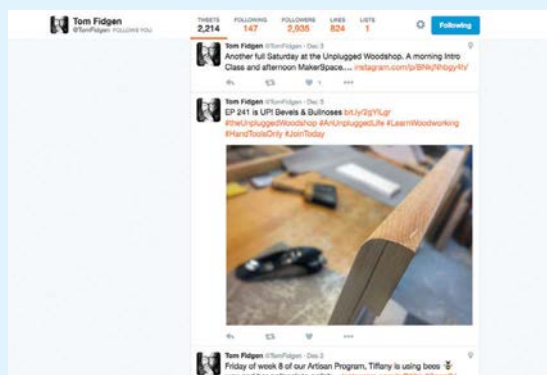


Twitter: Tom Fidgeon



Tom Fidgeon runs the Unplugged Workshop in Toronto, Canada. Tom tweets the latest news, photos and videos from his workshop, providing his followers with a daily dose of inspiration and practical knowledge.

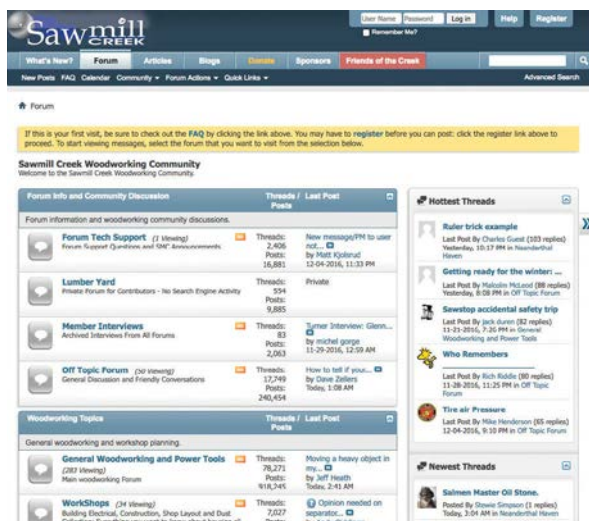
Address: @TomFidgeon



Blog: Sawmill Creek

It may not be the most attractive looking website, but Sawmill Creek's blogs and articles are well worth a browse. There's also a busy forum where you can discuss hand or power tools, woodworking and carving, workshop practicalities, finishing techniques, musical instrument making and much more.

Address: www.sawmillcreek.org



From the forum

The Woodworkers Institute forum is a great place to discuss furniture making and show off your latest projects. To join in the conversation, visit www.woodworkersinstitute.com and click on the forum button.



Saw doctors

Forum user Aged Whittler wrote in response to the Editor's article on saw sharpening in *F&C* 252: The lead article by Derek Jones highlighting a situation concerning sharpening handsaws, is a situation with which I fully concur. Like Derek, I am happy to have the odd tinker with an old saw to try and improve its cutting capability, but I would not attempt the same on an expensive item.

With regard to Derek's comment about UK saw manufacturers providing a sharpening service that they don't advertise, I had a different experience. I have a tenon saw, bought new, made by a well known UK company and when I contacted them with regard to having it sharpened, they advised that they did not provide such a service even for their own product. After some pushing, they offered to do it that time 'as a favour'. The sad thing is they could not suggest a third party who could provide such a service.

I did find a company in England who would sharpen saws, so I sent one rip and one crosscut. They returned sharper than they went, but I would not lay out the same money again for the standard received.

A couple of years ago, in conversation with Deneb Puchalski of Lie-Nielsen, I told him that I am reluctant to purchase a Lie-Nielsen saw because I have not located a suitable saw doctor who could re-sharpen it for me. This coupled with a UK price that is 40% over the US price, I could not find it in me to justify such a purchase. While LN offer a free sharpening service (postage cost only) in the USA, it is a bit ridiculous to send a saw some 5000+ miles for a tune up, together with all the aggravation of shipping and customs issues in between.

There are lots of wet/dry grinders, waterstones, diamond stones, etc. on the market related to sharpening chisels, plane blades, carving and turning gouges. We all do our own chisels, yet the basic element of starting any woodworking



project is to cut a piece of wood. We don't all have room for a tablesaw, and some of us also do work where hand saws are the only option. I don't want to spend a lot of time learning how to become a saw sharpener, I want to get on and use it.

I encountered Shane and Jacqueline Skelton and their saws at the Harrogate show – absolutely fantastic tools. However, I did not purchase one because the primary purpose of attending the show was to find, test and purchase specific items I had been after for some time. Another saw manufacturer I have encountered and with whom I have had some dialogue is Two Lawyers (Klaus and Pedder in Germany). Look at the detail on their website and see the outstanding quality of their product.

I realise that Skelton and Two Lawyers are at the top end of the market, and both provide an after sales sharpening service for their products. It seems you get what you pay for – product quality; comfort and quality in the hand; cutting capability and after sales support.

I am saving up my money!

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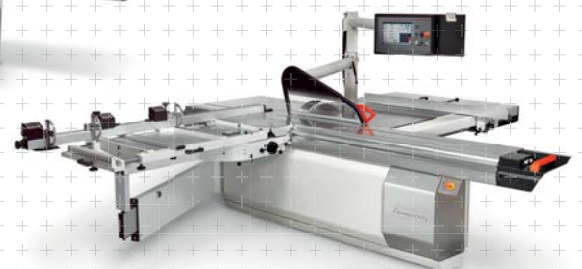
STURDY AND CONFIGURABLE

Manual models:

SI300 CLASS, SI350 CLASS, SI400 CLASS

Electronic models:

SI400 EP CLASS, SI550 EP CLASS



L'INVINCIBILE

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AND ADVANCED TECHNOLOGY

Electronic models:

SI 3, SI 5, SI X



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Sharpening Innovation

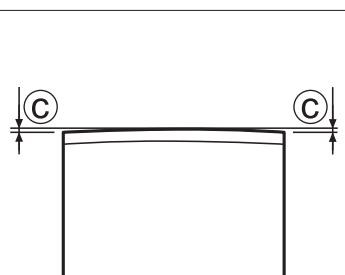
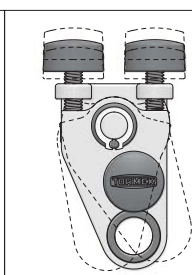
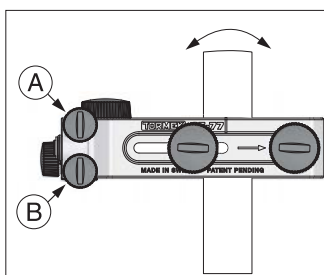
SHARPEN YOUR TOOLS TO A SQUARE EDGE OR A CAMBER GRIND

WITH THE NEW SQUARE EDGE JIG SE-77
it is even easier to set your wood chisels and plane irons for sharpening square every time. The jig also allows you to create a camber grind.

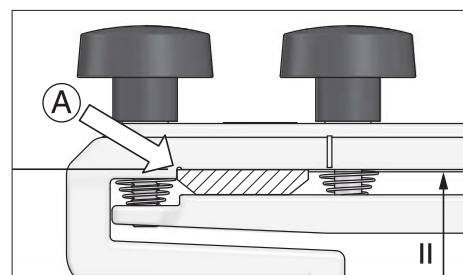


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- Tapered mouth to sharpen many Japanese chisels.
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Camber grind The more you loosen the adjustment knobs (A and B), the greater the pendulum motion you get, which increases the convexity (C).



Square edge Thanks to the jig's shoulder (A), it is easy to mount the tool correctly at 90°.



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Wood Awards winners

A wide range of furniture and building projects were nominated for the 2016 Wood Awards. We showcase the winners here

The winners of the 45th annual Wood Awards were announced at a ceremony held on 22 November, 2016 at Carpenters' Hall in London hosted by Editor of *Crafts* magazine, Grant Gibson. The projects all demonstrated the beauty and versatility of wood. The Wood Awards is the UK's premier competition for excellence in architecture and product design in the world's only naturally

sustainable material. The Wood Awards aims to recognise, encourage and promote outstanding design, craftsmanship and installation using wood.

For more information about the Wood Awards, visit: woodawards.com

Furniture & Product awards



Bespoke winner: Pantori Larder

Inspired by the Japanese 'Wabi-sabi' aesthetic that embraces simplicity and naturalness, Pantori is a freestanding pantry larder, created for Japanese crepe eatery, Nojo. The piece uses a combination of Japanese and English joinery. The top has been jointed using three-way mitres and wedged tenons, the rails are housed dovetails, while the drawers have been housed and nailed with ring shank nails typically used in boat building. Oak was selected for the frame and flexible straight-grained ash for the woven inner drawers. Shou Sugi Ban, the traditional Japanese technique of burning timber to preserve it and make it resistant to fire, rot and insects, inspired the scorching on the oak. Within the drawers, waste sawdust creates a substrate for mushrooms to grow in. Two extra rails allow the positioning of the drawers to be changed while the oak board provides an extra workspace

Designer: Steph Leake, Intern at Jack Badger Ltd.

Maker/manufacturer: Jack Badger Ltd.

Client/owner: Nojo

Wood supplier: Brooks Brothers Timber

Project architect: Holland Harvey Architects



Production Made joint winners: Planks Collection and Stretch Extending Dining Table

Designed by Max Lamb, Planks' roots lie in the humble carpenter's workbench and 17th/18th-century English country furniture. The collection (a dining table, bench, shelving, console table and lounge table) promotes utility, strength, durability and economy of material. Easily accessible storage prevents clutter from gathering on work surfaces. Varying plank sizes have been used for each piece of furniture to minimise waste. Full-width planks are used as the defining feature. Narrower planks are joined to form structural rails to support the top. Four simple L-shaped legs, structurally strong yet physically light, connect to the side of the box and support the cantilevered top. The collection is available in Douglas fir or oak

Designer: Max Lamb

Maker/manufacturer: Benchmark

Wood supplier: Tyler Hardwoods



The Stretch Extending Dining Table was conceived to use the natural characteristics of formed ply. The form of the laminations enables the top to slide along a very simple metal frame, exposing the extension leaves stored within the table. First designed in 2003, the original was much smaller and less successful. The re-design in 2015 was based on overcoming issues with the movement of each lamination. The updated version is significantly larger due to these issues being resolved. The table is available in European beech, birch or oak

Designer: Pengelly Design Ltd

Maker/manufacturer: Stonebridge Ltd

Client/owner: Montis



Student Designer, people's choice winner: Velo Chair

Inspired by the bicycle, the Velo Chair connects body and object by seamlessly wrapping itself around the user. Each surface is hand sculpted. Ash was selected for its flexibility, allowing the complex curves to be freeform laminated without breaking. The flexibility allows a more comfortable backrest which flexes and moulds around the sitter

Designer: Jan Waterston

College/university: Rycotewood Furniture Centre

Wood supplier: Tyler Hardwoods, Mundy Veneer





Student Designer winner: Geometry

Geometry is a modern circular dining table. The frame is inspired by molecular geometry, made with contemporary stainless steel rods and contrasting classic oak junctures. The table top consists of constructional oak veneer and solid oak lipping

Designer: Michael Stevenson

College/university: Building Crafts College

Wood supplier: Blumsoms, Capital Crispin Veneer

Steel supplier: Parker Steel

Buildings awards

**Arnold Laver Gold Award winner:
Maggie's Centres**

Maggie's Centres provide a welcoming space where people affected by cancer can find emotional and practical support. The design of the Manchester centre establishes a domestic atmosphere in a garden setting with a greenhouse and a veranda. The centre accommodates a range of spaces from intimate private niches to a library. Naturally illuminated by triangular roof lights, the building is supported by lightweight timber lattice beams. The beams act as partitions between different internal areas, visually dissolving the architecture into the gardens. The timber beams are designed as trusses that reflect the magnitude and orientation of the loads acting on them, anything superfluous to the structural support has been removed. The design uses Laminated Veneer Lumber (LVL) timber with no visible fixing between the pieces. The diagonal arrangement of the trusses across the central spine provides stability to the roof without the need for additional elements. The desire to create a low energy, homely environment with natural ventilation and daylight defined the design. As well as winning the Arnold Laver Gold Award, this design also won the Structural award



Location: Manchester

Architect: Foster + Partners

Client/owner: Maggie's

Structural engineer: Foster + Partners

Main contractor/builder: Sir Robert McAlpine

Specialist contractor: Blumer Lehmann AG/
SJB Engineers

Landscape consultant: Dan Pearson Studio

Photography: Nigel Young

Wood supplier: Metsa Wood



Small Project winner: The TWIST

The TWIST was developed by the Emergent Technologies and Design Programme at the Architectural Association School of Architecture for Timber Expo 2015. The project sought to exploit the anisotropic properties to gain full control of the bending and twisting behaviour of plywood. The system was primarily composed of two plywood strip elements: the ribs and the wings. The ribs were CNC-milled planar arcs that served a

structural function while the wings were straight strips with the grain perpendicular to the length. These wings connected to the ribs at specific angles and distances in order to bend and twist. A sub-system of combs and the perpendiculars ran along the free edges of the articulated surface, locking the geometry in place

Location: Timber Expo 2015

Architect: Emergent Technologies and Design, Architectural Association

Structural engineer: Emergent Technologies and Design, Architectural Association

Main contractor/builder: Emergent Technologies and Design, Architectural Association

Wood supplier: Hanson Plywood

Sponsor: TRADA, Hanson Plywood



Commercial & Leisure winner: Stihl Treetop Walkway

The Stihl Treetop Walkway provides views over Westonbirt Arboretum. At almost 300m it is the longest structure of its kind in the UK. The walkway bridges across a valley, allowing for ease of access at ground level without any stairs or lifts. While walking along the structure the valley falls away beneath and the walkway rises to over 13.5m above the forest floor. The route snakes above and through the tree canopy supported by scissoring timber legs spaced at 10.5m intervals. The walkway is a hybrid timber and steel structure. Larch was selected as the principal material given its durability and attractive colour. Scottish larch was selected for the decking and handrail while the columns are Siberian larch as it offers a tighter grain and higher strength-to-weight ratio

Location: Westonbirt, The National Arboretum, Gloucestershire

Architect: Glenn Howells Architects

Client/owner: Forestry Commission

Structural engineer: Buro Happold

Main contractor/builder: Speller Metcalfe

Joinery company: S H Structures

Wood supplier: CTS Bridges, Ventis & Brasker Masten, Russwood, Heseltine Design



Education & Public Sector winner: Stanbrook Abbey

Stanbrook Abbey is a new home for the Conventus of Our Lady of Consolation, a Benedictine community of nuns. The nuns' contemplative way of life required spaces that were simple, tranquil and beautiful. Stanbrook Abbey derives its plan from two intersecting axes significant in the liturgy of the church, its organic form rose out of the modest orthogonal domestic architecture of the abbey. Its interior celebrates the diurnal changes in daylight and takes advantage of the dramatic views. Preference was given to renewable, recycled or low energy materials, woods used include German oak, Scottish spruce, Douglas fir and British sycamore

Location: Wass, Yorkshire

Architect: Feilden Clegg Bradley Studios

Client/owner: Conventus of our Lady of Consolation, Stanbrook Abbey

Structural engineer: Structures One, Buro Happold

Main contractor/builder: William Birch Construction, QSP Construction

Joinery company: QSP Construction

Organ builder: Jennings Organs

Choir stall manufacturer: Ooma Design Ltd

Wood supplier: James Burrell, Vastern Timber Company Ltd



Interiors winner: Portledge Rear Staircase

This staircase is designed as a distinct contemporary insertion into the old medieval service wing of Portledge House, a Grade II listed manor house. The stair replaces a damaged multi-phase service stair and forms part of a re-ordering of the house. The staircase blends with the wall panelling to create a homogeneous design using English oak chevrons between darker walnut fins. On the staircase, the walnut fins form spindles topped with a leather handrail. The spindles are cut with arcs of varying sizes to create an organic flow. CNC machining was used prior to the staircase being assembled by hand using traditional joinery techniques

Location: Bideford, Devon

Architect: Witcher Crawford Architects and Designers

Joinery Company: Warren Hughes Furniture

Private winner: Contour House

Sanei Hopkins was commissioned to design an open, light replacement house using high-quality traditional materials. Removing the existing house and associated landscaping allowed the 'Contours' of the original meadow site to be reinstated. The use of timber externally was precluded by the Peak National Park Authority because the site is in the heart of a protected landscape where stone is the prevalent material. Stone only acts as a rain screen and cladding. A combination of American white oak, European oak and some stainless steel has been used for the superstructure. The house utilises both local and renewable materials as much as possible

Location: Peak District

Architect: Sanei Hopkins Architects Ltd

Structural engineer: Elliott Wood Partnership LLP

Quantity surveyor: MPA Ltd

Services engineers: Max Fordham LLP

Timber frame specialist:

Constructional Timber

Timber flooring: Admonter UK

Timber stair: Boss Stair

Timber doors: Longden Doors



Existing Building winner: Ansty Plum

Ansty Plum, a mid-century house designed by David Levitt and wood-lined stone studio designed by Alison and Peter Smithson, has undergone a retrofit and studio extension. The buildings are situated on a steep wooded hillside and the house has a simple open plan with a singular plane rectangular roof following the gradient of the land. Coppin Dockray transformed the house by removing many sequential changes made over the past 50 years to open up the house and express the architectonic qualities of the original Douglas fir construction. A new bedroom and study were created with bespoke Douglas fir joinery. The derelict studio has been brought back to life, acting as an ancillary bedroom that glows pink with Douglas fir. A secluded shower room was also created by extending into the hill

Location: Wiltshire

Architect: Coppin Dockray

Structural engineer: Tall Engineering

Main contractor/builder:

J & C Symonds Ltd

Joinery company: Westside Design

Wood supplier: Meyer Timber Ltd, SMS Veneering Services, Oscar Windebanks Ltd

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Compact size with mobility kit

Strong and constant pressure

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99.7% dust separation before filtration



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Compact Size

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Stable static pressure



A professional woodworker
A peaceful and clean shop

A photograph of Kevin Glen-Drake and Anne Briggs Bohnett in a workshop. Kevin, on the left, is an older man with a grey beard and glasses, wearing a grey cap and a dark blue sweatshirt with 'Glen-Drake TOOLWORKS' on it. Anne, on the right, is a younger woman with dark hair, wearing a blue denim vest over a red and black plaid shirt. They are both smiling. The background shows a workshop with various tools, wood, and a large black bag.

Riding horses in the rain – an interview with Kevin Glen-Drake

Anne Briggs Bohnett spends an afternoon
with the California-based toolmaker

Kevin and I at Pratt Woodshop in Seattle

I've had the incredible privilege of getting to know Kevin Glen-Drake of Glen-Drake Toolworks by working with him at various Lie-Nielsen Hand Tool Events on the west coast of America.

I was first drawn to Kevin's dry-as-toast sense of humour, but his depth of knowledge and understanding of so many aspects of the woodworking craft can reel one in for hours of fascinating conversation. A few quick tips that he gave me on woodturning at a show last year have revolutionised my turning technique. His new Joinery Saw, though it may look a bit strange at first glance, is revolutionary.

A few weeks ago, I was able to sit down with Kevin to ask him a few questions for *F&C*. True to form, Kevin kept me giggling the whole time, and I left the conversation feeling inspired.

While some of these questions were only really asked in jest, I've included a few of my favourites here because his answers were just too good not to print.

Why did you start making tools?

The root of my dysfunction is clear. If it weren't for my father I wouldn't be doing what I'm doing today. His favourite lament was: "If I only had the right tool". His work-arounds were legion. How he managed to die with all of his limbs attached, and how I managed to survive my childhood hanging with him are mysteries to me. But my father had a can-do attitude and a zest for life that was magic. He wasn't the sharpest tack in the box, but I was lucky to have him, and I like to think that if he were alive today, I could provide him with at least some of the right tools.

What was the first tool you ever made?

It was a knife. I remember it very well. I was seven or eight years old. It was rather crude, but it was sophisticated enough for my mother to remark that if I wasn't careful, I could hurt someone. My mother was a rather naive person, so I'm sure she had no idea that I had been stalking my sister for quite some time.

