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PHOTOGRAPH BY GUY/DEREK JONES

Not so long ago, 'community' might be something you found more or less on your doorstep. Nowadays the geographical boundaries to hold a community together are pretty much non-existent. We connected with Jason Thigpen at Texas Heritage Woodworks to share his ingenious budget version of a Moxon vice, which was featured in issue 220. Weeks later, we received a letter from the Falkland Islands in response to it. I'm not sure if it's the juxtaposition of technology, or the irony of it that makes me smile, but it sure feels good to know that we can put these two workshops together in the same neighbourhood. There's definitely a backyard feeling to this issue as we start a new style of feature article that has a working title – at least in my head – of 'Our Man in Havana'. The vacuum cleaner salesman in our version of the Graham Greene novel is luthier Kieron

Binnie and as far as we know, he doesn't work for the secret service. Instead, we're looking to leapfrog our way around the globe and have our own correspondent in as many different workshops as we can find to give you a different slant on things each month.

The great tool makers

On a personal note, I acquired this masterpiece of ingenuity by Clifton. Come to think of it, I can't say I've ever had a yearning to own one or use one but I feel it's something I should at least try before dismissing the whole idea. All the cutters are there and so is the original manual, although you'd need a Hubble telescope to read it. I guess there was a time when a tool like this gave you the upper hand. Now, though, it'll be a rainy afternoon project with no distractions. Although our methods vary a lot and our techniques often contradict one another,

versatility is the cord that binds us together. In the last of our series on the great tool makers, we look at the ultimate ragged trousered philanthropist Henry Disston. Stand up straight by your benches for this one, as the story is told by ex-US military commander Mark Harrell and the man behind Bad Axe Saws. Disston is still the brand all contemporary saw makers are competing against years after the last factory in Philadelphia closed. So pay attention and enjoy. At ease, men and women!

Derek Jones

Derek Jones
derekj@thegmcgroup.com

Furniture & cabinetmaking

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

DEPUTY EDITOR Tegan Foley
Email: teganf@thegmcgroup.com

DESIGNER Oliver Prentice

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

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

ILLUSTRATOR Simon Rodway

CHIEF PHOTOGRAPHER Anthony Bailey

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

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

PUBLISHER Jonathan Grogan

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

PRODUCTION CONTROLLER
repro@thegmcgroup.com

CIRCULATION MANAGER Tony Loveridge

MARKETING Anne Guillot

SUBSCRIPTIONS Helen Christie
Tel: 01273 488005, Fax: 01273 478606
Email: helenj@thegmcgroup.com

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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 courtesy of Lee Valley Tools

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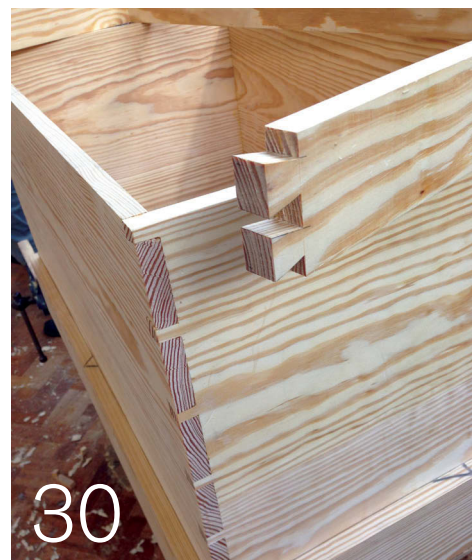
Between 25 June and 5 July, the Business Design Centre, London played host to the annual New Designers exhibition, a showcase of the widespread design talent emerging from post- and undergraduate courses in universities across the UK

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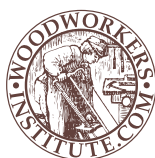
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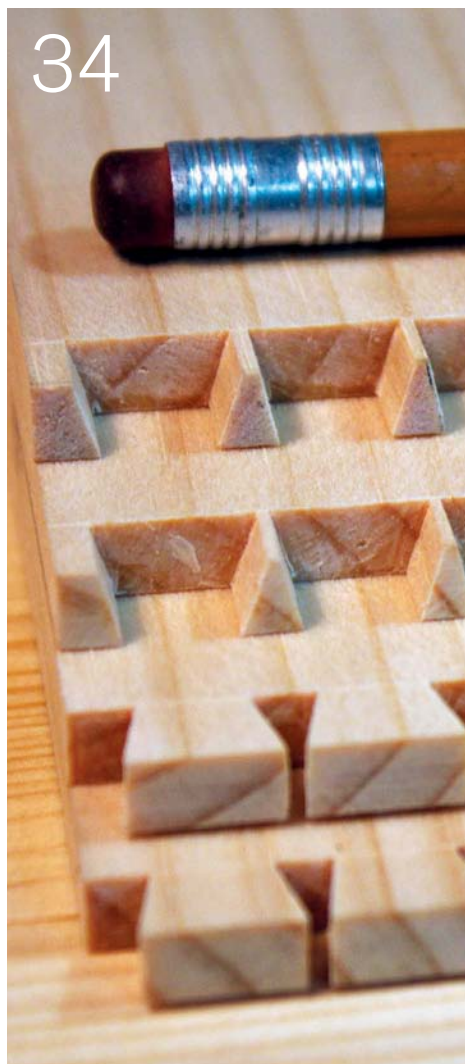
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Barrie Hope reviews a book on European picture frames and another on advanced veneering techniques. Website of the month is from Tom Fidgen

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



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Contribute to these pages by telling us about matters of interest to furniture makers. Call Tegan Foley on 01273 402 839 or email teganf@thegmcgroup.com. Please accompany information with relevant, hi-res images wherever it is possible

News&Events

BLACK+DECKER wins 'Most Innovative Brand' at Plus X Awards for second year

BLACK+DECKER has been awarded the honour of 'Most Innovative Brand' at the Plus X Awards for the second year running, this time in both the 'power tools' and 'garden' categories.

The Plus X Award is a prize bestowed for the highest quality innovations that directly benefit the consumer today, and are relevant for the future. The jury comprises a panel of renowned, independent trade journalists and experts from 25 industries.

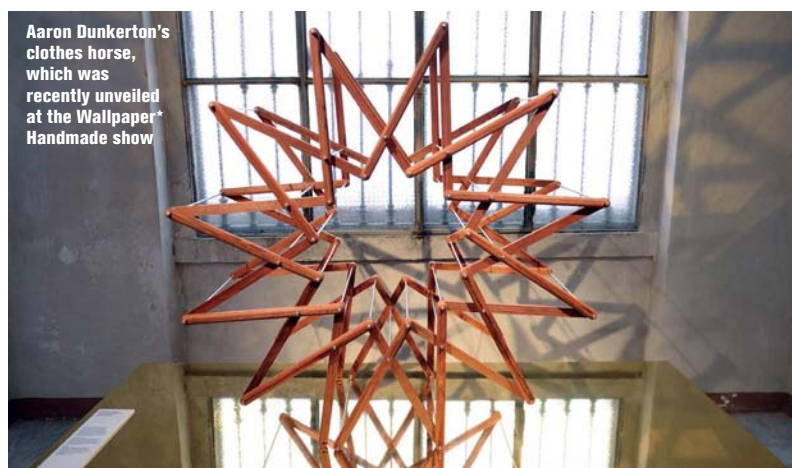
This year, two new products from BLACK+DECKER were awarded 'Best Product of the Year 2014' in their appropriate categories, as well as receiving honours for innovation, high quality, ease of use and functionality. Further details on the Plus X Awards 2014 can be found at www.plusxaward.com.



PHOTOGRAPH COURTESY OF BLACK+DECKER

BLACK+DECKER receives honour for 'Most Innovative Brand' at Plus X Awards 2014

Kebony makes the domestic aesthetic with the unveiling of its clothes horse by Aaron Dunkerton



Aaron Dunkerton's clothes horse, which was recently unveiled at the Wallpaper* Handmade show

PHOTOGRAPH COURTESY OF THE COMMUNICATION GROUP PLC

Kebony recently revealed its most recent and exceptional project, which comes in the form of a beautifully crafted clothes horse. Exhibited and made exclusively for the Wallpaper* Handmade show, Salone del Mobile in Milan, the stylish piece is comprised of intersecting slats with the cross-section forming the shape of a star. The organic appearance

of Kebony's Radiata perfectly complements the subtle beauty of the piece, an artistic re-imagining of an everyday item of furniture.