What is the number one most played song on your iPod/audio device of choice?

I'm a recovering musician so I don't listen to music much, and certainly not when I'm doing something else, like woodworking. I prefer to not have my focus interrupted by exogenous variables, e.g. sound. If you have a shop radio, then you're on Darwin's future awards list, and not very far down either.

Tell us about your hobbies aside from woodwork, do any of them lend themselves to woodwork? Do you recommend woodworkers take up any of your hobbies? If so, why?

Work is my hobby. When I get tired of working, I sleep. As a child I watched people work so that they could retire and do something they liked. None of them made it.

Do you garden?

Be serious.



Ergonomic turning tools

What is your favourite food?
Popcorn.

When you aren't working or making stuff, what do you love to do? What do you hate to do?

When I'm not making tools, I practise techniques. I'm no good at business, but I'm smart enough to know that, so I try to have someone around who likes to take care of the business side of business.

What would your dream life look like? How do you see your life moving towards that dream in the next year? The next five years?

If I'm not living the dream, then I'm dreaming. I've been at it awhile now though, so I'd like to cut back a little on the business travel so I can make more videos and do more teaching. I like to teach. It's hard work though. I have no plans to retire. If I did, I would probably go start a tool company, and I already have one, so what's the point?

Outside of tool making, what has your greatest success in life been so far? Or, what does 'success' look like for you and when will you have achieved it?

Success is not a destination. It's a journey, and I feel like I am being successful when I use my body to create what my eye wants to see. It's the same thing I learned as a percussionist. When you get the motion right, the sound comes out by itself. Success is in the motion.

Was there a mentor/inspiration that taught or guided you to become a maker? Or what was the catalyst that led you to start making stuff?

I've been influenced the most by people who drill down on problems. Most problems are a collection of problems, ergo solutions

“Success is not a destination. It's a journey, and I feel like I am being successful when I use my body to create what my eye wants to see”

are a collection of solutions. My music and programming careers taught me to break problems down into manageable elements that could be understood and practised. It's what I do as a toolmaker as well.

I don't know how many musicians turn to woodworking, but when they do they are usually pretty good at it. I think that's because they understand the concept of practice. We are all familiar with the concept of learning but practice is different from learning. Practice is applying what we know over and over again until both our minds and

our bodies understand it. That doesn't mean that we shouldn't perform until we are the world's best at what we do. I had a music teacher once who said: “When you have to perform, get the sound out any way you can, but when you practice, practice what you need to practice. The more you practice the more your practice will creep into your performance.” He was right, and that sage bit of advice also applies to woodworking.

Of course practice doesn't always produce the desired results. There's something called technique as well, so



Glen-Drake Mallet



Kevin with his wares

knowing what and how to practice is also germane. I am opposed to joining the fast-race. We get good by practising good, not fast. If we are going to be looking at something for 30 years, no one is going to care then how long it took to make it.

I have a lot of empathy for avocational woodworkers. I understand that they cannot do the jobs that the woodworking pundits do every day, any more than the pundits can do the jobs that avocational woodworkers do every day. They enjoy woodworking though, so I try to mitigate some of their frustrations.

What's the coolest thing you have ever made? And what is your favourite tool?

The coolest thing I have ever made is my Joinery Saw. It's also my favourite. I really think it's a game changer. I decide what tools to make by using tools and watching others use them. When I identify a problem that seems to be universal, then I start breaking it down. The biggest problem I have seen so far with woodworking tools is the handsaw. This is one of those problems that is a collection of problems.

We grind to a start and grind to a stop on every stroke of a traditional handsaw. A power saw doesn't work that way. On a power saw the teeth are only touching the wood when they are moving. Since our saw has tooth-free zones at the front and back of the blade, if you take a full stroke, then the teeth will only be touching the wood when they are moving. It's a whole different feel. The pitch is finer at the beginning and end of the stroke as well. Being able to maintain cutting velocity while the teeth are engaged, plus ramping into and out of the coarsest part of the cut, produces a faster and smoother cut.

Other features include removable/ interchangeable blades and a handle that aligns with the direction of force and gives you a variable 'hang'. You can see me using the saw and suggesting some ways to practise on YouTube.

How long have you been seriously pursuing making stuff and perfecting your craft?

I started the Glen-Drake Toolworks in 2001, shortly after graduating from the College of the Redwoods fine woodworking programme. The Tite-Mark marking gauge

was my first tool, and really, all I was looking for was a better marking gauge for myself. What's happened since then is a bit of a mystery to me.

When do you have your best ideas? What inspires them?

The tools I make are all driven by aggravation. I have zero tolerance for solutions that are more of a problem than they are a solution.

Who are some of your favourite makers?

Lie-Nielsen does an amazing job of producing quality hand tools along traditional lines, but I also like some of the cottage toolmakers.

Who is your biggest fan?

Fancy Feast.

What brings you the most joy? What gets you really excited? What makes you laugh?

There's nothing better than watching the light of understanding go on in someone's eyes.



Kevin's Kerf Starter. I couldn't resist

What do you wish someone told you when you first got started making stuff? (Or maybe someone did tell you and you wish you had listened)?

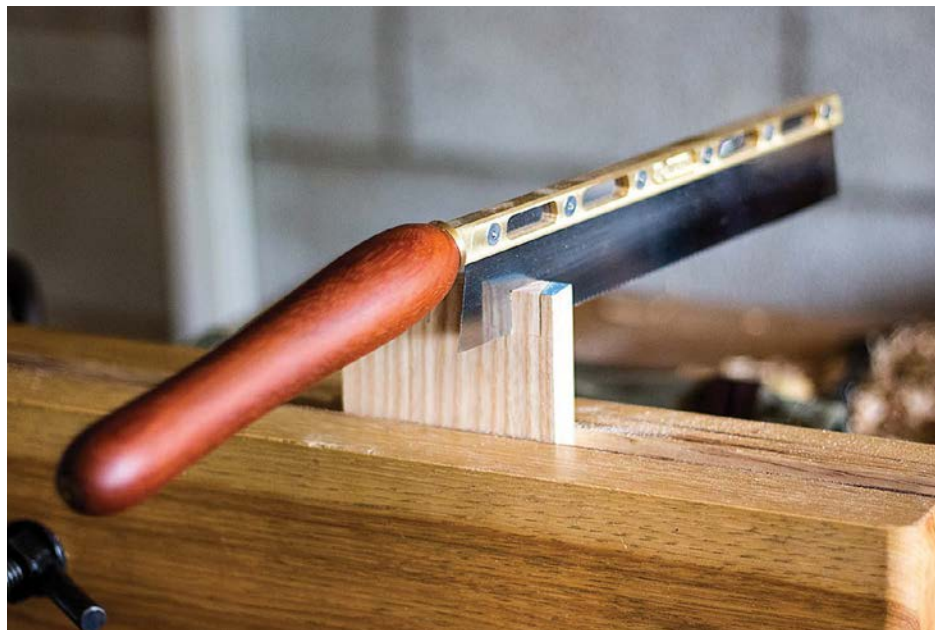
The advice I received was all about how to make money, but it's not about the money is it?

Any advice for people wanting to follow in your footsteps?

To fully understand a problem you have to know how to create the problem. Once you understand a problem, then you can work on a solution to the problem.

Doing something the way we do it, because that's the way we learned to do it, is the dumbest reason I can think of for doing anything the way we do it.

When it comes to tools we seem to be willing to accept endless innovation as long as the tools have switches. But we continue to base our hand tool designs on what the first industrial revolution – AKA 'tradition' – afforded us. It's kind of silly really. If you want to connect with the past, lose your phone and go ride a horse in the rain. *F&C*



Glen-Drake Joinery Saw

INFORMATION

For more information about Glen-Drake Toolworks and for links to classes and events, visit: www.glen-drake.com

The Glen-Drake Toolworks YouTube channel can be found at: tinyurl.com/hj58499

Glen-Drake tools can be purchased in the UK from Classic Hand Tools, see: www.classichandtools.com

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cutting
height



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Cutting Stroke

Forsa 4.1

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Panel Sizing Saws

Forsa 8.0 & 9.0
Panel Sizing Saws

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Precisa 6.0-P2	Inc 2m STC + TWE + TLE (as illustrated)	4.0 / 6.5	110 mm x 1400 mm	£2,890.00	£3,468.00
Precisa 6.0VR-P1	Inc 2m STC + TWE + TLE + pre-scorer (as illustrated)	4.0 / 6.5 + 1.0	110 mm x 1400 mm	£3,250.00	£3,900.00
Forsa 4.0-P1	Inc Pro STC + TWE + TLE + scorer (as illustrated)	NA / 6.5 + 1.0	107 mm x 1600 mm	£3,300.00	£3,960.00
Forsa 4.1-P1	Inc Pro STC + TWE + TLE + scorer	NA / 6.5 + 1.0	107 mm x 2100 mm	£3,800.00	£4,560.00
Forsa 8.0-P3	Inc Pro STC + TWE + TLE + rear support table + clamp + scorer	NA / 6.5 + 1.0	107 mm x 2600 mm	£5,250.00	£6,300.00
Forsa 9.0-P3	Inc Pro STC + TWE + TLE + rear support table + clamp + scorer	NA / 6.5 + 1.0	107 mm x 3200 mm	£5,395.00	£6,474.00

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

All prices effective as of the 1st January 2017.

End of an era – the Holtey No. 984 panel plane

**Jim Hooker reviews Karl
Holtey's final plane**



It's the end of an era in more ways than one. Most importantly because, after 25 years of plane making, this is the last series production plane from Karl Holtey. It's also the end of an era for me; I first reviewed a Holtey plane for *F&C* in 2007, since when I have looked at all his major introductions, but of course this will be the last. I don't expect this to be cause for sadness to anyone but me, but I do think the end of Holtey plane making is a cause for sadness for all woodworkers who value the finest of tools and the depth of knowledge and effort that goes into designing and making them. I am conscious that one of the things that has marked my Holtey plane reviews over the years is the absence of serious criticism of the product. This is not for want of trying; it's just that the application of that depth of knowledge and effort makes life so difficult for the humble plane reviewer who wants to be seen to be doing a proper job. So I'll give it my best shot but I'm not making any promises I can't keep.

History

The end of an era is a good time to take a look at what really marks it out. In the case of Holtey Planes, a revolution occurred in 1998 when Karl designed his No. 98 smoother. Until then all his planes had been based on infill planes by British makers from the late 19th and early 20th centuries, mostly, but not exclusively, by Norris. These weren't copies – Karl is as critical of the work of these early makers as he is of his own – extensive experience of restoring period infills made

him very aware of ways they could be improved, both technically and aesthetically, so all Holtey infills include improvements, many hidden. While continuing to make infills after 1998, Karl always regarded non-infills as the real path of progress for a brand which has from the beginning been characterised by an obsessive search for plane making perfection and the 98 series shows a clear and progressive direction in that search. Has the series produced a quantum leap forward in plane design and making? Of course not, after 2000 years in the development of a tool intended to do something so fundamentally uncomplicated, there are no great leaps forward to be made.

Planes are like bicycles – their underlying principles were settled long ago, but in the case of planes this started about 1800 years earlier. As with modern racing bikes, advances take the form of marginal gains based on careful analysis of existing conventions and Holtey has introduced a string of innovations. Some have become commonplace, such as bevel up blades in bench planes, stainless steel construction, A2 tool steel blades and kickers near the blade edge against which the blade can pivot to facilitate lateral adjustment. Others, like integral rivet body construction and the brilliant evolution of the Norris adjuster in the 982, have not caught on because they are either best suited to small scale production or simply too complex and expensive to make.

So, the 984 represents the end of the Holtey line. The final step in that obsessive search for perfection, so we'll see whether the No. 984 has more of those prized marginal gains which, when aggregated represent a real step forward. But first, the basics. The 984 is, blade and handles apart, made entirely from stainless

steel and its body uses Karl's familiar integral rivet construction method. The A2 steel blade is bevel up and bedded at 17° so a 30° bevel angle gives an effective cutting angle of 47°, which is close to standard pitch. The whole ensemble weighs in at a pretty substantial 2630g, so there's plenty of heft to help you do the work. Innovations include a new rear handle design and further development in adjuster friction reduction. The overall shape is clearly based on the 983 block plane and, to my eyes, is an aesthetic success.

While there have been panel plane (equivalent to a jack plane or No. 5) versions of the 98 and 982 smoothers, made in very tiny numbers in response to demand and never advertised, the 984 is the first in the series to be designed from the outset as a panel plane.



The front part of the 984's sole showing the integral rivets used to fix it to the sides. Also shown is the boss to which the front knob attaches



The design of the 984 is clearly derived from Holtey's No. 983 block plane and is, arguably, even better looking

Handle design

Given that a plane's handle or tote is the user's most direct connection with it, that seems a good place to start the review. So far as shape is concerned the rear handle is, on the face of it, pretty conventional, but the 984's handle bucks the trend in a number of manufacturers' recent designs towards angles closer to vertical than has historically been the norm. The 984's handle is canted forward at an angle of 52°, which is rather more than the historical norm.

Another area where the 984 departs from convention is in the fixing of the rear handle. Take apart most rear handles and what is revealed is a pretty big hole down the centre only partly occupied by a long spindly screw clamping handle to body. The 984's handle has a much more substantial

shaft, 10mm thick over its lower section and incorporating a hexagonal section allowing it to be spannered tightly into a substantial plinth which is integrally riveted to the sole. The threaded 8mm top section of the shaft allows final fixing of the handle via a tubular nut incorporating an external coin slot. This means of tightening is used so that the top fixing will never be tighter than the one at the bottom – if unscrewing the top nut were to result in the bottom shaft fixing unscrewing it would not be possible to withdraw the shaft from the handle. Coin slotted nut apart, all this beautifully made complexity is entirely hidden because it slots very snugly into an accurately machined recess within the handle.

The handle and front knob on the plane tested here are made from acrylic and will not

be to everyone's taste. For my part, I love the subtle shades of grey in the basic black with limited red highlights complementing the otherwise all stainless construction. If you have prejudices about the use of plastics in tools borne of poorly formed moulded handles of old, forget them. These handles are machined and hand shaped from a solid block using exactly the same methods as for the alternative wooden handles and they feel every bit as good in the hand. They are also more dimensionally stable than wood so less likely to be loosened by seasonal movement. However, if you like the sound and look of them and fancy ordering a 984 so equipped, I'm afraid you're out of luck because all of the acrylic handled examples are already sold, so it will have to be some beautiful rosewood or nothing!



The rear handle fixing is much more substantial than that of the pre-war Record No. 5 shown alongside. Note the inset sleeve in the top of the handle into which the cylindrical fixing nut fits



The recess into which the handle mounting plinth fits so that the fitted handle is flush with the plane's sole



Some will think the 984 looks even better with rosewood handles

The 984's rear handle slopes forward at 52° from the vertical and is very comfortable to hold

Friction reduction

Plane makers have long grappled with the balance between the friction needed to provide effective blade clamping, the need for the blade to slide when adjusted fore and aft and laterally and the effect that fore and aft adjustment can have on the lateral setting. On the 984 the latter problem is addressed by a somewhat larger version of the ball and socket blade clamping shoe attached to the clamping wheel, as first seen on the 983 block plane. On many planes the friction problem is mitigated by flexibility in the lever cap itself but the solid milled stainless steel cap on the

984 is immensely rigid. This wouldn't be a problem if users didn't tighten blade clamps more than is necessary but the reality is that most do. In an attempt to alleviate this, Karl has experimented on the 984 with hexagonal boron nitride, a dry, fine particulate ceramic, consisting of 0.5 to 14 micron sized particles which is burnished into a metal's surface in a tumbling machine and acts as a dry lubricant. Widely used in industry, on the 984 the clamping shoe is treated with it.

The adjuster is of the Norris type with a single fine thread rather than the dual left-

and right-handed thread type favoured by Norris in which the opposing threads act additively to give rather coarse adjustment. The adjuster is non-captive, sitting in a recess in the plane's sole. Although unconventional, there is no necessity for the adjuster to be captive; it avoids the need for a mounting plinth which would have forced the blade higher and resulted in a steeper blade angle. Being able to simply lift the adjuster out of its recess also makes it much easier to clear it and the surrounding area of shavings and dust.



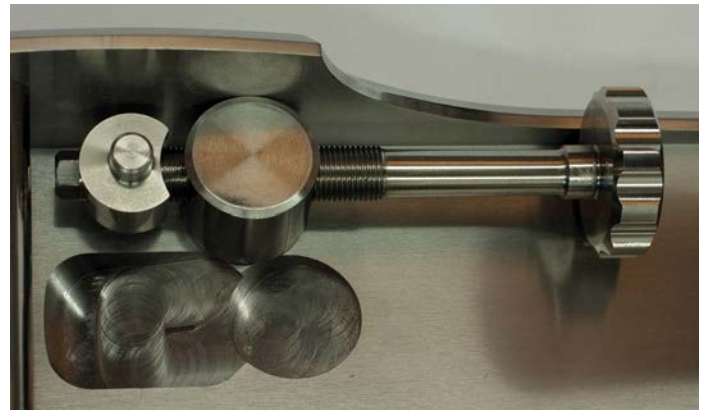
The lever cap clamping wheel with ball and socket shoe and its component parts



Lever caps are partly machined as a strip and then cut up before final machining to shape and hand polishing. There is still a lot of metal to be removed here...



...a completed lever cap with wheel and clamping shoe



The non-captive adjuster and the recess in which it sits. The shaft and adjusting wheel are made in one piece

At the bench

As ever with a Holtey plane, first impressions are of beauty of line, attention to detail and, above all, the perfection of making that one would expect of a plane at this price.

Unscrewing the lovely-to-the-touch clamping wheel lowers the lever cap so it can be slid under the bridge and removed, allowing the blade to be lifted out for sharpening. At this point, the minor downside of the non-captive adjuster becomes apparent because the adjuster wants to come away with the blade and there isn't enough space for this to happen. However, a wiggle of the blade quickly causes the adjuster to drop away allowing both to be removed separately and is a small price to pay for the ease of cleaning.

The blade is finely surface ground on every face – edges included – so polishing the

back is straightforward and the edge ground at 25° facilitates the quick formation of a 30° secondary bevel with a very fine edge.

Now to that forward-canted rear handle. Upright handles always look ugly to me, which wouldn't matter in the slightest if they were ergonomically correct. I'm no expert in ergonomics but I don't believe they are. I suspect that those who have adopted them have used as their starting point the notion that a handle should be upright because most of the effort expended when planing is employed to drive it forward. However, this ignores two facts. First, when a gripping fist is formed the knuckles are not aligned vertically but extend further forward at the top. More importantly, when a natural planing stance and height is adopted, the most comfortable and efficient alignment

of wrist and forearm is a straight line and this straight line is not parallel with the surface being planed. A forward-sloping handle facilitates this alignment and the combination of forward force combined with modest downward pressure that is required. Whatever the merits of this argument, in use the handle immediately feels entirely natural and comfortable.

The second question to answer is whether all the effort and complexity that went into the handle fixing has really made a difference. A widely unappreciated disadvantage of the conventional open handle and its spindly fixing is that it has notably more flex than the closed handle typical of infill planes. As with a bike frame, flex is the enemy of efficient energy transfer but, perhaps more importantly for a plane,

it dulls feedback about what is happening at the cutting edge. I have to admit that before using the 984 I had not been conscious of the flex in conventional open rear handles and the difference a really rigid handle makes, but the 984 really does feel noticeably more solid and all of a piece than other open-handled planes and the equal of a closed handle.

Last and most important, what about planing performance? Well, first of all, that high-tech treatment to the lever cap clamping shoe does seem to help blade adjustment which is smooth and easy as long as the screw is not tightened excessively – something that should be avoided with any screw adjuster because it can cause rapid thread wear.

I used the 984 on a variety of different types of wood at varying shaving thickness, including some with recalcitrant grain, and achieved a smooth silky finish very satisfyingly. It won't cope with extremely curly grain without tear-out, but then, neither will any other plane with its blade bedded at or near common pitch.

Conclusion

As expected, the 984 doesn't represent a great leap forward in plane making but it does prove that those marginal gains so prized by the Team GB cycle racing team are there to be had in the world of hand planes. Is it worth the price? In purely objective utilitarian terms it is hard to argue that it is, but as in many other fields, not least bikes, decisions are rarely made on purely utilitarian grounds. Aesthetically, technically and functionally the 984 is such a beautifully honed tool made in a way and to a standard that requires real depth of design and engineering skill, expensive workshop resources, plus an obsessive devotion to perfection on the part of the maker, that the chances of its like being seen again seem improbable. And, of course, it's the last in the line. On that basis, I would be surprised if there are not enough people out there who will appreciate its qualities and be able to afford it, for the remainder of the production run to be snapped up. I wouldn't blame them for doing so; they certainly won't be

disappointed. So again, I have no significant criticisms to make, but I'm neither surprised nor disappointed. *F&C*

F&C VERDICT

FOR:

- Performance
- Flawless standard of making
- It looks even better in real life
- Probably your last chance to buy a new plane made to this standard

AGAINST:

- Price
- Removing the blade is a bit fiddly

THE NUMBERS

Body: Fabricated stainless steel

Dimensions: (l,w,h): 346 x 54 x 125mm

Weight: 2630g

Blade: 5mm-thick A2 steel, 50mm wide

Price: £9936 inc. VAT

From: www.holteyplanes.com



Full surface grinding makes polishing the back a doddle



A gripping fist slopes forward; part of the reason that plane handles do the same ...



... but, in a normal planing stance the arm adds an even larger angle, so plane handles need to slope forward significantly for efficient and comfortable planing



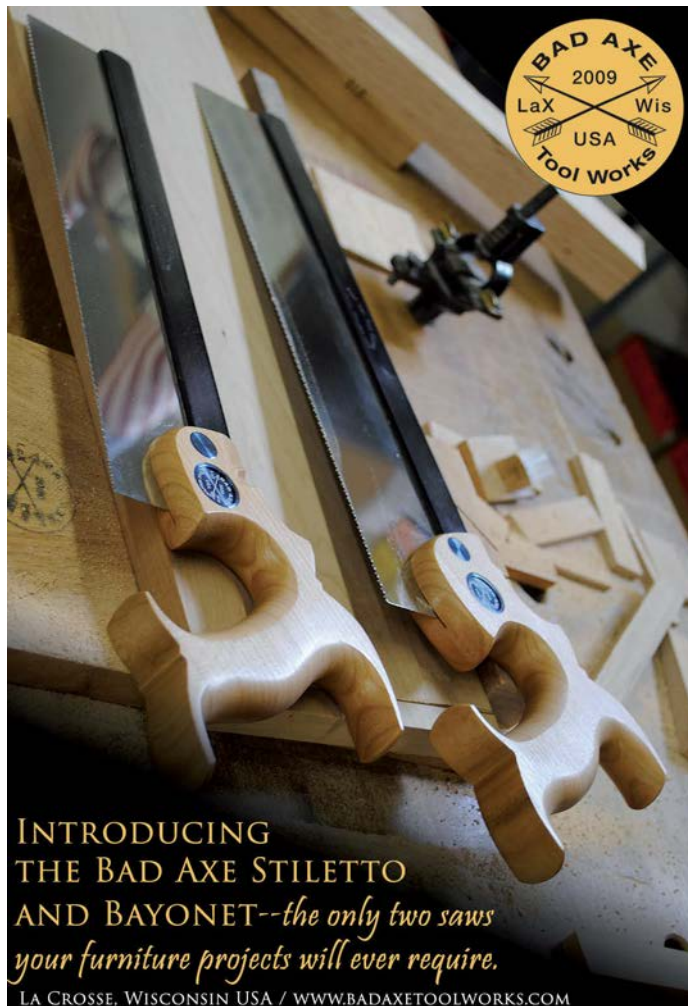
Creating this pile of shavings from various wood species with the 984 was a real pleasure



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Angled dovetail box

David Barron breaks away from the usual right angles with this angled box



Showing the lid...



...and the lining

I love making dovetail boxes, but wanted to try a box that moved away from the usual right angles that dovetails tend to dictate. Angling all sides involves complicated layout and joinery, but angling just two of the sides makes things a lot easier, while still giving a pleasing effect. This box is the ideal project to get you thinking about slopes and curves and the subtle effects they can have on your designs.

As a precursor to making a box with four sloping sides it will give you an idea of how even the smallest changes to square edge joinery can affect the geometry for laying out neatly spaced dovetails.

Preparation

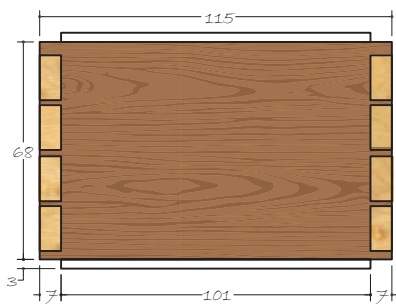
Before you start making it's a good idea to make a couple of 10° angle blocks; one for horizontal and the other for vertical, these will be used a few times during the build. When cutting the pieces to size it's important to make the two ends 6mm taller in order to accommodate the angle which needs to be cut on the bottom of the ends. This angle is best done on a shooting board with the support of the vertical 10° block. This same block is also used on the router table to cut the groove for the base, in order for it all to line up. The front and back are cut lying flat with the router table fence in the same position. Stop blocks are used to limit the travel so that the slots don't go through the ends, which would show in the finished joint.



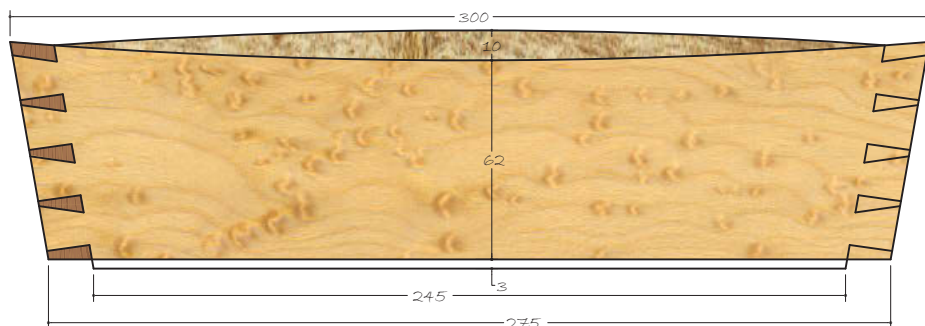
The sides cut to size, note the coloured dots which help you keep track of the pieces



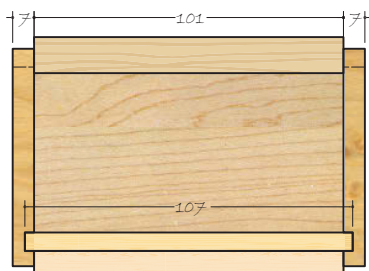
A 10° bevel being shot on the underside of the walnut ends



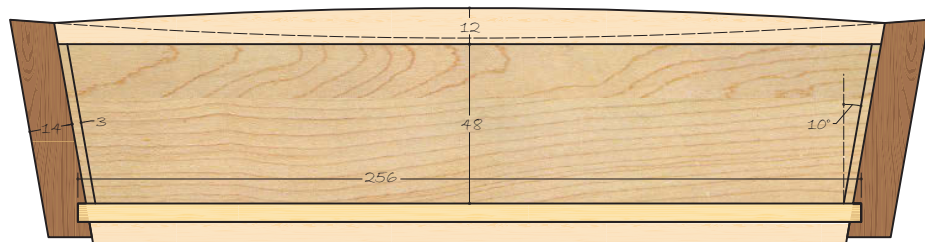
END ELEVATION



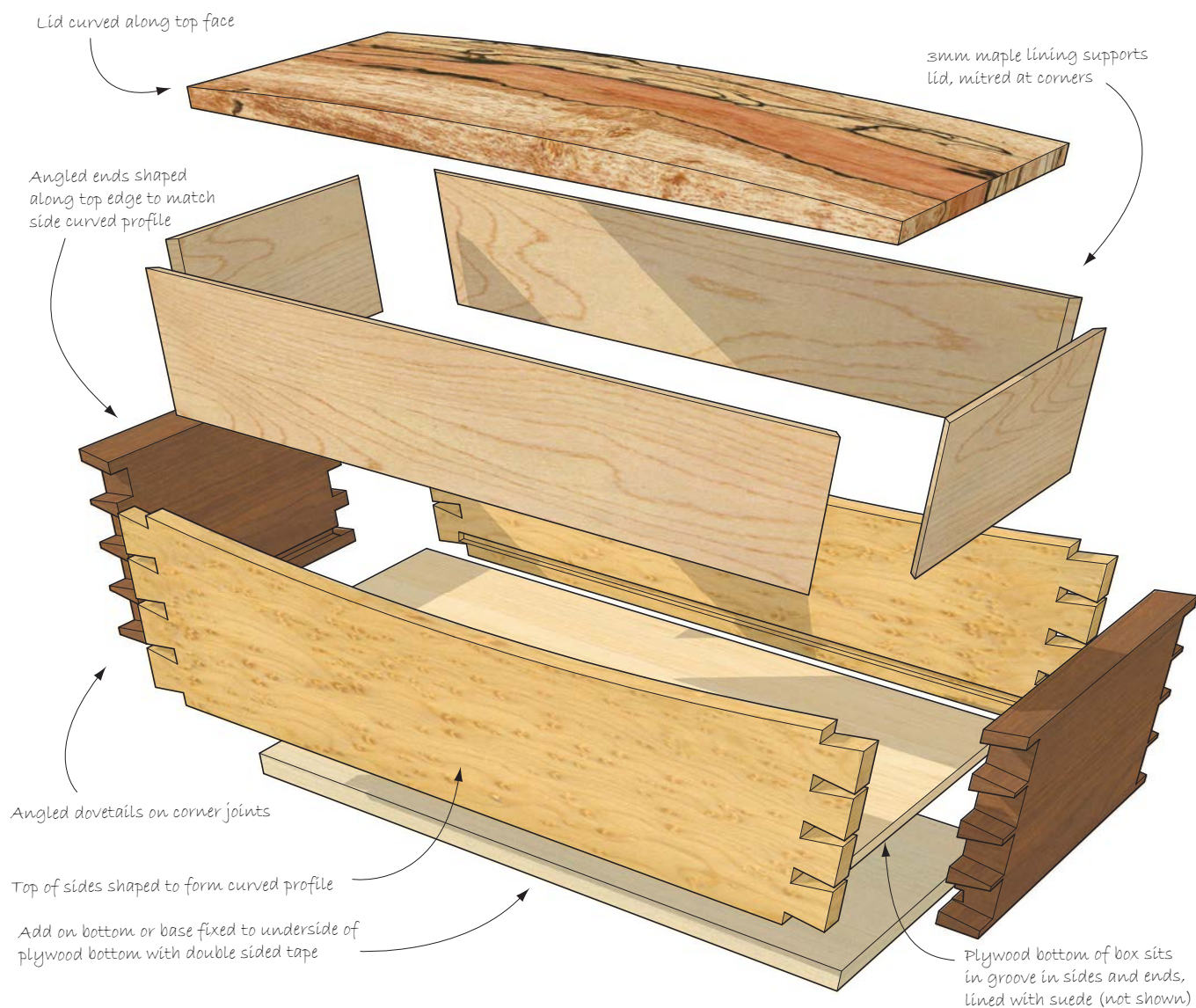
SIDE ELEVATION



SHORT SECTION



LONG SECTION

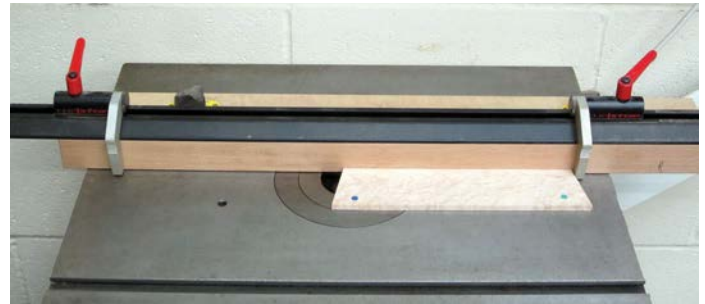




Cleaning up the edges of the front and back



Slots for the base being carefully routed with a 10° block



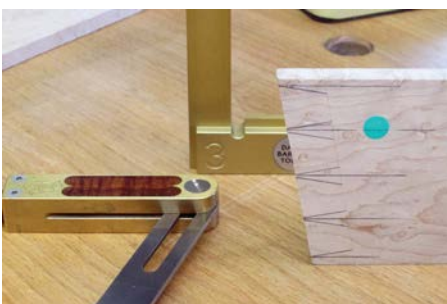
Slots for the front and back being cut, note the stop blocks

Beginning construction

The dovetail base lines can now be marked. Note the ends of the angled tail boards need to be marked with a knife and square, as there is no registration for the stock of the marking gauge. For the dovetails to look right they need to be horizontal, so I drew evenly spaced lines parallel to the bottom edge and then marked in the dovetails to either side of the lines. With a 10° angle and using a 1:6 ratio (also 10°) it means that one of the lines is marked at 90°, with a square, and the other at 70°, with a sliding bevel. If you decide on different angles or dovetail ratio you need to adjust accordingly.



The sides of the tail board being knifed



Marking out the tails

Cutting the tails

To help cutting the tails at the same angle each time I angled the boards so that the cut is vertical, which is more natural. In addition, to try and keep the cuts dead square, I cut both pieces at the same time which doubles the width of the lines. I used my new Skelton



Angling the boards so that the cut is vertical



Using my new Skelton dovetail saw

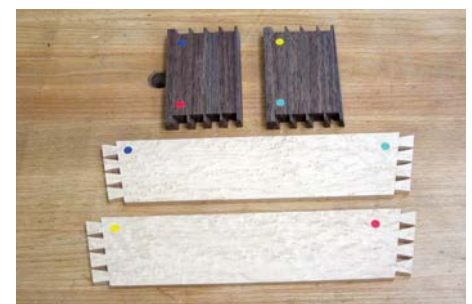
long stroke dovetail which cut beautifully and tracked straight; this is the best English style saw I've ever used. The pins were then marked from the tails ensuring the bottom edges were perfectly aligned. Do check the fit of the base all round before committing glue to the joints.



Cutting the other side vertical as well



Marking the pins, ensuring the bottom edges are in line



All the parts ready for glue up

Lining

With the box glued up I marked out the shallow curve with a template and this was carefully cut on the bandsaw. Make sure the box is perfectly square with the blade to get an even cut on both sides. The sides were then cleaned up with a spoke shave and sanded smooth using a block that spanned both sides to keep the edges square. The base of the box was lined with pig suede followed by a wooden lining

to support the lid. The lining was taken to just under the lowest part of the curve so that the lid didn't end up too chunky. The 45° mitres were cut on mitre shooting board using the horizontal angle block for the front and back pieces. The vertical block was used to angle the top and bottom of the two end pieces. An easier alternative to fully lining the box would be to just use two end pieces to support the lid.



The dovetail box glued up, note the protruding ends



Template used to mark out the gentle curve



Cleaning up the curves with a spoke shave



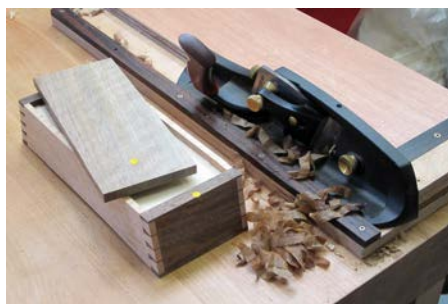
Trimming the lining on the shooting board

Making the lid

The same curved template was used to cut the matching curve on the lid. I used double-sided tape to stick on an identical support board to make the bandsaw cut more stable and even on both sides. The surface was sanded smooth on a disc sander using a fine 240 grit disc, which gives good control over stock removal. The support board was left on to keep things square, but needs to be removed for final flush fitting of the two ends of the lid. The resulting difference between the opposing curves gives enough finger room to allow the lid to be lifted off with one hand, removing the need for a handle.

The last thing to be done was to build out the base to lift the sides clear of the surface by about 4mm, adding a floating feeling to the box as well as adding welcome low down weight. The add-on base was shot to a snug fit and attached to the plywood base with good quality double-sided tape which would accommodate any small seasonal movement.

In order to maintain the whiteness of the maple and background colour of the spalted beech I used a water-based matte finish, applying three coats with a small sponge. This was left for a week (up to 30 days is ideal) to harden and then cut back with 600 grit Abranet pad to a smooth finish. *F&C*



Shooting the add on base to fit



Finishing with a matte water-based varnish



The finished box



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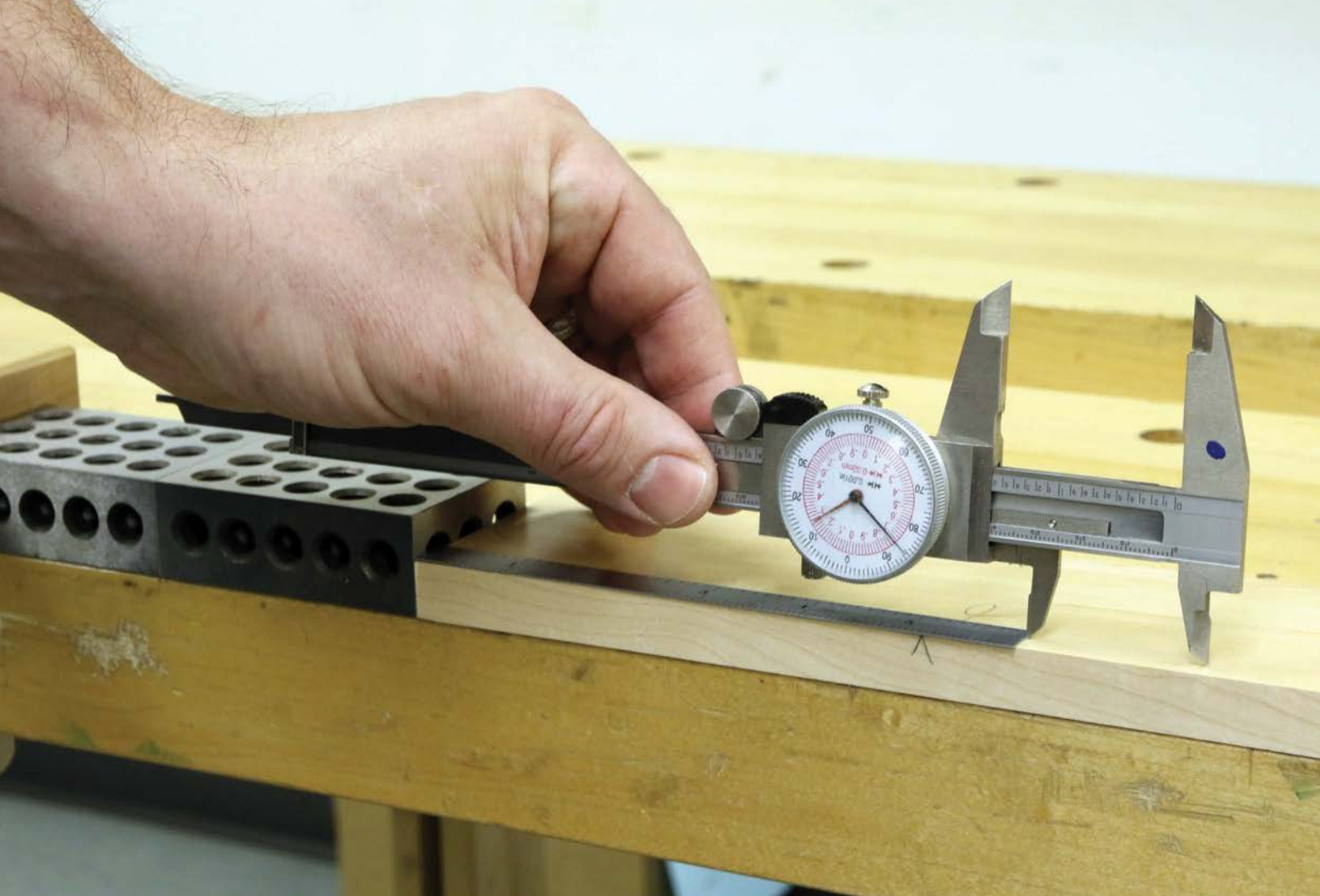
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Stack marking

Robert Paul Gurney explains how to use ordinary tools to get extraordinarily accurate layouts

The key to accurate marking and layout is to use common tools in an uncommon way. With common marking tools you can achieve an accuracy of one hundredth of a millimetre or better. If you don't have these tools already they are inexpensive and commonly available.