The sustainable wood from award-winning Kebony has most frequently featured in high profile architectural and construction projects and the material is renowned for its performance and durability.

However this recent foray into the world of design is not a first for the cleantech pioneer, whose previous exhibits, exclusive to the Wallpaper* Handmade exhibition, have included a luxury coffee bar and a Nordic-style dog kennel.

Designed by young London-based designer Aaron Dunkerton the aim of the project was to create a beautiful luxury sculpture for the home, which was also practical.

Kebony wood was selected by Aaron due to its durable and hard-wearing qualities, which not only make it perfect for outdoor spaces but also ideal to be put in regular contact with wet clothes, set out to dry. The clothes horse is expandable, unfolding into a star shape to create more space for hanging wet garments. With 36 arms – 10 more than a conventional drier – when in use the clothes horse takes the form of a 12-pointed star, when collapsed it is a lot more compact and smaller than those already available for purchase. For more information, see www.kebony.com.

The opportunity of a lifetime for one young professional +

Kelly Baker, who works for Axminster Tools & Machinery, was one of four young professionals along with others from Panaz, Ercol and Blum chosen to attend a three-week pilot course run by London-based The Furniture Makers' Company this summer.

As part of an expanding education programme, The Furniture Makers' Company has just finished a pilot course giving four of the brightest and best young talents in the furnishing industry an intensive three-week experience where they had an unrivalled opportunity to learn about all aspects of the furnishing industry supply chain. Only The Furniture Makers' Company, which is the furnishing industry's charity, with its unique network of contacts, can provide such a course.

During the three weeks the group covered

components and raw materials, the complexity of manufacturing, testing, buying criteria, pricing, marketing, merchandising, customer service, consumer law and after sales. The group also attended tours, presentations and seminars hosted by other companies including John Lewis, DFS and Marks & Spencer.

In total the group visited 17 companies travelling the width and breadth of the UK.

The course culminated in each of the four young professionals giving a presentation about what they had learned over the three weeks of the course, and how they felt this could be put to practical use by their respective companies. The presentations were made to a group of VIPs, Liverymen and senior representatives from the companies involved.

Paul von der Heyde, the Master of The Furniture Makers' Company said: "The four young professionals, who have enjoyed learning everything from design to retail and from fabrics to fitted kitchens, have had the opportunity of a lifetime. I am sure it will stand them in good stead for great careers in our growing industry. We owe huge thanks to everyone involved for making this possible and look forward to developing the course further for the future, so we can offer this opportunity to more talented young people who will help our industry to flourish for many years to come."



Kelly Baker receiving her certificate from the Master, Paul von der Heyde

TIMBER TRADE NEWS Chestnut blight in the USA

There has recently been some good news about sweet chestnut blight (*Cryphonectria parasitica*) – see F&C 214 for more information and *New Scientist* magazine – June 7 – reports research by the American Chestnut Research and Restoration Project carried out at University of New York in Syracuse. They have used genetic modification techniques to engineer disease-resistant trees, apparently the only case to date of the use of this approach in a conservation project. They have introduced a gene into chestnuts from wheat, which codes for an enzyme that destroys one of the chemical products from the fungus – an acid – thus preventing it from forming lesions. The trees are called 'Darling4' and are more resistant than unmodified trees. The resistance is heritable through the seeds, so should permanently establish itself in the population once the trees are released into the wild. Further 'Darling' trees with greater resistance are in the pipeline. Another project has taken a more conventional approach, not using GM techniques, to introduce resistance genes from Chinese trees: at present it is not clear if one of these approaches will be more favoured, but even in the USA there are those opposed to GM technology. Woodworkers who like to use 'wormy' chestnut (*Castanea sativa*) should perhaps lay in stocks now.

Chris Prior

+ New Forest Trust Creates UK First

The New Forest Trust has, it believes, created and built the first pavilion in the UK made totally from locally sourced materials and by local experts and craftsmen.

This was built as a temporary structure for the Fine Crafted Wood Exhibition at the New Forest & Hampshire County Show at New Park near Brockenhurst in the New Forest. Part of that Exhibition is a display of Professional Furniture and entries for a national competition from Trainee Designer Craftsmen. Up to 2013 the Exhibition was held in a marquee. This is not the best environment for furniture so it was decided a pavilion would be better. Normal pavilions are made with aluminium frames, but for a display about wood this kind of pavilion is not really appropriate.

So this New Forest charity decided to see if they could make one themselves. First they sourced the services from a structural engineer and Wessex Structural Engineering Services from Totton created the design. The Douglas fir (*Pseudotsuga menziesii*) timber used came from the Crown Lands of the New Forest and was sawn by East Bros from West Dean and some from S C Soffe and Sons of Copythorne.

The metal parts came from Pip Biddlecombe at Ower and RAD Engineering at Culverley. A newly formed company, Bespoke Framing, run by Richard Haynes of Sway, made up the frames.

The Project was supported by New Forest Trust volunteers as well as a large number of Two Tree volunteers and the Forestry Commission. For more information, see www.newforesttrust.org.uk.



The pavilion created and built by the New Forest Trust, which was made totally from locally sourced materials and by local experts and craftsmen

Make-Your-Own Standing Desk

MIT graduate students David Yamnitsky and Isabella Tromba have created a Press Fit Standing Desk which, using just a CNC router, can be assembled just like a puzzle in a few seconds. At \$200, to bring the Press Fit to market, David and Isabella launched a Kickstarter campaign that surged past its initial \$10,000 goal in less than a day. With the suggestion that standing at your desk will be much healthier for you, this is coming in at the perfect time!



Handmade in Britain 14 – The Contemporary Crafts & Design Fair

This November over 100 UK-based designer-makers will showcase the best of contemporary fine crafts in all disciplines across interiors and fashion over three days at Chelsea Old Town Hall. The show is an inspiring alternative to the high street and a unique opportunity to browse exceptional crafts, buy unique and handmade gifts or commission a bespoke piece of work. This is a luxury shopping experience with added value, a very special chance to buy directly from the makers and discover the inspirations and processes behind the work of Britain's most skilled craftspeople.

This event offers a unique opportunity to explore British contemporary crafts in a showcase of innovative design alongside exceptional craftsmanship presenting a rich variety of form, function and style.

DETAILS:

When: 14–16 November, 2014

Where: Chelsea Old Town Hall, King's Road, London SW3 5EE

Contact: Handmade in Britain

Tel: 020 72865 110

Web: www.handmadeinbritain.co.uk



PHOTOGRAPH COURTESY OF HANDMADE IN BRITAIN

Jonathan Pearce's jewellery chest of drawers

Trend Celebrate Opening of 200th Trend Routing Centre

Trend introduced the Trend Routing Centre (TRC) programme to create stores where customers could see eye-catching in-store presentation units and buy a comprehensive range of Trend products. The TRC programme provides local stores with gold, silver or bronze levels of stocked display units, close to where customers live and work, where they can return with confidence to purchase Trend products from knowledgeable staff.

The 200th TRC was recently opened at A1 Tools & Fixings Ltd in St Albans and Trend Managing Director Jeff Willcocks was at the launch to assist with the celebrations. David Muskett, Owner, said: "We are very happy to be Trend's 200th distributor and this really takes A1 Tools and Fixings forward in what we are able to stock." For further information on Trend Routing Centres, please call 01923 249 911 or visit www.trend-uk.com.

Housefish

Design company Housefish aim to make pieces that are 'useful, beautiful and easy to assemble'. Their furniture is built to last a lifetime, using only formaldehyde-free sustainable harvested wood and recyclable metals. The Denver-based firm has just launched a 'Lock Seating' range, available as a regular-height chair or as a counter stool, the pieces are easy-to-assemble, crafted with FSC-certified plywood and zero VOC finishes. For more information, see www.housefish.com.



PHOTOGRAPH COURTESY OF HOUSEFISH

'Lock Chair' in walnut,
by Housefish



IT IS Great British Furniture

In July the BFM – British Furniture Manufacturers – re-launched the Great British Furniture Campaign. Originally launched around seven years ago, the campaign is to promote British-made furniture and to increase awareness of the key factors that 'make British furniture "great" in the eyes of the consumer, retailer and a wider international audience'.