Marking & layout tools

The tools you need are:

- 200mm engineer's square – you don't need to spend a fortune, it just needs to be square and stable. You can extend its range with a straightedge if you need to.
- Saddle square – you'll find out why later.
- Rulers – you'll need three rulers to get you started: 150mm, 300mm and 500mm. You can add a 1000mm ruler later. These rulers should have square ends and should have no extensions beyond their stated lengths.
- Machinist's 1-2-3 blocks – you'll need two that measure 25 x 50 x 75mm.
- Set-up blocks – these blocks start at 0.5mm and allow you to go in 1mm increments to 25mm.
- Dial calliper – a 150mm dial calliper can

be used to transfer the measurements from mating parts or hardware. It can also be used as a ruler – use the thumb roller to get a desired dimension and then lock it in place.

- Marking gauges – you will need two marking gauges: one with the bevel towards fence and one with the bevel away from fence.
- Marking knife – a single bevel knife should be fine.



Although the tools shown here are in imperial, their metric equivalents are commonly available

CARING FOR YOUR TOOLS

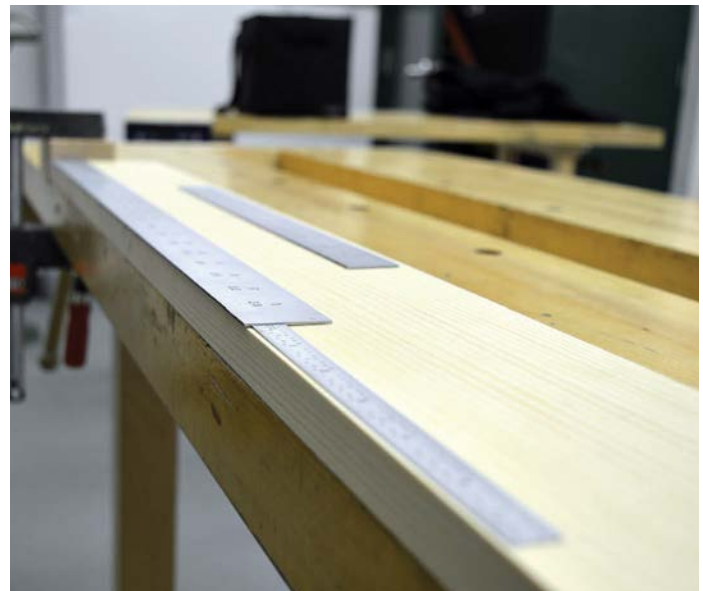
Before you use them, run your finger along the edges to feel for burrs and to wipe off any bits of dust or particles. You can gently run your finest whetstone over the burrs to take them off and rub them with a light oil when you're finished with them. Take good care of your tools and protect them from damage and they can last you a lifetime.

Making a 'stack'

Most layout errors involve the ruler. The ruler's markings or etchings can be quite wide, maybe 0.3mm or so. Trying to get your marking knife in the same place each time is next to impossible. If you want to align the etching with the end of a board or another mark, you are building in another error. The ruler can also slip while you're trying to make your mark. You get an error called an alignment error if the ruler is not parallel with the edge of the board. Also, if you are not sighting the ruler mark from the same position, you create a parallax error. It's the error you get when you're in the passenger seat of a car looking at the speedometer – you get a different reading than the driver. All these errors accumulate and you then find yourself with problems at glue up.

The solution is to use rulers in a different way than intended by placing the rulers end-to-end. Three rulers end-to-end can make measurements up to 950mm. Add a 1000mm ruler and you can make measurements up to almost 2m. This is more than enough for most furniture making and this is why I use square-ended rulers. Putting the measuring instruments together end-to-end is what I call a 'stack'.

The stack can include set-up blocks, machinist's blocks and dial callipers. Machinist's blocks add dimensions in 25mm increments. Set-up blocks offer dimensions in 1mm increments and the dial calliper to one hundredth of a millimetre.



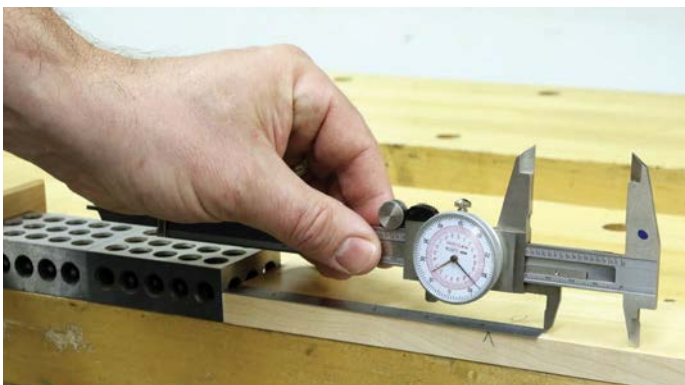
A stack of rulers is the basis for the 'stack' marking system

Ensuring stability

No matter how accurate your measuring tools are, they cannot be accurate if they move during layout – your work and tools must be stable. By clamping your workpiece and clamping your tools (wherever possible) you will take out movement and increase the accuracy of your layout. A little bit of clamping can help you when you're trying to scribe a line against a square. The V-shape of your marking knife can actually deflect the blade of the square and leave you with a slightly angled line.

Even with movement eliminated you can only get a true measurement when the workpiece and the measuring instruments align exactly. It isn't difficult but there is a trick. Two blocks clamped to either end of your

workbench (square and true to the front edge and bench top) are the arcane solution. But first you need to add a mark to your usual method of doing witness marks. To your face-side and face-edge marks, you need to add a face-end mark. I use a check mark at the left end of the board or a circle on the end grain. Like your other common faces, this face should be true and square. This is the end you index against one of the two blocks on your bench. The block on the left is where you index the face-end when the face edge is to the front and the face side is up. The other is for when the face end is down. These blocks must be thicker than your workpiece because you will be indexing your stack and your workpiece against them.



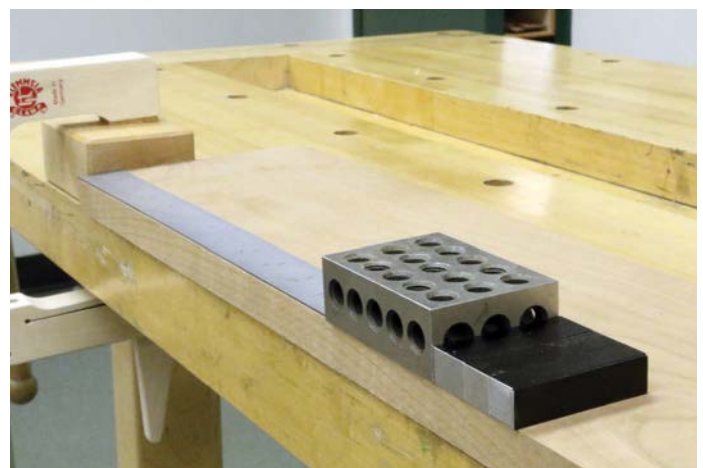
A dial calliper can also be a rule



Accurate marking requires stable tools

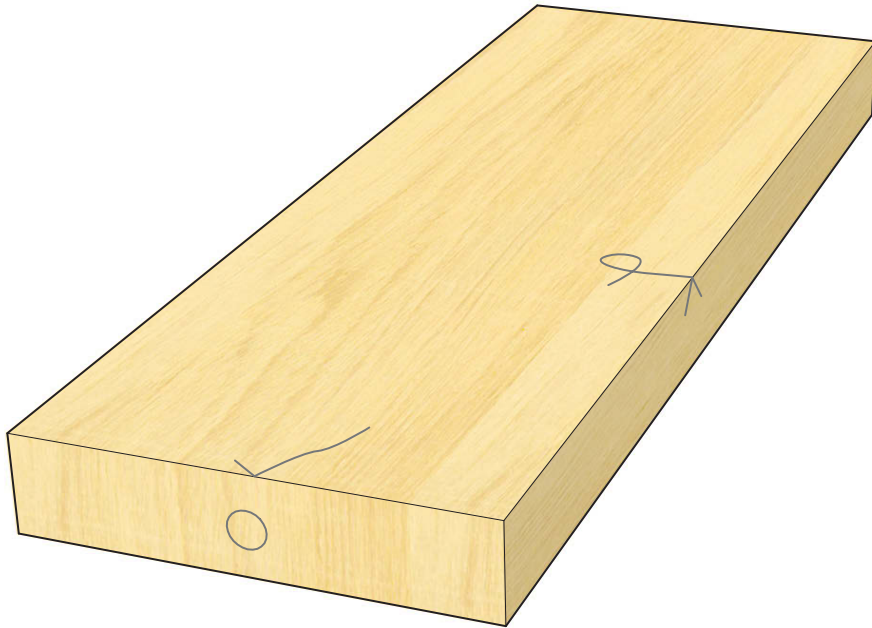
Marking lines

A marked line of zero width is impossible but you can use your marking knife in a way that comes close. A marking knife leaves a V-shape with one face vertical and the other at an angle from vertical. The vertical face forms the shoulder of a joint – the rest of the groove lies in the waste portion of the joint. The shape of the marked line creates two situations when using the stack method. Situation 1 is when the bevelled portion of the marked line is under the stack. This is easy to mark: just slide your square up against the end of the stack, clamp it, remove the stack, and mark your line. Situation 2 is when the bevelled portion of the marked line is beyond the stack. This requires you to add another step. Instead of sliding your try square against the stack, you slide your saddle square against it and clamp it. Now it's just a matter of sliding your try square against the stack, clamping it, removing the saddle square and marking your line. If you are near the end of a board, you may not have enough board left to place the saddle square but you can place your marking knife against the stack (lightly engaged in the wood) replace your stack with the try square and mark your line.

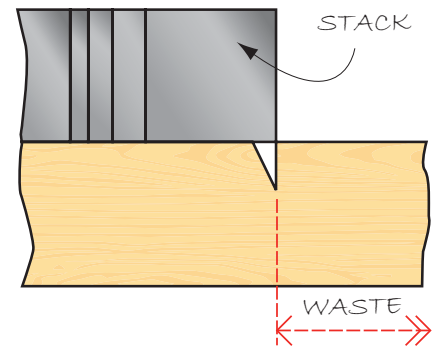
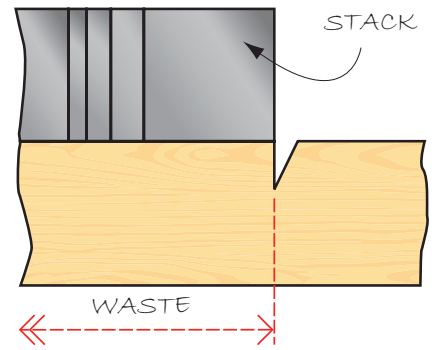


Setting up your workspace for layout

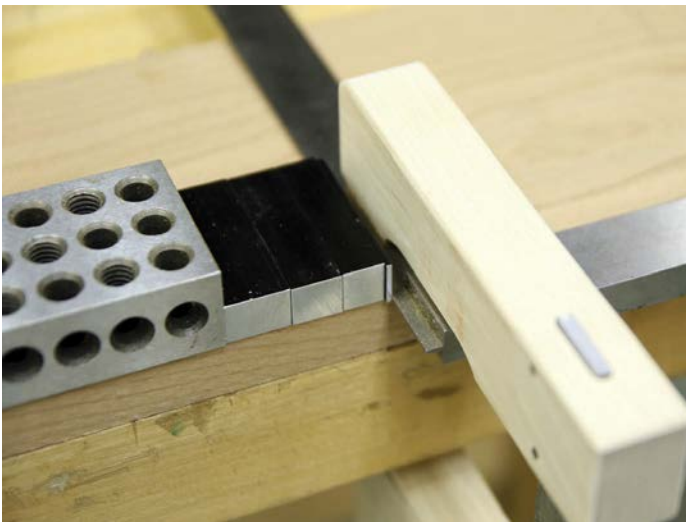
Marking lines continued



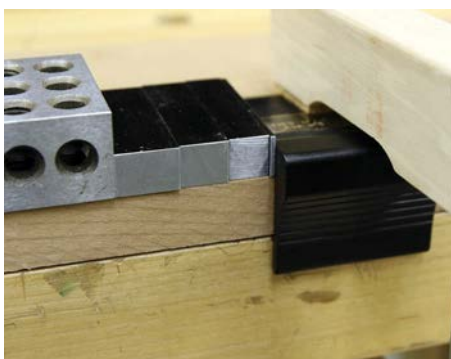
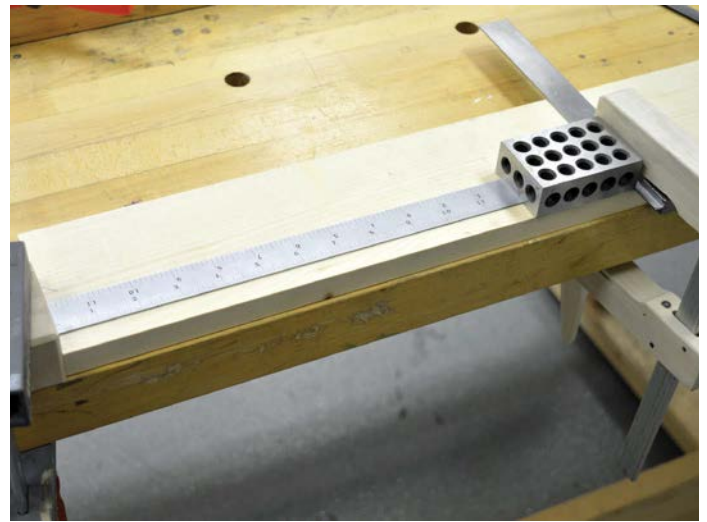
The witness marks required for using the system



The shapes of the marking knife grooves



Situation 1 when using the stack



Situation 2 when using the stack



Transferring measurements

Transferring a scribe line around a piece of wood always creates a slight offset. I know this because I've checked it with a magnifying glass. Using the stack on all four faces solves this problem. If the boards aren't too thin you can use this method on every marked face.

A common problem with traditional marking techniques is laying out a through joint. When trying to transfer measurements to the opposite side of the board we would normally switch to a pencil. Unless you are extremely lucky your knifed lines won't line

up due to the thickness of the pencil line. By using the stack, this problem is eliminated.

A common solution of having to set and reset marking gauges is to have lots of them. However, now you can use the stack to set two marking gauges the same each time.

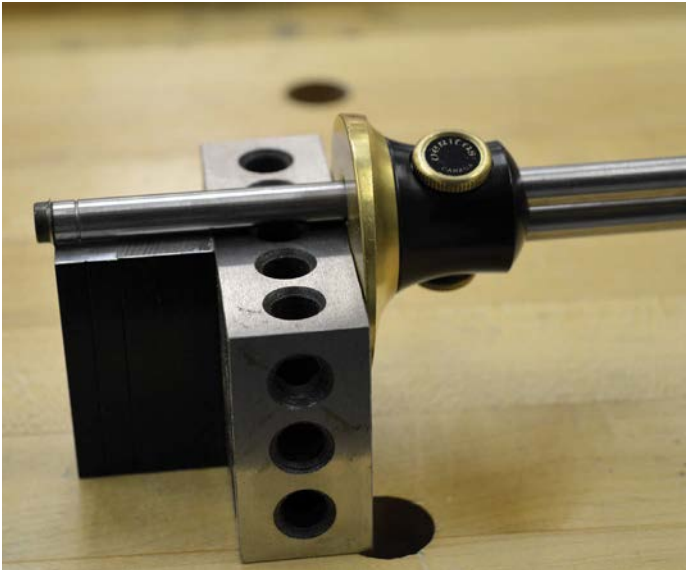
We have only two marking gauges: one with the bevelled portion of the blade facing into the fence and one with it facing away. You will use one depending on where the waste is in relation to your reference face. Two methods are needed for setting them.

With the bevel facing away from the stack

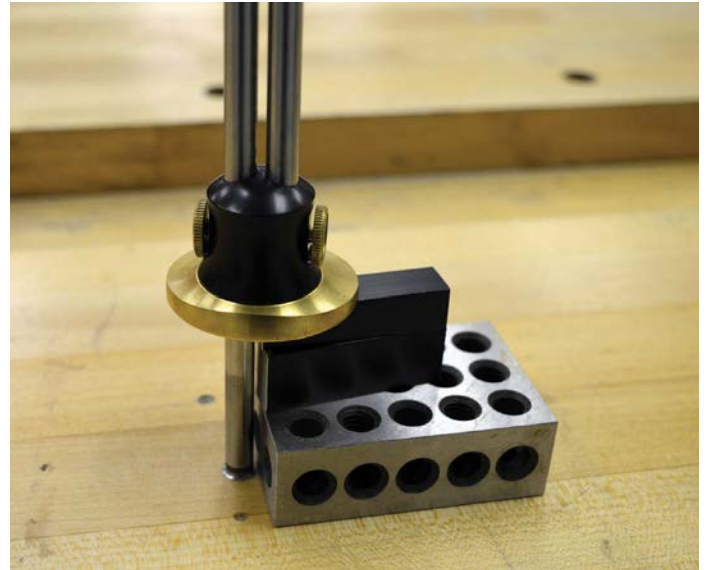
just place the stack between the fence and the pin and tighten the fence.

With the bevel towards the fence, there are two solutions depending on what type of marking gauge you have. These are shown below. With the stack, you will find it easy to recapture forgotten dimensions without any loss of accuracy.