Since the campaign began, a significant number of high profile names signed up in support of it and since the Olympics, Paralympics and the Jubilee hit the UK in 2012, there was a dramatic rise in the number of furniture manufacturers and retailers signing up to help promote their products. In order to build on that success and to increase participation, the campaign will be opening up to the contract and office markets, and the domestic market. In opening up to more markets, the campaign allows for participants to use swing tags and printed material on their products, which will highlight their work among others.

To participate in the campaign the manufacturer must be a member of the BFM and make at least 75% of their furniture in the UK. To participate as a retailer, a sufficient number of products must be sourced from GBF manufacturing members. For more information visit www.bfm.org.uk or www.greatbritishfurniture.co.uk.

Events



PHOTOGRAPH COURTESY OF D&M TOOLS

'The' Tool Show 2014 – an event not to be missed!

'The' Tool Show '14

D&M Tools look forward to seeing you at 'THE' Tool Show 2014, which takes place at the prestigious Kempton Park Racecourse at Sunbury-on-Thames, on the weekend of 10–12 October, 2014. This event, the UK's premier hand, power tools and woodworking machinery exhibition for DIY amateurs and trade professionals, is now in its 14th year. Don't miss this opportunity to see the very latest tools and equipment demonstrated by all the leading manufacturers. Several brands will be showing new products for the first time in the UK, plus you can pick up exclusive deals and special offers, which are only available to visitors to the show. There is ample free parking plus free show guide and free admission. Be sure to make a note in your diaries!

When: 10–12 October, 2014

Where: Kempton Park Racecourse, Staines Road East, Sunbury-on-Thames, Middlesex TW16 5AQ

Web: www.thetoolshow.com

The Joinery & Furniture Manufacturing Show 2014

The national show for joinery and furniture manufacturers, W14 is one of the UK's largest trade exhibitions and covers three large halls at the NEC, Birmingham, where it is held every two years. It's a chance to see running machinery, materials and components – all the essential equipment and supplies to the industry.

Entry to the show is free for bona fide trade visitors. Suppliers to those manufacturers will enjoy a perfect high

profile opportunity to show their latest product developments to an industry which constantly searches for differentiated product and production capability.

When: 5–8 October, 2014

Where: NEC, Birmingham, Pendigo Way, Marston Green, Birmingham, West Midlands B40 1NT

Web: www.w14exhibition.com

Triton open day at Yandles

Yandles will be holding a Triton Day on Saturday 18 October to celebrate the opening of their new Triton Academy. The day starts at 10am, with demonstrations on the full range of Triton power tools and machinery and there will be seating available for this part of the day. There will also be an opportunity for visitors to try out the products for themselves.

In the afternoon, customers will be able to get specific advice on Triton products and there will be a trip around the sawmill with a general talk about timber. The sawmill talk has limited places and those wishing to attend should book through the office. During the day there will be special offers available on all Triton products and discounts on timber. There is a cafe, hobbies store, gallery and free parking.

When: 18 October, 2014

Where: Yandle & Sons Ltd, Hurst Works, Martock, Somerset TA12 6JU

Web: www.yandles.co.uk

Makers by Commission

The Makers by Commission is an event setting out to 'demystify' the commissioning process. As well as exhibits, there will be an introduction to the maker and step-by-step breakdown of the development of the piece. It is the 13th annual exhibition and features work from 25 makers, ranging through from beginners to those with 40 years' experience in the business. You can keep up-to-date with SFMA news, events and exhibitions by visiting their Facebook page: www.facebook.com/sfma3.

When: 3–19 October, 2014

Where: John Hope Gateway, Royal Botanic Garden, Edinburgh EH3 5LR

Web: www.scottishfurnituremakers.org.uk

Judy's Affordable Vintage Fair

On 19 October, Judy's Affordable Vintage Fair is at Lambeth Town Hall. It is an award winning, London-based vintage furniture flea market and is a celebration of mid-century living, from the '50s onwards. The event includes ornaments,

cushions, crockery, glass, textiles, cameras, record players and much more!

When: 19 October, 2014

Where: Lambeth Town Hall, Brixton Hill, London SW2 1RW

Web: www.judysvintagefair.co.uk

'Roman Splendour'

Held at The Society of Antiquities, Burlington House, Simon Swynfen Jarvis will attempt to address the history of the Pierre Sure cabinet in the Cabinet room at Stourhead, which has long been admired since its arrival in 1742. As the former Chairman of the Furniture History Society and Chairman of the 50th Anniversary Appeal, Simon will be looking into the origins of the piece, where it was made and for whom, who designed and made it, and where did it stand.

When: 20 October, 2014

Where: The Society of Antiquaries, Burlington House, London W1

Web: www.furniturehistorysociety.org



PHOTOGRAPH COURTESY OF THE FURNITURE HISTORY SOCIETY

The Pierre Sure cabinet

Made London – The Design and Craft Fair

Made London is one of the top selling events for designer-makers in Europe. It is a chance to showcase the very best and original makers in the UK.

When: 24–26 October, 2014

Where: 1 Marylebone Road, London NW1 4AQ

Web: www.madelondon.org

■ THE SOUTHERN FELLOWSHIP OF WOODWORKERS

News from the Southern Fellowship of Woodworkers

In April, the Southern Fellowship of Woodworkers celebrated their 20th anniversary with a show of members' work at the Mytchett Community Centre in Camberley. Members had a chance to discuss each other's work and celebrate with founding member Peter Guyett, who cut a specially commissioned cake.

During May, members visited Marc Fish at his workshop in East Sussex, following on from an earlier talk. Marc gave an insight into the making of his spectacular 'Nautilus' table and the challenges this gives. Members then visited John Lloyd in his workshop to catch up on recent changes.

June saw Hugh Jones providing an insight into green woodworking at his workshop. All who attended were impressed with the ease that green wood is worked with traditional tools. The Fellowship also visited Henwood & Dean Boatbuilders, which provided an understanding of the unique challenges faced in boat restoration compared with furniture.

Members have also recently demonstrated at the Axminster Basingstoke store on sharpening, spindle moulding and routing to an interested audience.

August saw the Fellowship visiting The Celebration



PHOTOGRAPH COURTESY OF BRUCE RICHARDSON

of Craftmanship & Design and the Painswick Museum. The winter programme restarts this month at the Mytchett Community Centre with Jeremy Broun talking about joints and construction strategies. For more information, see www.sfw.org.uk.

**The Fellowship
visiting John Lloyd's
workshop**

■ BUCKS NEW UNIVERSITY

Bucks New University student wins Mixology14 Student Furniture Designer of the Year

The Mixology14 Student Furniture Designer of the Year award, sponsored by KI Europe's KICKSTART programme, has been won by Sang A Choi of Buckinghamshire New University for her innovative designs, 'Beehive' and 'Pony'.

Sang A studies MA Art and Design Practice: Furniture Design at Bucks New University. Two other students, Ian Reveley and Wesley George, made up the three person shortlist.

The award is open to any person enrolled on a recognised furniture design course in the UK. The Mixology Awards concentrate entirely on the office interiors market. All submissions are judged by an independent panel of experienced architects, designers and consultants, which recognises the highest standards of architecture and design.

Sang A's piece, 'Beehive', is a chest of drawers inspired by the relationship between objects, gaps and space. The concept behind 'Beehive' is to create shadow using minimalist lines and forms. Made out of solid oak, its black finish increases the reflection and accentuates

the concept. 'Pony', Sang A's second piece, uses recycled climbing rope to create a simple bar stool. The concept and detailing of the stool is inspired by climbing. The frame wrapped with the rope creates curves for a seating posture similar to a saddle or harness, creating a feeling of safety and comfort while seated. A re-appropriated climber's carabiner is used to join the ends of the ropes beneath the seat. The blue rope goes into and out of the tubes almost snake-like, emphasising the continuous language of climbing and giving the illusion of holding the whole frame together as if by magic.

Lynn Jones, Head of Academic Department – Furniture at Bucks New University, said: "Sang A is an amazing, fresh, up-and-coming designer and her award is really well deserved. Still only in the middle of her one-year Master's degree course, she has shown exceptional design ability and creative tenacity throughout her time with us at the University." Find out more about this story at www.bucks.ac.uk.