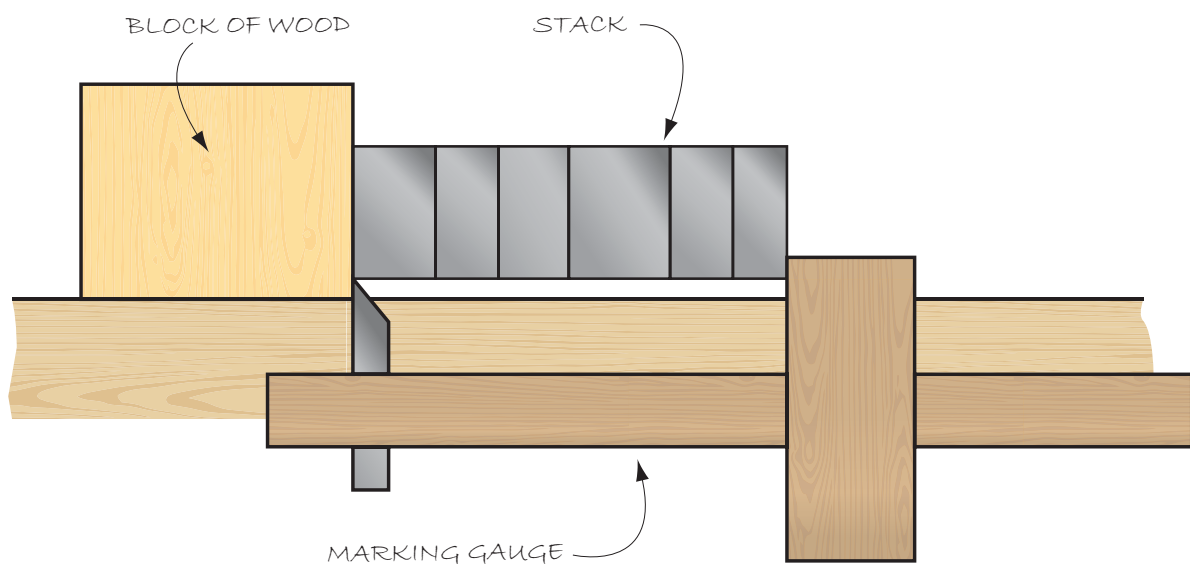
It is a good idea to lay out everything in pencil before you begin as a double-check. This will be helpful when you use the stack with your hand and machine tools – but that's the subject of another article. *F&C*



Accurate setting of the marking gauge



Accurate setting of two types of marking gauge



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Riding the new wave

Students from Marc Fish's Robinson House Studio tell us about their work

For anyone considering a future in contemporary furniture making the choice of independent schools is about as wide and varied as it's ever been and the numbers are growing year on year. With events like the Wood Awards (featured on page 14) and WorldSkills helping to promote awareness in craft-related skills we're beginning to wonder if there has ever been a more exciting time to pursue a career in furniture making. We've decided to start 2017 off with a look at what is arguably Britain's most unconventional furniture making school since Parnham closed its doors more than

a decade ago. Robinson House Studio (RHS) is run by Marc Fish and Theo Cook – Marc's work is sold internationally through his gallery in New York and can now command six figures. Theo is an ex-Edward Barnsley apprentice with over 20 years' experience and has done work for dukes and duchesses while working for Senior & Carmichael. Their combined skills make RHS a unique studio where design, creativity, innovation and craftsmanship mix harmoniously.

For more information about RHS, see: www.marcfish.co.uk

Sally Banks

Despite being halfway up a Human Resources career ladder, something about sitting at a desk all day just felt wrong. My boss reluctantly agreed to temporarily indulge my 'creative phase' and let me work part-time while I took a City & Guilds course in furniture making. Much to their horror I fell in love with woodworking and decided that 12 hours a week just wasn't enough, I wanted to do this all the time!

After visiting several training providers I was only in the workshop at RHS for a few minutes before I knew this was where I needed to be. The creativity and diversity in the work being produced by the students was incredible and the inspiration was infectious.

The blackened ash (*Fraxinus excelsior*) and bleached walnut (*Juglans regia*) coffee table was intended to be a bold



Oak console table by Sally Banks

contemporary statement piece as well as a functional storage unit. Incorporating a chest, a cupboard and drawer this striking monochrome piece focuses on crisp clean lines. In contrast the oak (*Quercus robur*) console table is a warm, tactile piece with soft curves that was designed with a form over function bias. It was also an excellent

opportunity to make use of the extensive laminating expertise at RHS.

After spending a year with Marc and the team at RHS these two tables are part of a collection of pieces that I am immensely proud of. I now feel I have the confidence and skills to pursue a career that I never even knew I wanted.





Blackened ash and bleached walnut coffee table by Sally Banks

James Linard

I worked for many years in theatre production, as a scenic artist. It was a very varied and interesting job where I learnt a lot about design and construction and developed a keen interest in furniture and interiors.

This interest and my practical nature eventually led me to explore carpentry further and after a week-long course with David Savage in Devon, I was hooked. I joined RHS as a student 18 months ago. It is a vibrant and progressive workshop, where the passion and talent on hand is exceptional. The teaching of traditional carpentry hand skills and impeccable attention to detail is paramount but students are also encouraged to experiment with a multitude of materials.

My low table with laminated oak is a bold and dramatic design. I have combined traditional materials and contemporary techniques to create a fluid, elegant form. I wanted to explore the process of laminating and was particularly interested in making solid, regular forms and peeling them open, like the pages of a book, to create a sense of movement. Maintaining large, flat surfaces across the width of each curve was the most challenging aspect of the table's construction but also pivotal to its design. The use of common materials such as oak

and concrete help to enhance the familiar and contrast with the unconventional form.

My jewellery boxes are a contemporary design with a sense of theatre. I planned to make a luxury product that has two very distinct states. When closed, the box is

modest yet sleek and sits unassumingly waiting to be opened. When opened, the double lid pulls apart to reveal bold, contrasting timber and the box changes form completely to become a dramatic half pyramid.



Laminated oak low table by James Linard



Jewellery boxes in American walnut and bog oak by James Linard



Desk N 23 by Lubica Patekova

Lubica Patekova

In September 2016 I completed a one-year furniture design and maker's diploma at RHS. Coming from a background in architecture the course allowed me greater artistic freedom and expression to work on projects that are on more of a human scale. The experience has given me a deeper understanding of design, techniques, materiality and the significance of having a vision and being able to translate it into a tangible form.

With Table N 21, I wanted to create something diverse and distinguished. Like temporary scaffolding it opposes the discipline

of commercial furniture and allowed me to explore my fascination with imperfection. The rough and unfinished surfaces are inherent qualities of steel with the lack of finish becoming the finish itself.

The grandeur of Desk N 23 is conveyed by the small details, which were meticulously crafted using a combination of hand and machine tools. The overall look resembles the harmony and rhythm of the suprematism movement. The desktop is supported by sleek, tapered legs shaped using a spindle moulder. Brass sabot feet were made by welding five pieces of brass plate together and fixing them

to the legs with a mortise and tenon joint glued with epoxy.

The Sputnik 1 stool embodies an anti-materialist philosophy. It's intended to express my designs and to illustrate my thoughts and the abilities that helped me to transform my 2D concepts into 3D tangible forms. It was important to choose a suitable material and my eyes fell upon ancient wood that had been preserved in the fenlands of East Anglia for thousands of years under anaerobic conditions. The typical colour of bog oak fades from black to dark brown at the heart, it is one of the most striking timbers I have ever come across.



Table N 21 by Lubica Patekova



Sputnik 1 stool by Lubica Patekova



Michel Tellings



Desk by Michel Tellings

Coming from a business background I was a complete newcomer to woodworking and cabinetmaking. Enrolling at RHS was a leap in the dark mainly inspired by my wish to create something by using traditional techniques. After completing the basic training in cabinetmaking, I was looking for a project that would expand my knowledge of traditional skills. This project required me to become competent at veneer cutting and book matching, dovetailing, drawer making and fitting and surfacing finishing. The angled legs created a major challenge as the angles are repeated in the drawer sides and in the dovetails. The desk is made with Indian rosewood (*Dalbergia latifolia*), African zebrano (*Microberlinia brazzavillensis*) veneer and patinated copper on the inside of the drawer fronts. The drawer bottoms and drawer sides are



constructed from cedar (*Cedrus* spp.) and lemonwood (*Calycophyllum candidissimum*). The project required a lot of perseverance

and concentration, both of which I found enjoyable, and a chance to put my cabinetmaking skills to the test.

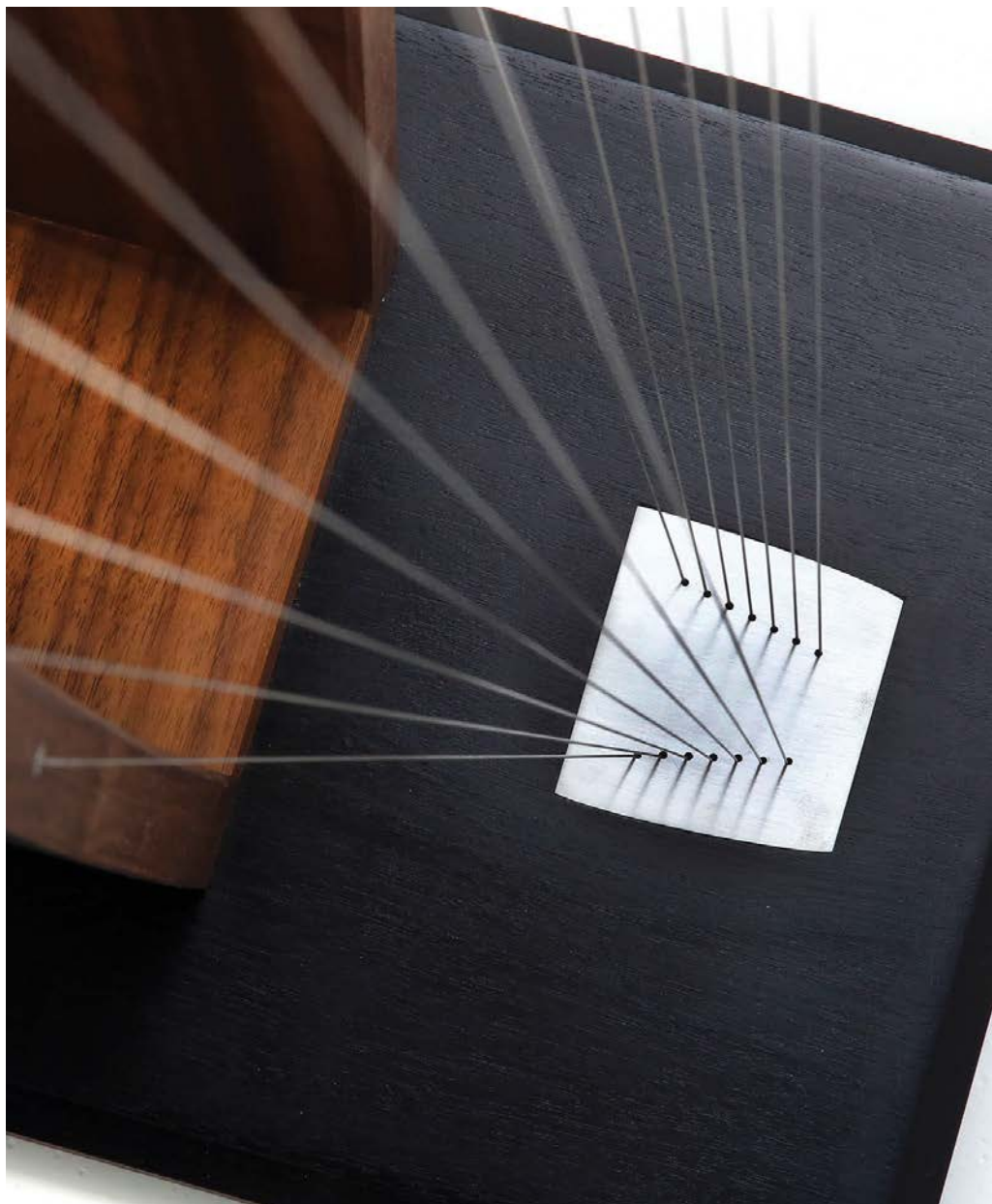
Dan Ryder Cook

During my time at RHS I learnt how to combine traditional making techniques with modern design. My projects included; a cherry (*Prunus* spp.) jewellery box, a stack laminated walnut coffee table which was shot-blasted for a textured finish, and a Naum Gabo-inspired grandfather clock constructed using walnut veneer lamination with aluminium and steel metalwork.

The aim of the Kynance project was to make a table that conveyed a sense of the coastline and the processes of erosion that have shaped it. The table was made by stack laminating 25mm-thick walnut blocks. The inside was angle-ground and shot-blasted to give a natural eroded finish in contrast to the smooth faceted exterior achieved with a plane.

I developed the St Ives grandfather clock after studying the work of sculptors Naum Gabo and Richard Serra. I am particularly interested in the different ways that these sculptors create engaging spatial forms. The project was also an opportunity for me to explore new construction techniques. The body of the clock is constructed by laminating layers of walnut veneer. The base houses a hidden tensioning system for the steel cables so they can be tightened throughout the life of the clock. Aside from the cable all other metalwork on the clock was made from aluminium and shaped by hand or on the lathe.

The understanding of materials and design developed during my course is something I deeply value and will draw upon through the rest of my working life. When I started in the workshop my imagination was ignited by the introduction to a huge variety of designers and techniques. Through the construction of my projects I came to realise that you can make almost anything you can imagine. Studying at RHS was a wonderful experience and has been a catalyst for me to embark on a career in architecture and design. I am very thankful to Marc and his excellent team of Chris, Danny and Theo for helping me in realising that dream.



Kynance coffee table by Dan Ryder Cook



St Ives grandfather clock by Dan Ryder Cook



Un-blunting; an existential crisis in woodworking

A year down the line and I can honestly say I don't miss my waterstones
by Derek Jones

The thought of sharpening has been known to bring about an existential crisis for some woodworkers, and whenever I'm asked about my own regime my answer tends to leave folk more than a little underwhelmed. I'm not that big on sharpening.

We had a manager here at *F&C* a few years back, who earned his publishing stripes in the white hot furnace of the Australian broadsheets. In a motivational pep talk one day, he told an assembled group of dedicated and passionately creative editors and deputies that the sole purpose of our job was to 'put ink on paper.' If you could throw arrows from your eye sockets this guy would have been pinned to the wall with

a dozen poison tipped barbs through each and every one of his vital organs. Needless to say he wasn't a woodworker. In fact he enjoyed cricket, which is even worse than not being a woodworker. It took a while for the penny to drop and even longer before I could turn his base level insight to my advantage, but finally I think I'm there.

You see, our role in the workshop is to make the tools blunt; it's the only truly predictable outcome of our time spent at the bench, everything else is just a consequence of that outcome. Well, at least that's the fun way of looking at it; the alternative being to flip this cycle on its head and regard the un-blunting of tools as the objective,

which isn't nearly as much fun. Sharpening for me is the equivalent of a hangover; the price you pay for a good night out, and I want to get it over with as quickly as I can. At the same time I don't want to be a slouch when it comes to obtaining an appropriate cutting edge on my tools. So to this end, about a year ago, I decided to trade my waterstones in for diamond plates in an attempt to crunch the time and investment involved in un-blunting duties without suffering the loss of edge performance.

It's a dirty job

Sharpening is a messy business however you do it and whatever medium you use.

Running in

A new diamond plate will cut very quickly. As the act of sharpening is the process of roughing up a surface by decreasing amounts they will leave a coarse scratch pattern on the steel at first and you will generate some spectacular wire edges. This diminishes after a few sessions to be no more harmful than a comparative water or ceramic stone.

until eventually there was nothing left. A good diamond plate, on the other hand, will not waste away in use.

My choice of plate was the Classic Pro 8in coarse/fine stone from Trend, which comes in a protective wallet with a rubber to help clean the surface after each use, and a non-slip mat. The coarse side of the plate has a 300 grit rating, equal to 50 micron and has a very fast cutting action and will reduce thin blades to dust in no time. It's so efficient in fact that I'm finding I don't need to break out the grinder quite as often to establish primary bevels on a lot of blades. The fine side has a 1000 grit rating equal to 15 micron and is ideal for setting secondary bevels. Like a lot of folk, I've got a mixed bag of tool steels in my rack that include O1, A2 and PMV-11 and possibly some I'm not sure about; the shocking thing is I cannot detect any difference in time spent un-blunting between the steels. As part of my trial I experimented with working straight off the fine plate with mixed results. Chisels seemed to fare best under this streamlined regime, especially those that are used for more chopping than paring. For all but one plane, a rough semi scrub like No.5, the fine plate was woefully under sharp and was not effective at reducing the wire edge. With the waterstones in moth balls I turned to a ceramic Spyderco fine grade stone for finishing. As good as these stones are, they are narrower than the diamond plates (50mm as opposed to 75mm) and not ideal for wider plane irons. I've since moved over to a Shapton Glass Stone HR grit 6000 fine (2.4 micron) and have not looked back.

The pros and cons of diamonds

It's a known fact that grinding tool steel with diamonds can cause changes in the molecular properties of the steel and generally to its detriment. This only happens when grinding at speed, so unless you are capable of grinding by hand at the equivalent of 6000rpm or more, then it's hardly an issue. In use a diamond plate behaves differently from other abrasives in that they are not friable, meaning the abrasive compound does not fracture from its substrate and combine with the lubricant and waste material to form a slurry. Although you can use your plate dry and use the rubber to remove the waste filings, it's better to manage waste material as you work and there are a number of options available in the form of lapping fluids for

this purpose. These are designed to prevent the plate from rusting, which is handy for your tools as well. For anything up to the finest plates WD40 can be used as an alternative to lapping fluid, but as it's a bit of a minestrone mixture of complex chemicals including mineral oil and (allegedly) Vaseline. It's not as pure as lapping fluid and can form a cushion that's deeper than the size of the diamonds, preventing the blade from making contact with the abrasive. Plain old tap water works but due to its low surface tension weeps off the plate quickly. Camelia oil and even baby oil are excellent alternatives. Finally, and what's generally not mentioned about diamond plates, is that they respond better to a lighter touch than a heavy hand. In fact, pushing down harder onto the plate has no effect at all and is a complete waste of energy.

How un-blunt do my tools need to be?

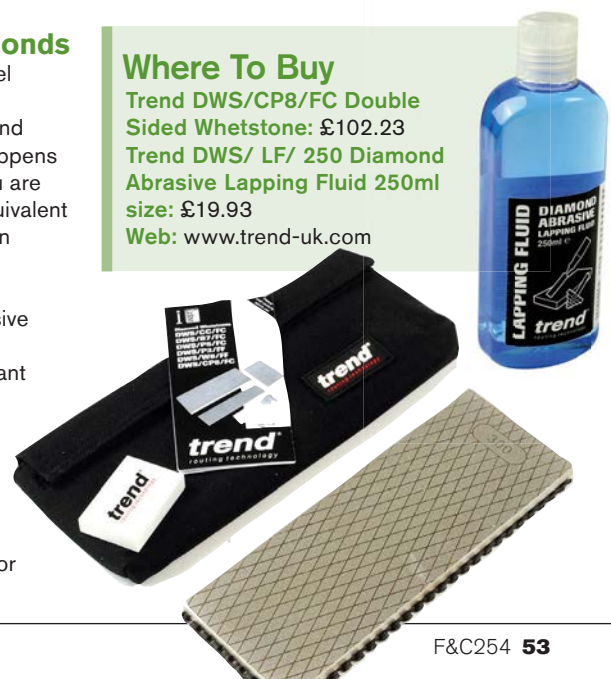
I think there's a definite relation to the level of sharpness you need vs the time spent achieving it. The sharper the edge the quicker it dulls and the sooner you need to return to the sharpening station to restore that edge. Not every tool in the rack needs a mirror shine edge to work. Put smoothing planes and paring chisels on that list and experiment with everything else, as there are far too many variables in the mix to establish a one-stop-shop sharpening regime for all your edge tools.

Conclusion

So after nearly a year of diamond plates, am I happy with the sharpness of my edge tools? Yes. Am I enjoying spending less time un-blunting my tools? Yes. Do I un-blunt more frequently? Yes, and am I making fewer trips to the bathroom? Yes. Do I miss having the dirty trough of water sitting under my bench? No. Do I miss having to flatten three separate stones every time I want to carry out any un-blunting? No. More importantly, am I happy with the sharpness of my edge tools? Yes. *F&C*

Where To Buy

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The problem is that they all require a lubricating fluid to either produce a slurry or to keep the cutting surface live. Not having a dedicated sharpening zone in my workshop or a convenient supply of running water meant that maintaining a permanent plate was problematic to the point where I'd put off the act of un-blunting for as long as possible, or even worse, just grab the next sharp tool!

The inherent flaw with both water and oil stones is the minute you start using them you start throwing bits of them away. Imagine you had a £50 note in your wallet and every time you looked at it you cut a piece off the corner

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Featured artist blogger

There's certainly no shortage of online content for woodworkers out there but how do you know if the tips and advice you follow is worth the pixels its projected on? To help you navigate your way towards good solid reliable information F&C are teaming up each month with the best bloggers we can find to build a list of sites you can trust.

Our first guest is Rob Porcaro and his blog Heartwood.

"For a craft or any pursuit that is meaningful to you, to do it really well, you must grant yourself freedom. And that takes courage."