PHOTOGRAPH BY STUART EDWARDS

Sang A Choi with her piece, 'Pony'

If you're a member of a collective and would like to raise your profile then submit a story to teganf@thegmcgroup.com

Readers' letters

Submit your letter to us either by email – teganf@thegmcgroup – or in writing: **F&C readers' letters**, GMC Publications, 86 High Street, Lewes, East Sussex BN7 1XN. Each month one letter will be awarded the prize of a Mini Z-Saw worth £39



Hexagons, octagons & dovetails

Hi Pete,

I really liked your article on the hexagonal dovetail bowl. You mentioned that you could not find any other examples of dovetails in hexagonal bowls and suggested that readers might write in with examples. My example, an octagonal jewellery box, isn't exactly the same but is somewhat similar. It dates back to 1960 when I was doing O-Level woodwork and being a little bit cocky, wanted to do something a bit different and challenging, so I designed and built an octagonal jewellery box using dovetails.

The woodworking teacher was very helpful and supportive but mostly just let me get on with this mad project. I used rosewood (*Dalbergia latifolia*) and sycamore (*Acer pseudoplatanus*).

At that time these woods were readily available in the Shoed Hill area of Manchester and finding the white sycamore was the most difficult. Working out how to set out the dovetails was challenging but with reference to my O-Level pure maths

notes, I sorted the problem. All joints were hand cut using basic tools, but the most difficult part to get right was the lid, which was made from alternate triangular segments 'rub' glued together using good old-fashioned hot smelly bone glue. I do not recall how I clamped the pieces but I am sure it was much easier than your project.

The lid was built up by joining pairs of triangles, cleaning and getting as good a 90° corner as possible, then gluing in pairs to give two halves and finally gluing the halves. Getting the points to meet in the centre and be the same was almost impossible and not a thing I would like to repeat. Sadly, one of the joints has failed after 40 years due to modern central heating drying the wood and creating a greater contraction of the wood at the periphery. I signed the box and gave it to my sister as a birthday present. She used it for many years until our mother died in 2012, when it was used as a casket for her ashes.

Mel Martin



Pete Simpson's hexagonal dovetail bowl, which was featured in *F&C* 221

Author's reply

It's amazing to think that you were doing that when I was still jumping in puddles and wondering what girls were for. Like you, I've always tried to do things differently. Growing up with my father, a very traditional woodworker, the movement across the grain was always a major consideration in design. I'm still caught out by sudden changes in temperature and humidity when fitting drawers and lids. I would urge anyone designing anything in wood to visit a few antique shops to see what time does to it. Where do we go next with dovetails? Thanks again.

Pete

Symmetrical dovetails

Dear Derek,

Following on from recent articles on dovetails in *F&C*, I thought you may be interested in my 'symmetrical dovetail', i.e. the pins and tails are identical. This is a very sloppy fit until it is locked by the inserts. Feel free to play with it; it only needs two of the inserts removing, by fair means or foul, and the remaining two should drop out and it all falls to bits. From one end, remove the first and third or second and fourth.

Over the years, I have been developing a multi-purpose router jig that can, among other things, cut spirals of any pitch from 4-400mm, left or right hand, single or multi-start; cut plastic gear wheels; cut lengths of wood to any number of sides with mortises in the sides; rough out linen-fold panels, and lots more.

Don's 'symmetrical dovetail'



PHOTOGRAPH BY GUY/ANTHONY BAILEY



Don's wine table in English cherry, holly and purpleheart

The centre pillar of the small table, which you can see in the photo here, was machined in one piece on the jig. The shape of the top ensures that any heavy container of liquid is either near the centre or directly over a foot!

Best wishes,
Don Acklam

Editor's round-up...

Having trouble sourcing the right tool for the job? Derek Jones sets about identifying the essential tools and equipment on offer this month



All sterling prices include VAT, correct at time of going to press



PHOTOGRAPH BY GMC/DEREK JONES

A while ago in *F&C*, we looked at the subject of flatness in detail and the basic premise was to debunk the theory that flatness was the be all and end all of everything that happened in the workshop. Well it certainly has its place but most of the time it's of little benefit to the woodworker at all, especially if he lacks the ability to measure either flatness or straightness with any degree of accuracy. In fact, concavity and convexity can be used to our advantage when we know how to harness the effect of these attributes. The thinking behind these pages is to provide you with tips that will make you a smarter woodworker. Now that may be with powered machinery or hand tools or a combination of the two – we make no distinction here. It's highly probable that you spend too much time removing unnecessary amounts of metal in the pursuit of straight line perfection and likely it's all down to that old saying “a little bit of knowledge is a dangerous thing.”

Let's look at the sole of your jack plane or jointer. Does it need to be continuously dead flat from heel to toe to work properly? No. Will the blade on your smoother perform better if the edge is ground with a gentle camber? Yes. Are the two mating edges of a pair of jointed boards better off flat or with a hint towards concavity? This one isn't quite so obvious but the answer is concavity. So when I hear stories of folk spending half a day flattening the backs of their irons, I wonder why they took up woodworking at all. Here's just one tip that will have you back at the bench quicker and enjoying making your tools dull rather than sharp. If it's behind the chipbreaker it doesn't matter. Don't polish it. Don't even flatten it; it won't make a difference to how the blade cuts. As a rule, if you're losing sleep over sharpening your irons, you're probably overthinking it.

Before I turn this into a full-scale sharpening debate, I've got another tip for you. Actually it's more of a recommendation and I don't usually go down this route very often. We've been running one of Irwin Marples' new range of circular saw blades in our workshop for the last few months and have been very impressed. It's a 255mm general purpose blade, 40T and 15° and it's taken quite a pasting. The spec says it's good for both soft and hard wood, composites and pressure treated timber and they're not wrong. Perhaps the most notable difference, though, is the reduction in noise output. Not only does it run quieter than

anything else we've had, but it's retained all its teeth, and by the way, they're all in good shape. As far as other news is concerned, let's have a look at what's new in the workshop this month.

Bosch GAL 1830 W Professional battery charger

With the launch of its 'wireless charging system', Bosch is opening up a new dimension in charging technology and providing new ways to make work with cordless tools efficient, cost-saving and time-saving. Bosch launched the GAL 1830 W Professional battery charger and the GBA 18V 2.0 Ah MW-B Professional 18V, as well as the GAL 1830 W Professional charger and the GBA 18 V 2.0 Ah MW-B Professional CoolPack battery. The GAL 1830 W Professional is exceptionally compact and currently the smallest charger available on the market for 18V lithium-ion batteries. As with the battery, it also has 'wireless intelligence': an electronic system which ensures communication between charger and battery, starts the charging process and adapts it to the current state of the battery. The system solution includes a frame which is especially suitable for stationary applications. It can be mounted on workbenches, shelves or other work surfaces and serves as a flexible but secure holder for the charger, battery and tool.



£109.99

Large Neat Hinge

Ian Hawthorne recommends his Neat Hinge for medium-sized boxes, but for larger boxes, or those with heavy lids, he has been developing a large version and has successfully been using it over the past year. After a few minor modifications, the large Neat Hinge is 60mm long x 9.5mm wide and the widely available 10mm cutter is used to fit these robust hinges. Not only are there six screw holes rather than the standard four for each hinge, the screw size is also a very robust No.4 instead of a No.3. The length of

screw is therefore 25mm rather than 16mm. This additional length provides greater support, anchoring the hinge to the box.

If you were to use a small hinge on a large box then there is a possibility that the screws would start to pull out with a heavy lid over time. So while a small hinge is ideal for smaller boxes, you really need a large hinge to support heavier, larger box lids.

Makita 2712 site saw

The new Makita 2712 site saw is a rugged tablesaw ideal for operation in many on-site situations. Weighing just 54kg and fitted with two robust trolley wheels and carry handles, this saw can be easily manoeuvred around the work site. It features a 315mm 40T carbide tipped saw blade as standard but can be used with specific blades from the Makita accessory range. The blade will run up to 2,950rpm with no load. With the 315mm blade a maximum cutting depth of 85mm is available at 90° with 58mm cutting capacity at 45°.

The bevel cutting angles range from 0° to 45°.

The pressed steel legs with bracing forms a stable stand while the main steel table measures 550 x 800mm and the extension table measures 400 x 800mm.

The maximum cutting width is 710mm. The blade is set 235mm from the left edge of the table, which has a guide rule for the supplied rip fence. It also benefits from a built-in dust extraction coupling that can easily be connected to a vacuum unit. Available in either 110V or 240V mode.

Jet JTS-600XLM saw bench

This well constructed, compact panel saw is a great all-round saw for small workshops. Strongly made with a welded steel cabinet stand and smooth cast-iron table, it is capable of handling most jobs in a small trade or home workshop and guarantees accurate cuts. It is fitted with a smooth running 1,600mm sliding table, which offers 1,200mm length of stroke.

A crosscut table supported by a telescopic outrigger is included, which can easily be removed for storage if



£374

required. The 1.5kW 230V induction motor provides plenty of power to the 250mm blade and the rip fence has a cast-iron holder with cam locking of the fence rail; the whole fence runs on a solid steel bar providing a very rigid system for accuracy in use. A fine width adjuster is also fitted. Plate steel side and rear take-off tables provide extra support for panels, etc. Smooth operating controls make setting this machine a simple task. Plus, it is easily made movable with an optional mobile base unit.

Rockler Auto-Lock T-Track Clamp

This accessory is specially designed for the Rockler T-Track Table and any other device with a T-Track that accepts 8mm T-bolts. The clamp slides into the T-Track and locks in perpendicular, in-line and 45° positions. The clamp arm slides until the clamp face is against the workpiece, then locks into place



£46



£1,619.95

Contacts

Bosch GAL 1830 W Professional battery charger

Contact: Bosch

Tel: 03447 360 109

Web: www.bosch-professional.com

Clarke Log Busters

Contact: Machine Mart

Tel: 08448 801 265

Web: www.machinemart.co.uk

Classic Hand Tools to sell products from Sterling Tool Works LLC

Contact: Classic Hand Tools

Tel: 01473 784 983

Web: www.classichandtools.com

Jet JTS-600XLM saw bench

Contact: BriMarc Tools and
Machinery

Tel: 03332 406 967

Web: www.brimarc.com

Large Neat Hinge

Contact: Hawthorne Crafts

Tel: 028 90 836 987

Web: www.ianhawthorne.com

Makita 2712 site saw

Contact: Makita

Tel: 01908 211 678

Web: www.makita.co.uk

MASCOT MULTISAFE range

Contact: MASCOT

Tel: +45 8724 4820

Web: www.mascot.dk

Narex limited-edition chisel set

Contact: TOMACO

Email: info@tomaco.co.uk

Web: www.tomaco.co.uk

Rockler Auto-Lock T-Track Clamp

Contact: Rockler

Tel: (001) 800 279 4441

Web: www.rockler.com

SawGear with Double MiterPro™

Contact: TigerStop

Tel: (001) 360 254 0661

Web: www.sawgear.com

Trend Complete Sharpening Kit

Contact: Trend

Tel: 01923 249 911

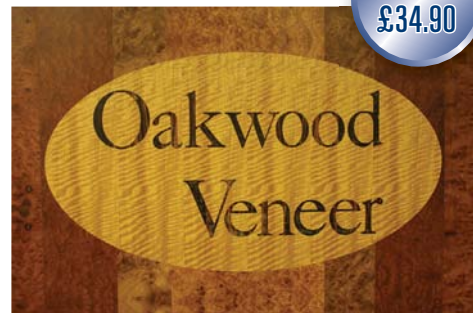
Web: www.trend-uk.com

Wood veneer

Contact: Oakwood Veneer
Company

Tel: 08000 124 201

Web: www.oakwoodveneer.co.uk



once the top lever is depressed. The clamp's sliding and locking mechanism provides instant adjustment and clamping, saving woodworkers time versus using traditional clamps and hold-downs.

The clamp features a T-bolt on its underside, which slides into any T-Track that accepts 8mm T-bolts. The bottom-mounted alignment pins can be repositioned at 45° – using a flathead screwdriver – to add clamping options beyond 0 and 90°. An optional mounting bracket is available for securing the clamp to workshop-made jigs and fixtures.

SawGear with Double MiterPro™

SawGear, the highly accurate, automatic lineal cutting system made by TigerStop, has added Double MiterPro™, a kit for adapting its use on double mitre saws, to its product lineup. The new kit adds CNC accuracy to length cutting and includes back rabbit compensation software, which is standard for framing applications. SawGear's Double MiterPro allows double mitre saw users to quickly, easily and accurately change desired

finished part lengths rather than manually moving the stops. SawGear sets up in minutes because it is customised for major brands and models of double mitre saws. Users keep their original saw equipment and simply add SawGear to increase productivity and improve work results.

SawGear easily attaches to either side of a double mitre saw, attaching to the saw's existing front fence. Because lengths are simply entered into the keypad, the need for repeatedly moving the stops by hand is eliminated, saving time, reducing material waste and vastly increasing efficiency. It sets up in minutes, can store up to 100 cut dimensions and includes an anti-pinch safety system.

Wood veneer

Oakwood Veneer Company has announced a new programme for providing a large selection of wood veneer species, sizes and backers that ship with low cost and high speed to woodworkers and businesses across the UK. Oakwood strives to be unique in the industry



based on offering a wider in-stock selection than virtually any other company and also sells a wide selection of hard-to-find timbers.

The two and three day Fed-Ex shipping price structure starts at approximately £34.90 for a single sheet and £74.90 for 10.

Trend Complete Sharpening Kit

Designed by world renowned expert James Barry, who has more than 25 years experience in the diamond sharpening abrasive industry, the new Trend Complete Sharpening Kit offers solutions to sharpening techniques and problems. The kit allows anyone the ability to sharpen tooling in seconds with precision diamond whetstones and means no-one needs to be wary of in-house maintenance.

The Kit comes complete with a double-sided credit card sized stone, 75mm taper file, 100ml lapping fluid, cleaning block, non-slip mat, instructional DVD and a *Sharpening Made Easy* booklet.

The sharpening stone uses a complex manufacturing procedure where electroplated nickel locks the diamonds to the surface. This product will last for years if combined with the lapping fluid, which with its unique formula helps prolong the life of sharpening stones by preventing the clogging, rusting and subsequent lifting of diamond particles. Trend is so confident of the sharpening stone and lapping fluid combination that they offer a five-year

tonnes of splitting force, enough to split even the most stubborn of logs.

Also newly available is the new autumn/ winter edition of the Machine Mart catalogue, which is packed with over 7,500 great products. The 500-page catalogue is the biggest yet and features everything from garage equipment to woodworking, generators to power tools. Expect to find over 1,800 price cuts and new products. Pick up your free copy now.

Narex limited-edition chisel set

To celebrate its 95th birthday, Narex is launching a limited-edition chisel set. Since its foundation in 1919, Narex has grown from strength to strength due to the quality of the products they manufacture and its many, many satisfied customers throughout the world. The eight-piece set consists of 6, 8, 10, 12, 16, 20, 26 and 32mm gouges with a handle design



Classic Hand Tools to sell products from Sterling Tool Works LLC

Now available to buy in the UK direct from Classic Hand Tools is a range of great tools from Sterling Tool Works LLC. CHT employee Alex used Chris Schwarz's 1:4 marker on both the Anarchist's Tool Chest and the Dutch Tool Chest he made at Warwickshire College recently. He liked it so much that he contacted Sterling Toolworks immediately. "1:4 slope looks great on both chests; this is the one we would highly recommend," he says.

The Saddle-Tail layout tool, which we have previously featured, is the first tool from Sterling Tool Works and incorporates two commonly used tools into one premium tool: a dovetail marker and a saddle square. The other tool available is the Plane Hammer, which is designed to be used to adjust plane blades and wooden plane wedges for wooden hand planes. It features hand turned handles and feels wonderful in the hand. Both of these great products are manufactured in the USA. *F&C*



that originates from the 1930s. The gouges feature round hornbeam handles with robust steel ferrules, a leather washer and burned-out company logo. The special anniversary wooden box can be hung up in a workshop using the supplied hinges.

With only 500 being manufactured for worldwide distribution, this set won't be around for long, so be sure to reserve your set today.



guarantee. You can now sharpen various tools including router and Forstner bits, gouges, chisels and carbide inserts, with effective results every time.

Clarke Log Busters

Take the hard work and effort out of splitting logs with a Clarke Log Buster, which is available from Machine Mart. They are safe, fast and mobile solutions to alleviate the backbreaking task of cutting wood to fuel your stove or fire this winter.