Jointer tune-up

Rob Porcaro shares some handy tips for tuning your jointer in this new series

Jointer parallelism

After writing blog posts on jointer-planer combination machines and the Hammer A3-31, some readers emailed me questions about how to align tables and knives so the jointer does what it is supposed to do – produce flat, straight surfaces on wood.

Here are the steps in tuning jointer tables and knives. The methods of adjustment will, of course, depend on the make and model of your machine, but hopefully this will clarify the overall logic of the process. Methods specific to the A3-31 are entered within brackets.

1 The cutterhead rotates on its axis.

This is the reference to which all the other parts must be aligned. Further, the tables should be flat. Of course, they are not perfect but if they are pretty good – not dished/bumped/twisted more than

a few thou – then go with what you have. Some localised imperfections will cancel out with the procedures described here. In any case, practical woodworking, not perfection, is the goal.

2 Check the parallelism of the cutterhead block to the outfeed table.

This step is often neglected. Make a wooden holder for a dial indicator as shown in the photo. Alternatively, a feeler gauge and the stock of a square can be used but this is awkward.

The reading is noted when the tip of the indicator is at the top of the cutterhead circle (i.e. its most retracted reading) at several points across the width. Use the same portion of the circumference of the cutterhead for all of the readings to negate any imperfections in the roundness of the cutterhead.



Rob Porcaro is a woodworker with over 35 years of experience. His work has been exhibited in premier juried artisan shows, fine galleries and numerous national and regional publications. His technical expertise is known and trusted in the field of woodworking as a widely published writer and teacher. He also writes regular articles for his Heartwood blog. Here he shares with us some tips for jointing techniques.

For lots more solid woodworking information by Rob, visit his blog at: www.rpwoodwork.com/blog



Make a wooden holder for a dial indicator

If the indicator readings are not consistent across the width, the tilt of the outfeed table on its long axis must be adjusted to make it parallel with the cutterhead. My outfeed table is parallel to the cutterhead within half a thou across the full width.

[On the A3-31, the two M12 x 1.75 bolts on the handle side under the outfeed table are adjusted. Calculate the amount of turn required and work from there rather than guessing. You should not have to adjust from the hinge side for this.] Other jointers may require shimming where the table and base castings meet on one side.

3 Adjust the height of the outfeed table relative to the knife arc. The knife arc should be consistent for all three blades and all across the cutterhead. On most jointers, this is adjusted by means of jackscrews in the blade holder. Really you are making the knife arcs consistent with the cutterhead, which previously has been determined to be parallel with the outfeed table. Aim for the top of the knife arc to be a thou or two above the infeed table using the method described in this post.

Hopefully, you are in the range of requiring only small adjustments of a few of the jackscrews. However, if it is way off for all of the knives, the outfeed table should be adjusted as a unit. [For the A3-31, this latter adjustment is found under the left side red plate. Page 33 of the User Manual shows where it is and how to move it.]

At this point, you should have a cutterblock

parallel to the outfeed table, three knife arcs also parallel to the outfeed table, and the top of the arcs should be about .001–.002in above the outfeed table. Only now should you turn your attention to the infeed table.

Note that wear of the knife edges may later require very slight adjustment in the overall height of the outfeed table. However, the parallelism should be retained.

4 Make the infeed table parallel to the outfeed table across their widths.

Assess this just at the cutterhead-end of the infeed table. Use the dial indicator jig or place a 12in straightedge on the outfeed table and extend it past the cutterhead just an inch or two over the infeed table.

Adjust the infeed table using the regular depth-of-cut lever to about the shallowest cut. Observe the dial indicator or use a feeler gauge under the straightedge to check across the width of the infeed table for parallelism of the tables. If the tables are out of parallel, it is easiest to retain the outfeed table settings and adjust the tilt of only the infeed table along its long axis.

[On the A3-31, adjust the two M12x1.75 bolts on the handle side under the infeed table. Again, calculate the amount needed and work from there rather than guessing.] Other jointers may require shimming where the table and base castings meet on one side.

5 Finally, adjust the infeed table so the infeed table and the outfeed table are

parallel along their lengths.

Assess this with the longest, best straightedge that you can find. You do not want the tables tipped in towards each other at all (like a V), in my opinion. You want them parallel or, if anything, a trace tipped away from each other (like an A).

It is easiest to retain the outfeed table settings and make the adjustment only on the infeed table. It is tilted on its short axis only by making equal adjustments on both sides of the table so as not to disturb what was accomplished in step 4. Again, the specifics will vary among machines. The intent here is to explain the overall logic.

[To adjust this on the A3-31 you have to work on both sides of the infeed table. On the near side are the M12x1.75 bolts. On the hinge side there are M10x1.5 set screws, accessed under the plate cover. To make a directed adjustment, rather than by trial and error, there is some geometry required. The Hammer manual does not cover this and the current online version is still referencing a 2005 machine. Time for an update please Hammer. I've done the geometry and it works but to write and diagram it is beyond the scope of this article.

The object of all of this is to get the machine to produce surfaces within the tolerances you need for the work you want to do. That is the answer to the question of how precise these adjustments need to be. Practical woodworking, not perfection, is the goal.

Verifying the alignment of jointer knives

Let's explore a simple method to verify the alignment of jointer knives, which is necessary when changing or adjusting them.

The first goal is to have all of the knife edges across their full widths in a consistent relationship to the outfeed table. The top of the arc of the knife edge should be very

slightly above the level of the outfeed table. Secondly, perhaps after the edges wear down or the jointing performance needs adjustment, the overall height of the outfeed table can be tweaked.

There are several good approaches to dealing with this, some involving dial

indicators and specialised accessory equipment, but I prefer a low-tech method. Though well-known, how accurate really is it?

Here is how I perform the test, starting with unplugging the machine. A block of wood, about ¾ thick x 1¼ x 4½in long is

carefully jointed (by hand) and marked with 1mm gradations. As you can see, I like to label the jigs I make with a description and reminders. It is placed in a reference position on the outfeed table.

Then, the cutterhead is carefully rotated by hand to allow the knife edge to 'grab' the block and advance it through the portion of the edge's arc that is above the level of the outfeed table. The block is deposited as the edge 'lets go' and continues its arc below the level of the outfeed table. Note that a wooden test block is better than a metal ruler, which the edge doesn't grab well.

The beginning and end of this arc define a tiny chord of the knife flight circle. The height of this chord is the amount of projection of the knife edge at its highest point above the outfeed table. The test is repeated at three or four places across the width of each knife.

Now let's correlate this height with the lateral travel of the test block, which is the length of that tiny chord. A mathematical formula involving the Pythagorean theorem gives the results, tabulated below, for the 72mm cutterhead knife flight circle on the Hammer A3-31.

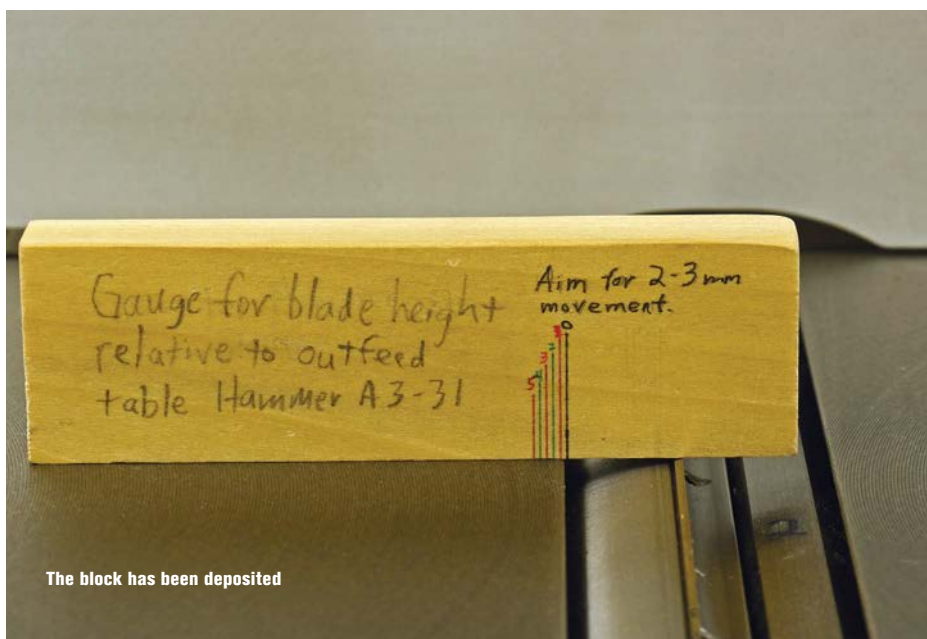
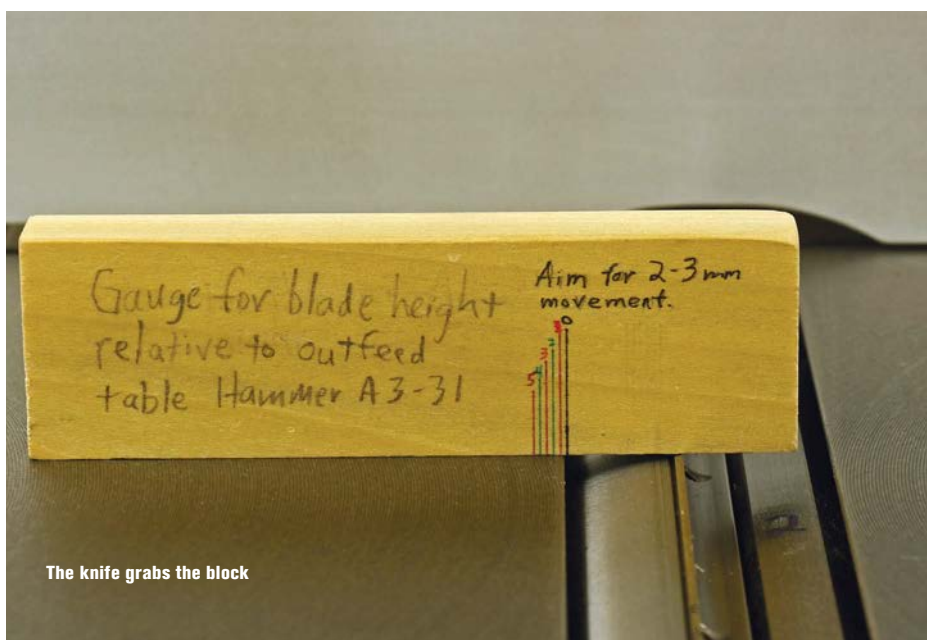
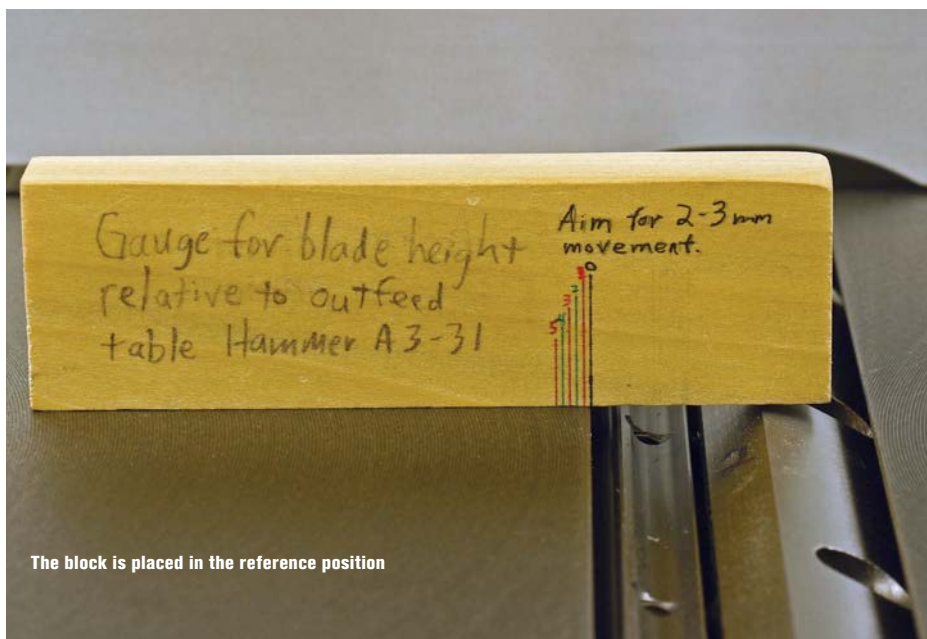
Knife		
Projection	Chord	Chord
(inches)	(mm)	(inches)
.0005	1.9	.075
.001	2.7	.106
.002	3.8	.151
.003	4.7	.184
.004	5.4	.213
.005	6.0	.238
.006	6.6	.261

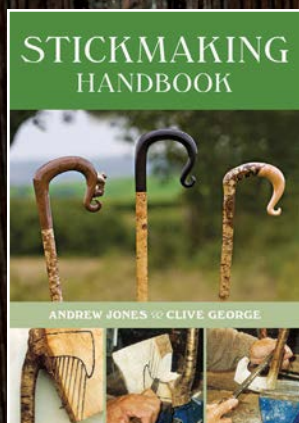
The method is very accurate! A mere .001in of knife projection moves the block 2.7mm, which is easily distinguishable from no movement, which signifies no projection.

However, note that the relationship of the knife projection to the advancement of the test block is not linear. The first thou of height advances the block 2.7mm – about 3mm. However, a height difference from .002in to .003in only advances the block about one more mm (0.9mm).

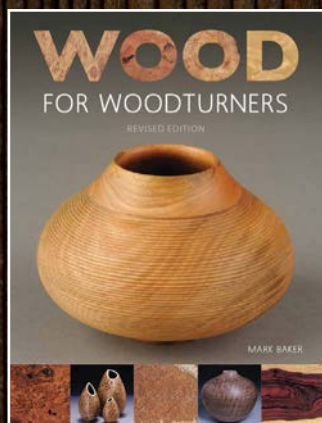
Fortunately, I want the knives to be a only about one thou, two at the most, above the outfeed table so all I have to do is see that the block advances about 2–3mm, or 4mm at the most, and do so reasonably consistently across the blade width, for all of the blades. Indeed, the Hammer manual recommends 2–3 mm of travel.

So, there it is: a low-tech, accurate method. But now, after having analysed it a bit, I have more confidence in it and can use it more intelligently. *F&C*

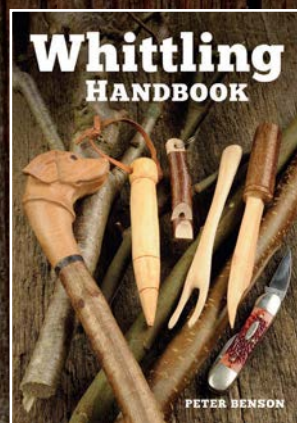




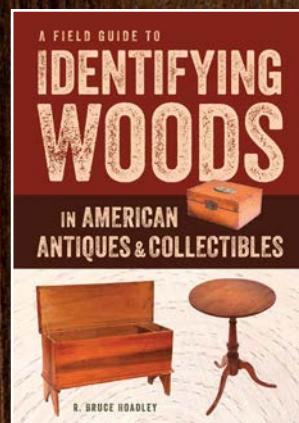
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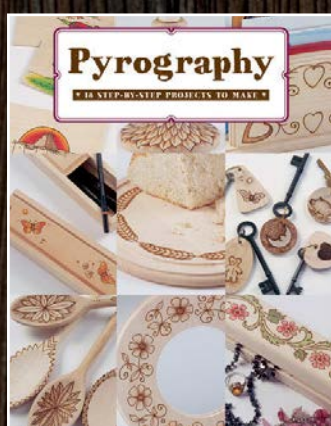
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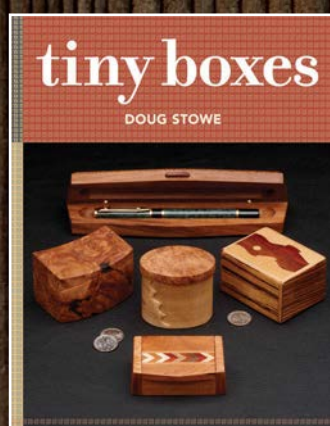
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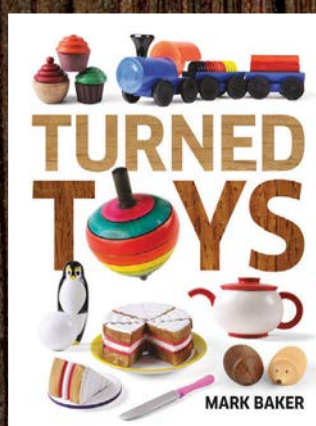
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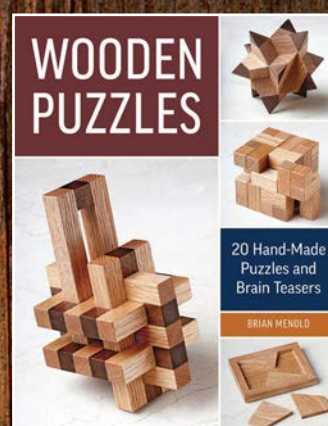
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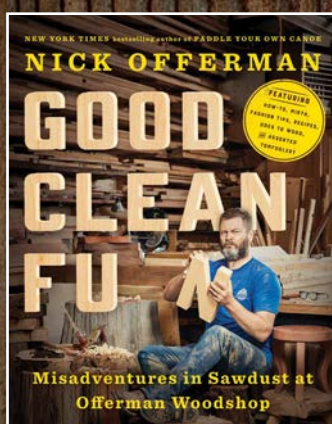


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Complete control

Hendrik Varju suggests the universal Bow featherboard is the new heavyweight among after-market safety accessories

At the 2016 International Woodworking Fair in Atlanta, Georgia, USA, I was on the lookout for new and exciting products. This kind of a huge woodworking trade show draws in manufacturers of new technologies who are bringing them to market for the first time. It isn't often that a small gadget like a featherboard will catch my eye, but the new FeatherPro featherboards by Bow Products are really something special.

The Bow in Bow Products refers to the Bow brothers, Keith and Ron. Keith, a forklift operator, and Ron, a shoe designer, both had experience with moving heavy objects, including people! Keith started experimenting with using a material called EVA (hardened foam) to support very heavy loads such as huge steel pipes weighing up to 4500kg. He discovered that EVA is remarkably strong and can support large loads, yet it is also flexible at the same time. As woodworking hobbyists as well, Keith and Ron wanted to find a woodworking application for this very useful material and so the FeatherPro featherboard was born.



The FeatherPro difference

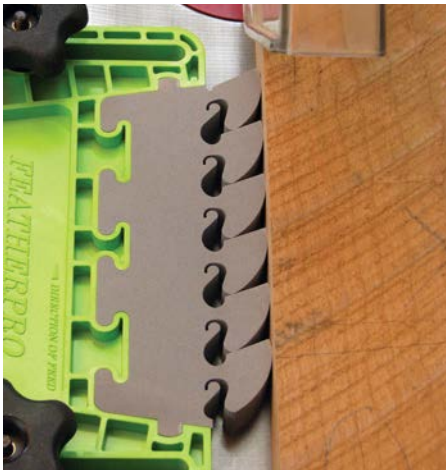
As you'll see the featherboard has a very interesting design where hardened foam feathers or fingers support the workpiece against a fence. That doesn't sound that exciting compared to any other featherboard, however, the shape of the feathers is such that when they bend backwards they lock in and exert tremendous force to prevent a kickback on a tablesaw.