The Log Buster 7 can split logs up to 370mm length and has a powerful electric motor with a splitting force of up to 4 tonnes. For occasions when no electricity is available, the Logbuster 4 is a manual hydraulic splitter which delivers up to 10





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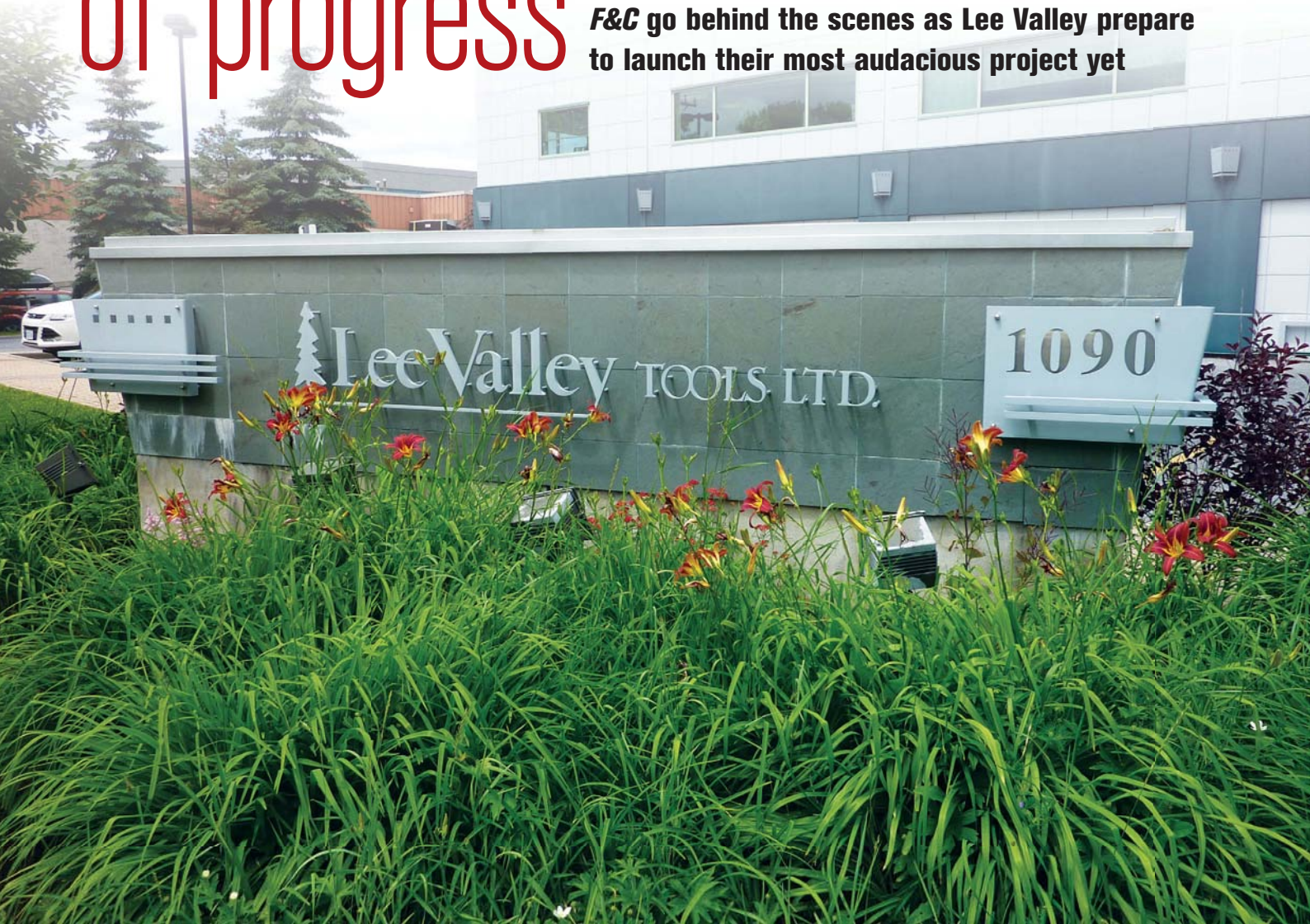
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The boundless possibilities of progress

F&C go behind the scenes as Lee Valley prepare to launch their most audacious project yet

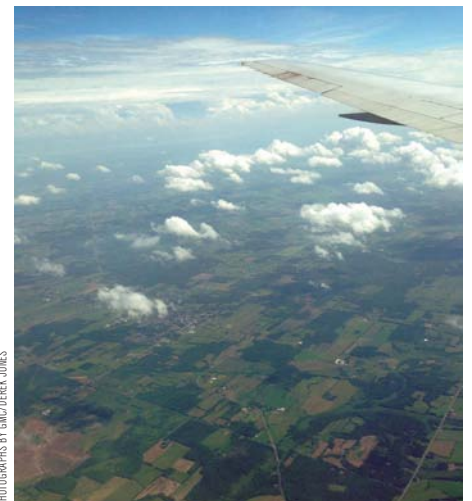


Descending through the clouds at 30,000 feet above Ontario, the landscape below looks remarkably like the one I left behind almost seven hours ago. The eastern provinces of Canada are on a similar bearing to that of southern England, so the patchwork of sun-scorched fields and green belts of forest looks like home. I'm going to meet regular *F&C* author and Canadian, Charles Mak who's spent a similar amount of time in the air but still not left the country. Canada covers a lot of ground.

Our rendezvous and final destination is Ottawa and the headquarters of Lee Valley at 1,090 Morrison Drive. The outskirts of the capital are a matrix of suburban parkland, low key commercial sites and residential streets. My guess is the town planners around here don't break a sweat that often. "We're not very economical when it comes to land

use," says our host, Export Sales Manager for Veritas, Wally Wilson. It's an urban landscape of wide open spaces, not at all unpleasant and not what I was expecting.

We're here to get a guided tour of the Lee Valley facility and a rare opportunity to see behind the scenes as the company prepares to launch a range of bench planes that could be the most significant addition to the woodworker's armoury since Leonard Bailey started tinkering with metal planes. As far as scheduling goes the timing couldn't be better, as we have been running a series in the magazine recently, looking at some of the most gifted and influential toolmakers of the last two centuries. Were we to run this again to include contemporary makers, the Veritas name would certainly be on the list along with Clifton, Lie-Nielsen and Robert Sorby, perhaps.



PHOTOGRAPHS BY GARY/DEREK JONES

Ontario or East Sussex? There's not a lot of difference from 30,000ft

Company profile



Left to right: Terry Saunders, Steve Jones, Brent Hyde, Robin Lee, Jason Tasse, Paul Roach, Wally Wilson Charles Mak and Rick Blaiklock

The story of Lee Valley is well documented if you know where to look, but folk still struggle to get their head around the two distinctive brands that come from the same stable: Lee Valley Tools and Veritas. Lee Valley began as a mail order company back in 1976 from the kitchen table of the current president's father, Leonard Lee. The first product was something of an innovation in its own right; a kit of castings that transformed an empty oil drum into a log burner. Back then of course toll free calls were unheard of and the Internet was science fiction, so customers reacted to word of mouth recommendation, placed a cheque in the post and hoped for something back in return. It was never a question of faith, more of an old-fashioned respect for good values. These same values are still at the core of the company today. As

the client base grew and technological advancements made it possible to take the catalogue online, the inevitable move towards manufacturing became a necessity. For a retailer, a robust supply chain is one sure-fire way of staying in control. When the jobbing machine shop down the street that used to make some of Lee Valley's regular lines became available, they bought it up and, shortly after, Veritas was born. Although part of the Lee Valley group, its role is the R&D and manufacture of woodworking tools that retail through the Lee Valley stores and beyond. Nowadays, Lee Valley employs some 700 staff with around another 150 within the Veritas group. It has 15 stores across Canada and a distribution centre that wouldn't look out of place in the grounds at Heathrow. Currently, the Veritas brand is carried by retailers in 26 different countries.



The reception area at Lee Valley's 100,000sq.ft distribution centre



A selection of old tools from the Lee Valley collection that are being sold at various special events

Custom Bench Planes



A simple measuring device to gauge a customer's hand size

Charles Mak is a part-time employee of Lee Valley and like hundreds of his colleagues, has been in the loop for months over this launch. It's been a carefully guarded secret and the form I'm asked to sign before taking the tour suggests they want it to stay that way. Sitting around the boardroom table president Robin Lee describes the process as being similar to the 'Build-a-Bear' experience. At first I'm not sure this is a good analogy but as the technicians behind the development reveal a measuring device and selection of knobs and totes, I start to buy into it. This isn't just one plane, it's a whole set from No.4 to No.7 with half sizes in between. But there's more. A lot more in fact as each plane is designed to accept a 40, 45 or 55° frog. Lee Valley will also produce custom angle frogs for any angle in between 40-65° in 1/2° increments, for a nominal surcharge. Frog options are a significant component of the programme and there are also a selection of different style handles that are sized to fit. The concept is clever. It might even be a stroke of genius given how particular the modern day woodworker can be about his tools. Pic-n-mix is back on the high street and I think you're going to love it. Robin Lee says: "We had to do something different especially as we have been promoting the benefits of bevel ups for years."