I watched some of the videos on the company's website and on their YouTube channel where they tested the force exerted by a regular plastic featherboard compared to the FeatherPro. The company used a scale that can measure the force required to pull a board forward through a featherboard

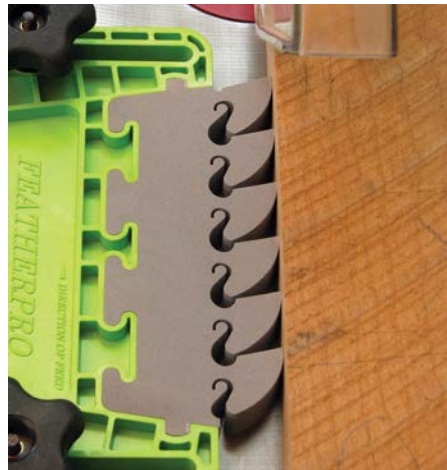
and then backward as well. Two typical plastic featherboards needed about 2.25kg or so to pull the wood forwards and then closer to 2.75kg to pull it backwards through the fingers. The FeatherPro also needed about 2.25kg in the forward direction but a staggering 28kg in the backward direction. I didn't try to duplicate this test in my workshop using a measuring instrument, but there is no doubt that the hardened foam fingers rotate into a locked position when the wood is moved backwards. This exerts a huge amount of force, making it very difficult to move the workpiece backwards, thus helping to prevent kickback. Bow Products calls the unique feather design a 'living

hinge' and it truly is ingenious.

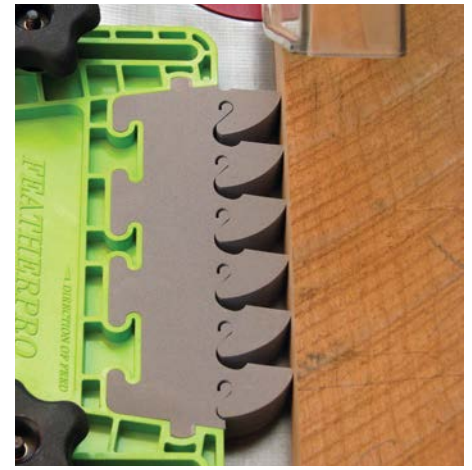
The other point to keep in mind is that the FeatherPro featherboards exert this type of force in the backwards direction even when the edge of the workpiece is fully engaged inside of the featherboard. In other words, a typical featherboard prevents a board from going backwards once the rear corner of the wood has gone past some of the fingers. However, the FeatherPro exerts this kind of pressure at all times, whether or not the board has moved past any of the feathers at all. That is what is so unique about this product. You really have to see how it works to understand how the feathers hinge back and then lock up to provide so much mechanical advantage.



The feathers flex easily in normal use providing firm pressure against the fence



If the workpiece is forced backwards the feathers' grip increases...



...before locking together and creating a brake

The specs

These featherboards are not unlike other featherboards in size, fitting a typical 20mm wide mitre slot about 10mm deep. So they can be used on any machine with a mitre slot, such as a tablesaw, bandsaw, router table or even a shaper. You can also attach the featherboards directly to a fence or other fixture with a T-slot, using the provided T-bolt hardware. And if the worst came to the worst and you couldn't use it where a mitre slot or T-slot was available, you could still clamp it in place in a pinch.

I am particularly impressed with the length of the slots for the jig handles that lock down the featherboard. They are long enough to give a very generous variety of positions from your fence, so they'll work with both wide and narrow workpieces. Also, the hardened foam feathers attach to the featherboard's plastic body with a press fit, allowing you to replace the feathers should they ever get damaged. The company also offers both black and grey interchangeable feathers which have different densities. The black ones offer stiffer resistance while the grey ones are described as being for more delicate work.

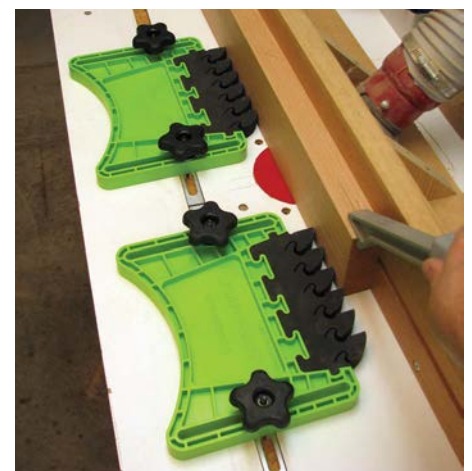
These featherboards can also be flipped upside down, allowing you to use them to the left of the fence or to the right. So if you are left handed or simply have a different setup on your machine (many woodworkers use their fence to the left of the blade on a bandsaw), it always works.

My testing

I started by testing the FeatherPro on my tablesaw, which is probably the machine I use the most. It worked very well for anything I threw at it. The FeatherDUO 'double pack' includes two FeatherPro featherboards that can be stacked on top of each other with a thick plastic spacer in between. This really helps hold taller stock for all kinds of operations.



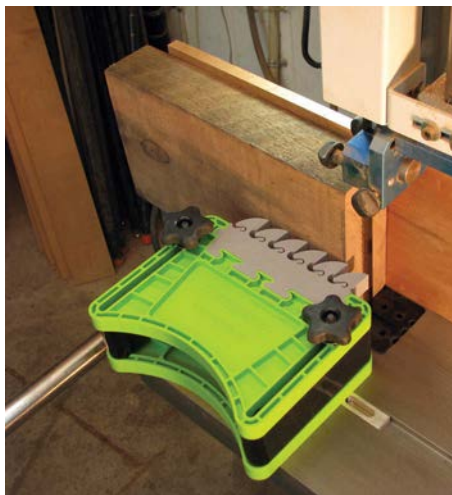
Stacking the Featherboard on thick stock gives even pressure across the face of the board



As separate units in-feed and out-feed can be controlled

I tried the double-stacked setup again on my router table, which is a homemade table with a standard mitre slot machined right into the surface. It had stunning holding power. I also tried one featherboard in front of the router bit and another at the back, which is something I commonly do when routing a groove or some other operation where any movement off the fence would ruin the cut. To be honest, I probably could have used just the one featherboard because these are so wide, but I'm used to using two if they are narrow wooden featherboards.

I also tried the FeatherPro on my bandsaw with the fence to the left of the blade. So I flipped over the FeatherPro and decided to also replace the feathers with the lighter coloured more 'delicate' fingers. They still gave plenty of resistance to moving backwards (not that this is a big concern on a bandsaw) but did allow the stock through with less effort in the forward direction. Don't forget that you have lots of control over the pressure exerted just depending on how firmly you push the featherboard against the wood when you lock it in place.



With much less risk of kickback on a bandsaw use the softer compound feathers

I tried the grey feathers on the bandsaw in the double stacked 'duo' mode as well, as for a re-saw operation. Just fantastic. Overall, I have to say that this is a really nice piece of kit that can handle a wide variety of operations on any machine with a mitre slot or T-slot. I'm very impressed.



Pressure can be changed by alternating between hard and soft compounds

The details

The FeatherDUO 'double pack', which is the kit I tested, comes with two FeatherPro bodies, four sets of feathers (two black heavier duty and two grey lighter duty) and two plastic riser blocks for double stacked operation. It also comes with the lock down handles, metal runners, bolts and T-bolts so that they can be used in single height operation or double and using a regular mitre slot or a T-slot. Very nicely thought out indeed. The FeatherDUO double pack is sold for U.S. \$59.00 and the single version can be had for just U.S. \$29.99. You can also buy replacements for the feathers should you ever damage them, so you don't need to replace the entire unit. All can be purchased at: www.featherpro.com *F&C*

The DUO pack has everything you need to make a double stack or two single featherboards



AUTHOR BIO

Hendrik Varju is a fine furniture designer/craftsman who provides private woodworking instruction and DVD courses. His business, Passion for Wood, is located near Toronto, Canada. www.passionforwood.com



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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



From
£140.92

Quick-adjusting vice

Irwin Tools' quick-adjusting vice combines world class innovation, the best materials and the highest manufacturing standards. This new product uses fast release lever functionality to quickly loosen the jaws of the vice and return it to the locked position, reducing the time needed to adjust when frequently clamping and changing materials. The vice is made of cast S.G. ductile iron and has integrated hardened steel anvil and jaws for durability. It also has a swivel base with three mounting points and 120° rotation for flexibility. The safety stop prevents the slide separating from the body and the self-cleaning buttress thread turns out debris when in use to prevent clogging. The quick-adjusting vice is available in two sizes; 100mm and 125mm.

Texturing blades for Veritas scrub plane

These texturing blades were introduced for use with Veritas' scrub plane after the company found out that customers were using the plane for final finishing, using the aggressively cambered blade to give surfaces a rough-hewn, rustic appearance. These new wave-like blade flutes cut multiple small grooves with each pass, letting you create a surface finish that would normally require repetitive, painstaking work with a gouge. The four-flute blade has 1/8in radius edges; the two-flute blade has 3/16in radius edges. Each A2 tool steel blade is 6in long, 1 1/2in wide and 3/16in thick.



\$42



£273

Makita DTD170 impact driver

Makita has introduced a new operating mode with the launch of the latest 18v brushless motor impact driver. The new Makita DTD170 impact driver is technically a six-function impact driver, with four speeds and matched impact power: the T-Mode is used for tightening self-drilling Tek screws and the new A-Mode (Assist mode) which, when selected starts the rotation slowly allowing maximum control of the screw as it starts to bite into the material. Once the impact driver detects the screw tightening it switches to full speed and full impact power to complete the tightening sequence. The A-Mode is designed to eliminate 'screw cam-out' and 'cross threading' caused by high speed rotation before the screw bites in the material.



From
£100.12

Dorchester tenon saw

The Roberts & Lee Dorchester tenon saw has a mirror finished, heavy folded brass back that offers fine balance and tension to the blade. The blade is hand sharpened and has a Danish-oiled walnut handle, which offers the perfect comfort and grip. The handle is fitted with solid brass screws and caps. This is a fine saw that combines top cutting ability with aesthetic beauty – it is a firm favourite with its production team! The Dorchester tenon saw is available in both a rip or crosscut version with sizes 10in, 12in and 14in.

Rider No.62 low angle jack and No.5½ jack plane

Axminster Rider planes are well-made, affordable hand tools, squarely aimed at professional woodworkers, tradespeople, apprentices and keen hobby users. Axminster claim the No.62 low angle jack is possibly the most versatile and easy-to-set-up plane available and the No.5½ sits halfway between the No.5 and No.6. When compared with the No.5, its longer length and wider blade make it a good choice for flattening boards and truing panels. A spare blade and plane sock are included with both planes. For a small extra cost, you can have your Rider plane

engraved with a personal message or as a way of identifying your plane on site. The bench plane engraving service is available exclusively on new plane purchases.

These tools are made with care and attention to fine detail, setting them apart from other run-of-the-mill tools. Rider planes only require the bare minimum of initial preparation. The blade comes honed with a secondary bevel ready to take shavings. Axminster Rider planes represent a good standard of traditional, quality plane manufacture and great value.



From
£105.02



€21.85
plus p+p



3-piece cabinet scraper set

This three-piece cabinet scraper set comes in a nice velour leather wallet consisting of one each square, 150 x 60mm, thickness 0.8mm, hollow as well as goose neck, thickness 0.8mm. All scrapers are made of the finest quality steel.

Bosch EneRacer batteries

Bosch claim the EneRacer batteries to be the most compact and lightweight high power battery on the market. Compared to current 18V XL battery packs, the GBA 18V 6.3 Ah Professional EneRacer offers 80% higher power output and increases runtime by up to 90% for heavy duty applications and more runtime. The improvement is largely due to optimised component design, better cooling and intelligent battery management. Intelligent technology is used to control energy consumption according to the application's demand. These factors not only increase runtime, but also extend the lifetime of the battery. As part of the Bosch flexible power system, it is 100% compatible with all 18V Bosch Blue Li-Ion tools. Bosch is developing a new generation of 18V tools optimised for use with the new battery – starting with the GWS 18 V-125 ICE/ICE angle grinder. Batteries and tools are available from specialist retailers.



£158.40

Router table top

The UJK Technology professional laminated router table top is high grade birch ply with a hard wearing, low friction, phenolic laminated surface. The ply core ensures the top will remain flat throughout its working life, and the laminated top ensures workpieces glide smoothly. An extruded aluminium track inset into the table top includes a standard 19mm track for the use of a mitre fence and a T-track slot for other jigs and accessories. The central aperture (230 x 306mm) will accept any of the UJK router table inserts as well as the UJK router elevator. The top measures 800 x 600mm and is pre-drilled to fit the UJK Technology professional router table leg stand, fence assembly or optional dust collection box.

£139.96



Trend Snappy System – one touch bit holder and 15pc colour ring bit set

To be fair, when the blurb arrived on my screen for Trend's latest addition to their Snappy system I thought they were pushing colouring-in books such as the impact of a punchy, in yer face, picture lead press release. Further investigation via their all singing, all dancing website reveals they have in fact been whiling away the wee small hours, colour-coding their driver bits; and what a pretty picture that is. Joking aside, any system that introduces a level of smart working and efficiency can't be bad.

Boring deep clearance holes for screwheads can mean your bit holder is a snug fit when it comes to driving home the screw, so their new slimline holder might get you out of a jam, literally. The one touch push button on the side of the holder ejects the bit, so there's no more reaching for the pliers to remove a stuck bit. See videos for these products and more in the Snappy range at www.trend-uk.co.uk

£11.94



£8.34

Contacts

3-piece cabinet scraper set

Contact: Kirschen

Web: www.kirschen.de

Bosch EneRacer batteries

Contact: Bosch

Web: www.bosch-professional.com

Dorchester tenon saw

Contact: Thomas Flinn & Co.

Web: www.flinn-garlick-saws.co.uk

Quick-adjusting vice

Contact: IRWIN

Web: www.irwin.co.uk

Makita DTD170 impact driver

Contact: Makita

Web: www.makita.co.uk

Rider No.62 low angle jack and No.5½ jack plane

Contact: Axminster Tools & Machinery

Web: www.axminster.co.uk

Router table top

Contact: Axminster Tools & Machinery

Web: www.axminster.co.uk

Texturing blades for Veritas scrub plane

Contact: Lee Valley/Veritas

Web: www.leevalley.com

Trend Snappy System

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Out & about: Design Museum

Now in a new location, the Design Museum is well worth a visit



The Design Museum in London is the world's leading museum dedicated to contemporary design and architecture. Now housed in a new, larger location in Kensington, a visit to the museum will fill you with inspiration.

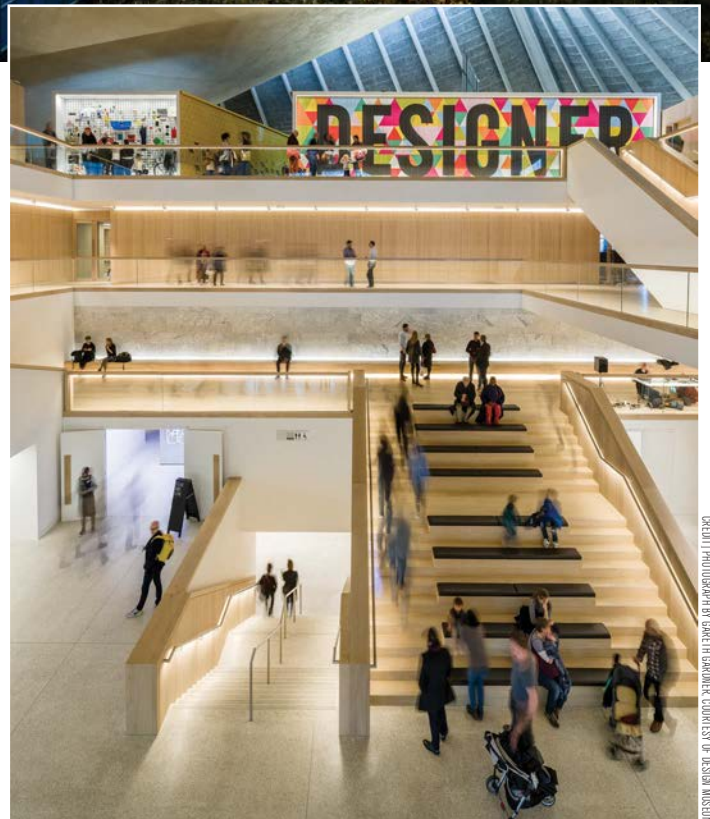
History

The Design Museum was founded by Sir Terence Conran in the 1980s. It began life in 1983 as the 'Boilerhouse Project' and was housed in the basement of the V&A before moving to a warehouse on Shad Thames in 1989. Here it staged exhibitions dedicated to product design, fashion, graphics, industrial design and architecture.

In November 2016 the Design Museum opened in its new location on Kensington High Street. Its new home is a Grade II listed modernist 1960s building, which has been remodelled by John Pawson. The new premises are three times the size of the museum's old location and include two galleries for temporary exhibitions, a gallery for the museum's permanent collection, a restaurant overlooking Holland Park, an auditorium, studios, library, archive and new learning facilities.

What to see

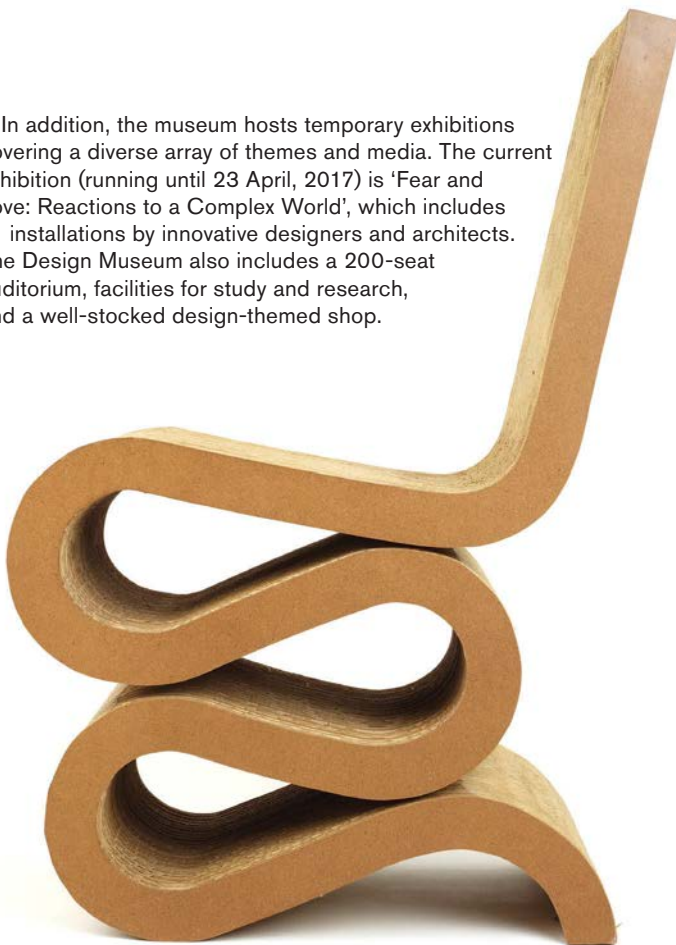
One of the main benefits of the museum's new location is that there is now space for a permanent collection display. 'Designer Maker User' includes around 1000 objects viewed from the perspectives of designer, manufacturer and user, as well as a wall of everyday objects which were chosen by the public. This gallery is free to enter.



The Design Museum now has a new home in Kensington

In addition, the museum hosts temporary exhibitions covering a diverse array of themes and media. The current exhibition (running until 23 April, 2017) is 'Fear and Love: Reactions to a Complex World', which includes 11 installations by innovative designers and architects. The Design Museum also includes a 200-seat auditorium, facilities for study and research, and a well-stocked design-themed shop.

PHOTOGRAPH COURTESY OF DESIGN MUSEUM



Wiggle chair by Frank O. Gehry is part of the museum's permanent collection

DESIGNERS IN RESIDENCE

The Design Museum's Designers in Residence programme provides emerging designers with time and space to research and develop their skills. Events and talks allow the designers to engage with the public and discuss their work. Previous participants include Torsten Sherwood, who we profiled in *F&C* 253. The designers are chosen from a call for entries which is open to all designers who have graduated from Higher Education within the last five years and who have been working professionally (either paid or voluntarily) in some form of design or architecture practice for a minimum of one year. See the website for details about entering.



The Design Museum Shop is full of design-themed goodies. The space includes the building's original stained glass windows by Keith New

Beazley Designs of the Year awards

These annual awards are the museum's way of providing a 'snapshot of creative innovation' from around the world. Every year, new designs in a variety of categories (architecture, digital, product, fashion, transport and graphics)

are put on display before an overall winner is chosen. The exhibition offers the public the chance to see future design classics; the awards tagline is: Someday the other museums will be showing this stuff.

This year's diverse lineup of nominees include the Tokyo Tribal furniture collection, the cover design of David Bowie's *Blackstar* album and the Tate Modern Switch House. The designs will be on display until 19 February, 2017.



Chairs in the Tokyo Tribal collection designed by nendo

PHOTOGRAPH BY AKIHIRO YOSHIDA

Where else to see... design museums

Cooper Hewitt National Design Museum
New York, USA
www.cooperhewitt.org

Danish Museum of Art and Design
Copenhagen, Denmark
www.designmuseum.dk

Design Exchange
Toronto, Canada
www.dx.org

Die Neue Sammlung
Munich, Germany
dnstdm.de

Triennale di Milano
Milan, Italy
www.triennale.org

Vitra Design Museum
Weil am Rhein, Germany
www.design-museum.de

Information for visiting

Address: 224–238 Kensington High Street London W8 6AG

Website: designmuseum.org

Opening: Open all year, closed Christmas Day and Boxing Day

Charges: Admission charges apply for temporary exhibitions, see website for latest prices

Information correct at time of publication, check the Design Museum website before making your visit

UNDER THE HAMMER: Josef Hoffmann furniture

We take a look at a selection of Hoffmann furniture from Bonhams auctions

This pair of lounge chairs and stools were made circa 1907 by Josef Hoffmann for the Austrian interior design firm Jacob & Josef Kohn. The chairs and stools are made from ebonised beech (*Fagus sylvatica*) and brass. The bentwood armchair was made circa 1905 and the beech armchair circa 1906; both were also made for Jacob & Josef Kohn.

The side table was designed by Hoffmann and the Austrian painter Carl Otto Czeschka for the Wiener Werkstätte. It was made circa 1903–08 in amboise wood. It is raised on four columns off a shaped brass base,

the table surface is inlaid in nacre (mother of-pearl), marquetry and silver thread with a central design of stylised birds amid tulips and foliage, the two birds incorporating a WW symbol to represent the Wiener Werkstätte.

Josef Hoffmann and the Wiener Werkstätte

Josef Hoffmann (1870–1956) was an Austrian architect and designer, known for his association with the Vienna Secession and the Wiener Werkstätte. In 1903 he and the artist Koloman Moser founded

the Wiener Werkstätte with the aim of elevating the role of the craftsman and the decorative arts. The furniture produced by the Werkstätte was of a high quality and was characterised by elegance, simplified shapes, geometric patterns and minimal use of decoration.

As well as furniture, the Wiener Werkstätte also produced high quality porcelain, glass, fabrics and clothing. The Werkstätte closed in 1932 due to financial difficulties. Its archive now belongs to the Austrian Museum of Applied Arts, see www.mak.at for more information.

Pair of lounge chairs and pair of stools
made by Josef Hoffmann

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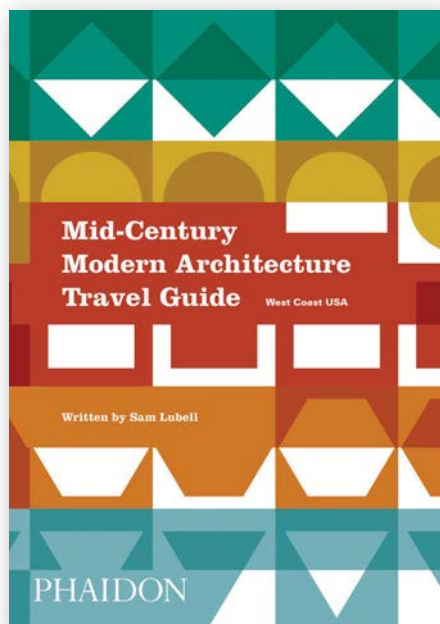


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* 1 year (12 issues) was \$106.43 NOW \$74.50 2 years (24 issues) was \$212.86 NOW \$132.25!

Workshop library

We review two books for you: ***Mid-Century Modern Architecture Travel Guide*** and ***The Minimalist Woodworker***



Mid-Century Modern Architecture Travel Guide by Sam Lubell

Admittedly this book will have greater appeal the nearer you are to West Coast USA if it's to make it into your compendium of travel guides for that region, assuming that's the outcome for your average travel guide. Perhaps this won't come as a shock but the majority of travel guide readers,

average or not, rarely get round to meeting their muse. I picked this book up not as a travel guide but more as more of a catalogue-style index to things I didn't know existed that would make for further investigation.

The introduction to this book explains why the West Coast was such a draw to a new wave of experimental architects and in so doing softens the blow for some of the more brutal visages to follow. Like most things in life, context is everything. The book is divided into sections running north to south from the Pacific Northwest through San Francisco, Los Angeles, Palm Springs and finally resting up in San Diego taking in humble domestic private residences and corporate headquarters of monolithic proportions. Sam Lubell knows all the right buttons to push and does a great job in luring you into the subject. What's obvious after just a few pages is that the scale of this movement is in no way commensurate with its place in the history books. Hidden in plain sight, this period of modern architecture is an untapped resource for designers in search of inspiration but you've got to know what you're looking at and Lubell's descriptions are as entertaining as they are informative.

Just in case you were considering making the trip and using this book as the publishers intended, each listing includes a simple yes/no to a number of features or facilities such as 'Open to Public', Overnight Accommodation' and 'Gift /Bookshop'

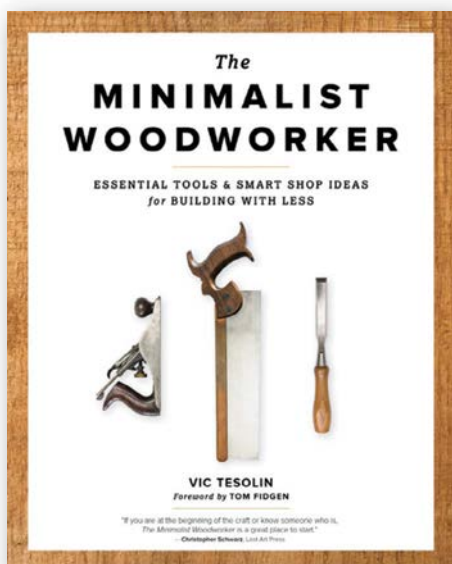
as part of a longer description about the building. Those properties that are open to the public are referenced later in the book with more information. There's also a glossary for further reading and a list of all the architects featured, and, at more than 300 pages long, there's plenty to get your teeth into. Want to know more? Simple, take a hike or better still plan your next road trip.

Derek Jones

Published by Phaidon
ISBN: 9780714871950
376 pages £24.95



Los Angeles, CA: Sheats Goldstein House, John Lautner, 1963. Photography: Darren Bradley, courtesy of Phaidon



The Minimalist Woodworker: Essential Tools & Smart Shop Ideas for Building With Less by Vic Tesolin

Vic Tesolin, who blogs as the Minimalist Woodworker, has now published a book about his pared-back woodworking. According to Vic, all you need are 'a few essential tools, a little bit of space for a basic workbench, and the desire to make something with your own hands'. In *The Minimalist Woodworker*, Vic includes drawings to show the various types of spaces one can use to work in to suit all types of craftsmen. He also highlights the possible space available in your home whether it's an apartment, town house or a basement. Vic discusses the essentials to creating a good, but safe workshop environment; these include good lighting, ventilation and flooring solutions.

If you have a small workshop and don't have

the room for big tools, there's no need to worry because Vic writes on what tools you can use for a smaller space such as hand tools, bench planes, jointers and block planes and also explains how to use the tools. Each chapter is equipped with information on everything you need in the workshop, explaining their uses and qualities. Furthermore, Vic discusses practical sharpening and tool maintenance, particularly look out for his piece: 'hone and polish the secondary bevel', which provides a step-by-step guide on just that.

Perfect for the craftsman who doesn't have a lot of space to do their work, or even a craftsman looking to downsize, this book provides all the necessary information to help you arrange your 'shop in the most effective way possible.

Tamara Birch

Published by Spring House Press
ISBN: 9781940611358
152 pages £18.99

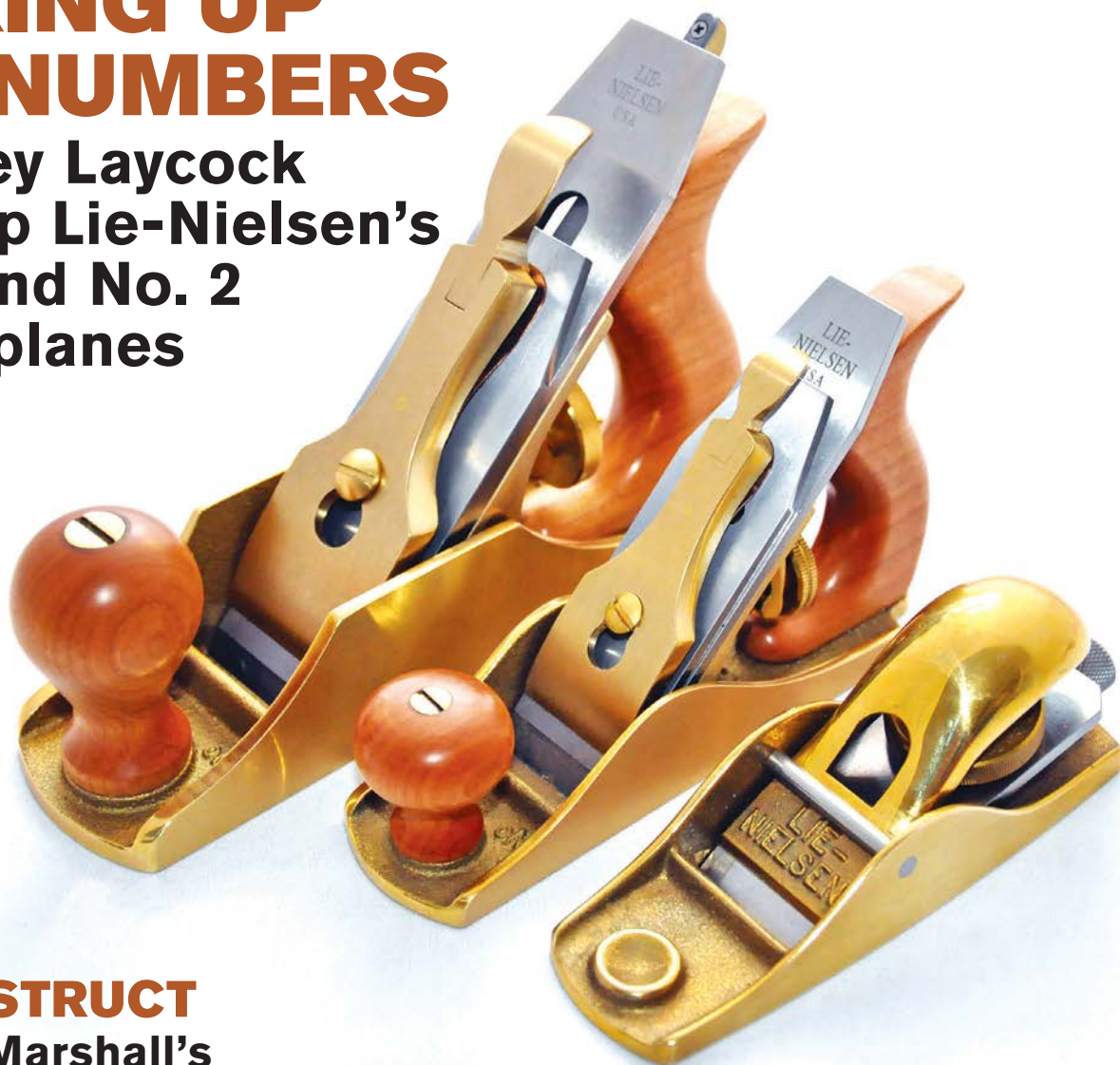
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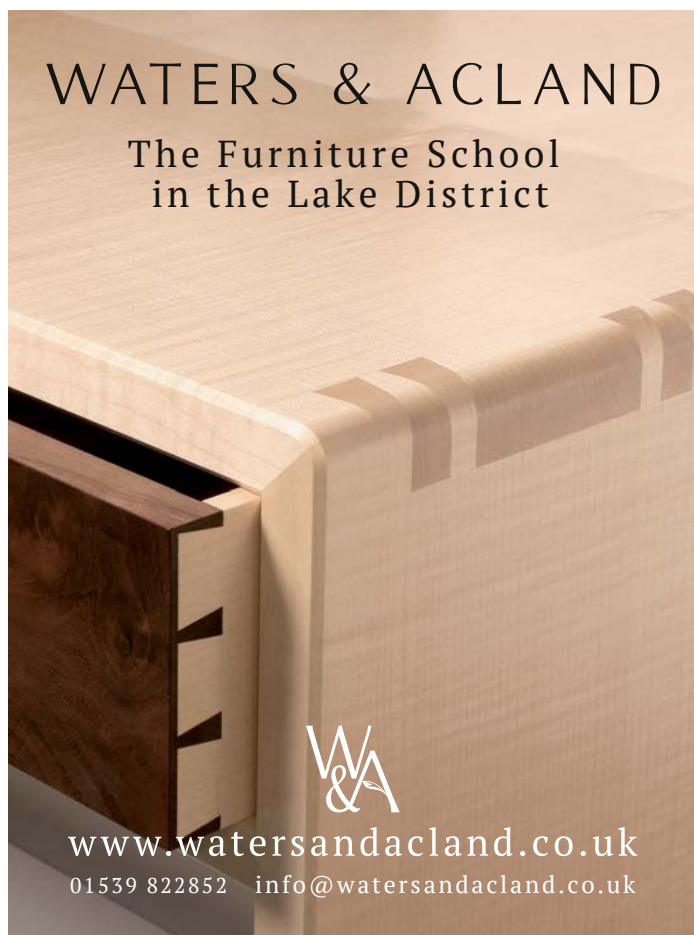
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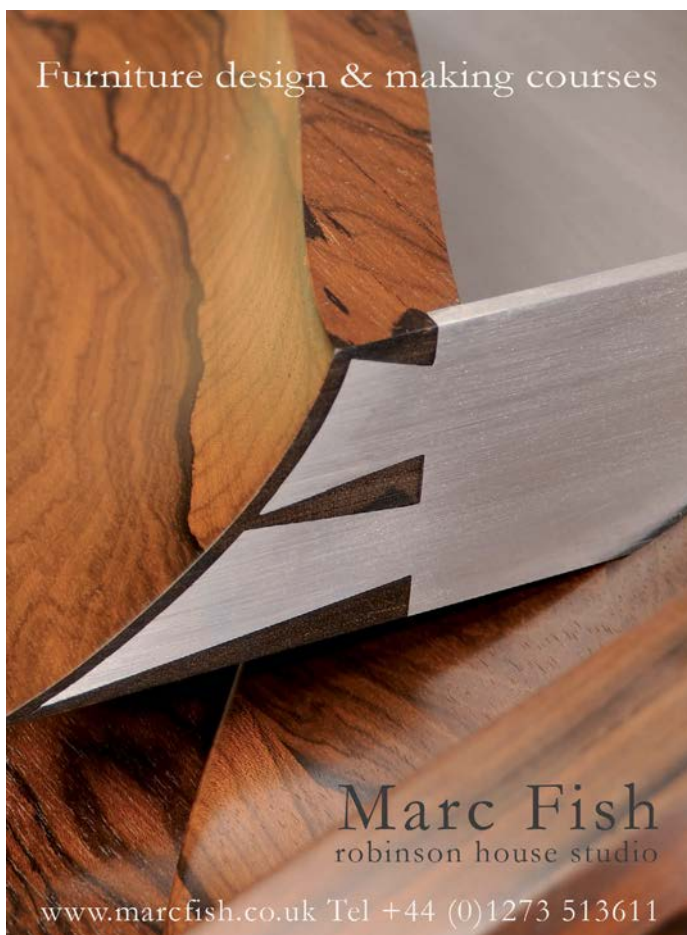
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THE GUILD OF MASTER CRAFTSMEN

Shop talk: Marc Fish

We catch up with the owner of Robinson House Studio, Marc Fish

Do you remember the moment when you thought you could make a career out of making furniture?

I am not sure this has ever happened to me. I know I need to make stuff, but I am not sure it has to be furniture and I am not sure my path could even be described as a career. I am very driven and always wanted to be the best I could be, at whatever I was doing. I think if I ever get to that place I will look to doing something else; I always fancied watch making!

Tell us about your most recent eureka moment.

I was sitting on the stairs waiting for my son to finish in the toilet and came up with the Nautilus table – I then panicked for the next six weeks on how to make it after telling the client that we could make it!

Enzo Ferrari wished he'd designed the E Type. What item would you have loved to have had a hand in creating?

Certainly not the E Type – the bonnet is too long, roof too high on the coupe, the horizontal line is interrupted and does not flow.

Suggest a museum that everyone should go to, and why.

I've just been to an amazing exhibition at the Jewish Museum in New York. My favourite architect, Pierre Chareau, has a retrospective of his work including lots of exhibits from Maison de Verre. It is on until 26 March.

What do you collect?

Materials. I currently have over 1000 samples at the studio.

What haven't you got time for?

Laziness in people and design.

Who in the last century do you think has had the most influence on furniture design?

If it is a question of influence on me then designers such as Wendel Castle and Wharton Esherick, who were for me pioneers and that inspires me massively. If you are asking for the influence on the greater good, then you may not like the answer – Ikea. They have truly brought design to the masses.

Who do you think it might be in 100 years from now?

Hopefully students of students who trained with us at Robinson House Studio. The school we run is very important to us and



All about Marc

Greatest success to date.

Nautilus, this has been the best and worst thing for us. It gained us amazing press, recognition and pushed us more into the gallery market, but its success held back the development of new work for a couple of years while we were busy fulfilling orders.

Are there any other makers/craftsmen in the family past or present?

Nope, maybe one of my boys. Willow made an aluminium light sabre on the lathe and Huxley, who is only two, already has a video on YouTube cutting dovetail joints.

Where did you gain experience in designing and making furniture?

A couple of courses and 15 years of experimenting. Experimentation is a big part of what we do at the studio. We have, and continue, to question everything we have learned or were taught. This is the key to our progression. What we learn today becomes part of the course we run tomorrow.

Tell us a little bit about home life.

I live with my partner Ness, and our two boys, Willow (9) and Huxley (2).



we strive to ensure our students are equipped to face their future in the industry. I hope that some day we can look back on some amazing craftsmen and women coming from the school, people who are just as driven as us and passionate about innovation and the progression of furniture making.

I read somewhere that Art Nouveau was a big influence on your work. Is that still the case?

I feel that my source of inspiration is the same, Art Nouveau, and what I design was/is always based on nature or natural forms. I don't think that is ever going to change for me and don't see us doing anything with straight lines for a while!

What are you making next?

A 2.5m shell sculpture for a restaurant in London; it will be suspended from the ceiling and be made from over 6000 pieces of veneer. This is our first truly non-functional piece and quite liberating to be designing outside of the normal parameters. It also feels great to have our work accepted on a level playing field with true sculpture.



What comes first, the design or the technique?

Form is always first, then we try to find a way to make it. I'm passionate about design and form, with construction secondary to this. I use a term 'appropriate construction' as all too often woodworking is about showing off the joints and the craftsmanship, but even more often lacking in the design department.

Is it true that VW bought your 1951 split screen camper for their museum?

Yes, I used to restore classic VW and Porsche vehicles. The camper was the earliest in the UK at the time and was restored from a rusty shell, taking 18 months. It had been used to transport acid around a chemical factory in Sweden. After selling it back to Volkswagen I felt there was nowhere to go and needed a new 'career'.

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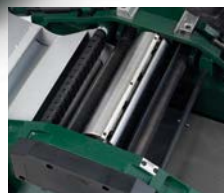
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