An early set of Bevel Downs with the choice of front knobs

Design process

- Around the same table are a group of gentlemen all with a vested interest in the project. I sense one of them has invested more than a little something of himself in this project and he looks worried. Maybe he's just plain cool, I don't know, but he needn't be worried. There isn't a single person on the design team with a professional background in woodworking, which goes some way to explaining why Veritas boys turn out products that don't always look like woodworking tools. They come to each project without any preconceived notion of what a plane should look like or how it 'should' perform. These parameters are established through a series of investigative procedures and

feedback from various parties. Each step requires evaluation from an open forum that includes the president, the director of R&D, Rick Blaiklock and the technical team behind the prototyping. Working as part of a team is one of the hardest things a creative person can do. It's hard not to take a bad critique personally but the discussion is light-hearted and almost matter of fact to the point of formality. Perhaps that's not surprising as this team is very close and well rehearsed. Veritas repeatedly develop new tools and have influenced the woodworking scene more than any other manufacturer in recent years. This approach is the cornerstone of the Veritas principle where reproducing

versions of old tools is not an option. Economy of scale surely helps but with it comes the added pressure of fulfilling orders when products are in demand. The Veritas shooting plane was launched in 2013. It was an instant success and caught the company by surprise. Stocks soon ran out in the UK and customers were forced to wait or buy direct from Canada. It's not something Lee Valley want to repeat so a large percentage of production has been turned over to the new line of planes. Remember this isn't just one plane: it has three standard and custom angle frog options, two blade types – 01, PM-V11 – three front knob options and six rear tote options.



Too cool for school; these are the faces behind the tools



Rough castings of the Veritas shooting plane having the edges knocked off before heading off for machining



All planes are assembled by hand in-house where checks can be made on quality at every stage of the process

Full commitment



One of the test jigs used in the development of Veritas' PMV-11-D



When a Veritas blade is lapped flat, anything you do to that surface afterwards makes this machine a waste of time. Don't do it



A set of caramelised maple tapers for the bevel down programme awaiting finishing

As we venture out into the Veritas manufacturing plant everyone we come into contact with is clearly excited about the project. At every workstation it seems is a pile of bevel down components. That's what the project is referred to as in-house. I start talking to the director of manufacturing about precision and tolerances and some of the quality control systems they have in operation at the factory. He's confident their products are the best they can be and from what I've seen so should you. He came to Veritas from a career at Boeing and lets slip that the

tolerances used in-house at Veritas are finer than those typically used in aviation. It was good of him to point that out. His commute home was a short drive down the road; mine was another seven hours in the air.

The Lee Valley distribution centre is about a 10-minute drive from the main HQ and manufacturing centre. Site manager, Dave Shaw pointed out very quickly that "It's not a warehouse. A warehouse is where things get stored. This is all about distribution. We don't want things to be sitting around taking up space. We've developed a system where

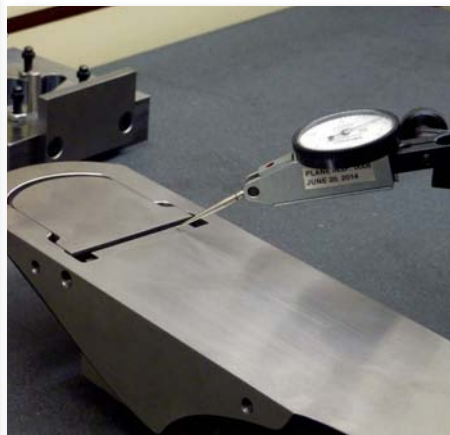
we can access items that get turned around quickly." It seems that the key here is communication and being able to respond to the demands of the business in an instant. It's not the most glamorous job in the company but the Lee Valley ethos is like a stick of rock with quality of service running from end to end. That kind of company culture is hard to cultivate. If I didn't know better I'd say there was a kind of Stepford Wives thing going on here. The belief and commitment is total.



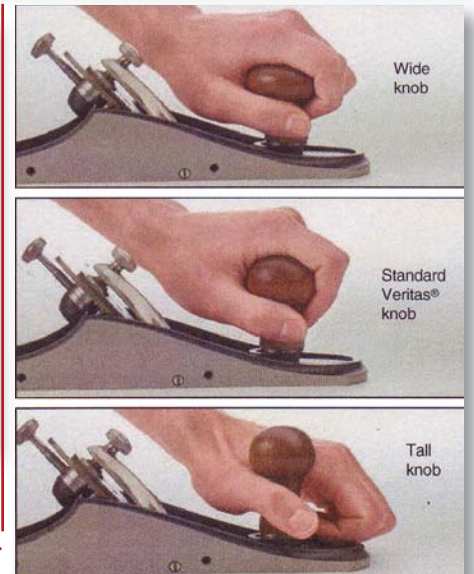
A partly assembled tray of No. 4 1/2 bevel downs with the paperwork that will stay with the tool until it's packaged for distribution



Back stage at the order process plant



A No. 4 1/2 bevel down is randomly selected from a batch to check tolerances



A selection of knobs and tote options are available

Remember the day

The first Lee Valley store to open was the one in Ottawa in 1978. There's a system in place the like I haven't seen for years: you walk in, you browse, you see something you'd like to buy and you fill out a form attached to a clipboard and take it to a sales person. To be honest, the last bit rarely happens as you'll probably be greeted by a member of staff before you get this far. The member of staff will then nip out the back and reappear with the goods. It's old fashioned and it's personal and it works! The only thing missing are the brown coats.

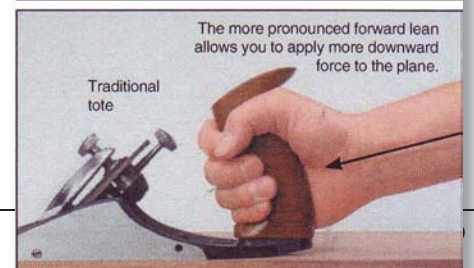
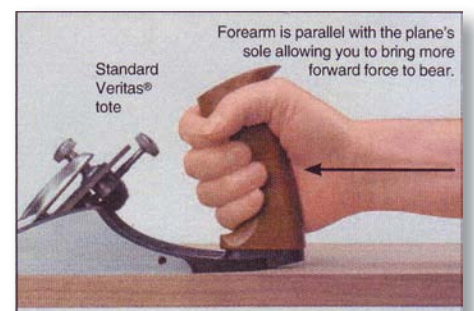
The last stop on our tour is to drop into a group training session fronted by Vic Tesolin to train the small army of technicians that will roll out the new planes in store. Purpose-

made stands, with the measuring equipment, will be installed in each store so customers can live the 'Build-a-Bear' experience and leave with a custom-built plane from a series of off-the-peg options. For tool buffs, this is history in the making every bit as significant as Norris' 1930 patent and Henry Disston's first D8. If you were there at midday on 13th September, 2014 you were part of it. For more information about the new Veritas bevel downs, see the *F&C* blog on The Woodworkers Institute website:

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Making the Ker Chair – with Stephen Hogbin

Stephen Hogbin takes us through the necessary steps for completing his latest piece – the Ker Chair. We also find out more about this woodturner and the unique techniques that he uses

For a woodturner, the Ker Chair is simple to make. Depending on the skill level there is only one challenging detail; this is a particular joint that resembles two golf balls joined together. Making that feels like joining two thin-shelled eggs.

The chair uses three different turnings to make two front legs, two back legs and one back rail. This simple design evolved from many years working as a woodturner. It represents four decades of working with turned forms, cut up, rearranged and glued together. Fragmenting and revising turned forms have made functional, decorative, technical and structural works. This is a dialect in the language of woodturning, the 1,000-year-old technique, that has been used structurally in architecture, functionally in furniture and decoratively in sculpture. These aspects of turning are incorporated in the Ker Chair functionally and decoratively in the structure. So this approach to turning is seen as the essential elements when arranged or when forming a sentence of turning.

STEPHEN HOGBIN



About the author: Stephen lives in Ontario and is a world renowned woodturner who is known for his groundbreaking techniques. He exhibits his work in the USA and beyond. Primarily a studio artist with an inclusive and multi discipline approach, he is also an occasional curator and author. Last year he

received the Queen Elizabeth II Diamond Jubilee Medal and more recently has released a new book: *Hogbin on Woodturning*.

Email: stephen.hogbin@gmail.com

Web: www.stephenhogbin.com

Drawings

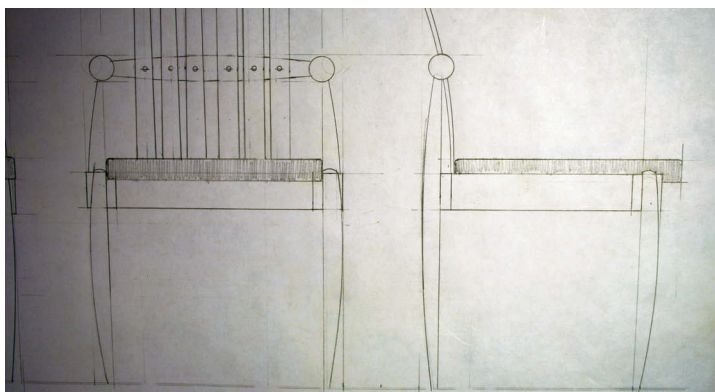
The design for the chair – of which I was to make a set – is based on the design of the client's dining table. The structure of the leg frame has a harvest table appearance and the table top is a totally wonderful piece of solid wood from West Africa. An elegant structure was the challenge to express. Ash (*Fraxinus americana L.*) was a regionally appropriate wood for the chair structure. The back of a dining chair is more important than the front. The chair should be visually interesting with a means to pull it back to enable sitting. To sit at a dining table the chair is approached from the back. The user of the chair pulls out the chair looking down at the back and across the table to the front of the chair he or she faces. The measured drawing shows a side and front view of the chair. This was the first drawing after the initial sketch and establishes the proportions, height and width of seat. The back has six slats in the drawing which I reduced to four after the first prototype chair.



1 The design for the chair is based on the design of the client's dining table



2 The back of a dining chair is more important than the front



3 Side view and front view of the chair

Turned elements

Fundamental to the design of the chair is the cross-halving seat frame. Importantly the legs are made from four blanks turned together to create four legs. The quarter of a turning fits snugly into the seat frame. It is a direct design solution and simple to make with modern glues.

The legs are made from four turning blanks which are 38mm square. The length is determined by the front and back legs. When cutting the blanks I had to make sure that there was extra wood for clamping them together. I also had to pre-sand the inside of the four blanks. The turnings are more difficult to finish when they are in their quarters. The four blanks are put together using a small amount of glue just on the ends and they are then clamped together using crescent fillers in a band clamp. The band clamp stays on while turning the legs. That little amount of glue keeps alignment when the chisel catches and prevents the four pieces from changing their position.

The front legs and back legs are a different length in an armless chair. An armed chair will use the same turning, but that's for another article. Laid out on the bench are two back legs, two front legs and the back rail which I will get to later. The sphere turned on the top of the back leg and the ends of the back rail should be the same size or as close as I can get it. The green tape



4 Fundamental to the design of the chair is the cross-halving seat

you can see here determines where the leg and seat frame meet and this protects the wood from glue runs. The blocks resting on the inside of the leg support the seat frame while gluing it all together for the prototype. Alternatively as shown in step 11, using a box for production of many chairs is a preferred support. The box should not be a perfect fit. Using some filler blocks, it is easier to take apart by sliding out a thinner block.



5 The legs are made from four turning blanks which are 38mm square



6 The front legs and back legs are a different length in an armless chair



7 Legs are paired in order to match the grain

Turned elements – *cont'd*

Legs are paired in order to match the grain. Front legs are shaped on the top using a disc sander on the lathe, followed by coarse file finishing with a mill file.

Here you can see the front leg detail of the chair which shows the leg projecting above the seat frame and the final positioning of the upholstery.



8 Here you can see the front leg detail of the chair

Cross-halving seat frame

The seat frame has a corner block and it is a good idea to glue fix that in place before gluing on the leg. The triangular block is pre-drilled to take a wood screw, which helps to hold on the upholstered seat. The seat frame is relatively easy to make. It is essential the frame is square or the legs of the chair will splay at odd angles. The cross-halving joint will not automatically align, so be sure to check all angles with a set square.



9 The seat frame has a corner block and it is a good idea to glue fix that in place before gluing on the leg

Back rail



11 I mark out exactly where the sphere will go on the back rail



12 The pencil line at the peak of the sphere is retained even after sanding the finished rail



13 I then mark out where the back rail of the chair is cut

The next step is to mark out exactly where the sphere will go on the back rail. I did this on a board making a template for copying to the many turnings. The space between the chair legs is most critical and comes at the centre of the sphere.

The pencil line at the peak of the sphere is retained even after sanding the finished rail. The square block on the end of the turning is critical to keep and it's better if it's a bit bigger than shown. I was being stingy with materials when I first cut the blanks. The length of the board demanded a somewhat shorter length. While there was a saving on materials it took longer to fiddle

with the making. I then mark out where the back rail of the chair is cut. The pencil line running the length of the turning is on the centre but a quarter of the sphere will also be removed. The rail is set up in a jig to hold the turning. I decided to do the first one without the jig but when making many chairs it is easier to be consistent.

As you can see from the photo opposite, green tape secures the back rail into the jig and this is where I appreciated having the square block on the end of the turning. The turning cannot rotate as it is passed through the bandsaw. The bandsaw table was set at 7°.

Fixing the seat frame



10 The gluing of the legs and seat frame is set up on a baseboard

The gluing of the legs and seat frame is set up on a baseboard. Four 'L' shaped blocks are positioned directly under the seat frame. The seat frame sits on a box with a couple of boards to get the seat frame to the correct height. Each leg is glued on one at a time. I pull the four legs tight to the 'L' blanks on the baseboard using a band clamp then use a spacer of wood at the top of the legs exactly the same width as the seat frame and of the legs at the base. This holds everything square and true until the glue has set. I used a PVA 'extend glue' to lengthen drying time and left it all in the jig until the next day.



14 Green tape secures the back rail into the jig and this is where I appreciated having the square block on the end of the turning

► Back rail – *cont'd*

Cleaning up the bandsawn surface using files and drum sanding is again made easier with the square blocks on the end to stop it from rocking. If I had them just a bit bigger I would not have had to clamp on the sphere.

I do a dry fit first and make sure the back slat fits flat to the angle of the bandsaw cut. This is where the angle is critical and it took a couple of tries to get the angle just right. If I am making a set of chairs, I make sure this is correct before cutting all of the rails.

Here, Tom, my assistant, is doing the final shaping of the 'sphere'. He was mainly using files but he used the disc grinder on a few of them. There is inevitable variations when turning the spheres by hand and making a jig to turn them accurately would guarantee a more accurate golf ball connection. Frankly, I prefer the oval shaped look and this is closer to the 'super egg'. It feels good in the hands when moving the chair around.



15 Cleaning up the bandsawn surface using files and drum sanding



16 I do a dry fit first and make sure the back slat fits flat to the angle of the bandsaw cut



17 Here, Tom, my assistant, is doing the final shaping of the 'sphere'

Curved back slats

How many back slats would you like? After looking at six to make a finer flexible back I decided to go with four. It is bold and was in character with the table and the proportions of the seat frame.

The jig is made from spruce (*Picea abies*) or any other similarly suitable available softwood and two boards are glued and screwed together to get 76mm thickness. The curve was plotted and cut on the bandsaw. A little cleanup of the surface with files was done and then a heavy coat of wax so that spilt glue would not stick. It is possible to have a straight back slat but the seat frame would need to be modified with additional thickness of the back rail. The curve does make a comfortable chair. The lamination was made from milling 25 × 76mm ash into full 3mm

strips. The first veneer is thinner so I could get four out of a board. These will become the four face veneers of the slats. The grain is different but clearly a shared pattern. I had three veneers to a slat but ideally I would go with four veneers per slat and the finished slat should be 13-16mm thick. The outside veneers were pre-sanded, making it much easier to finish the curved form later.

The lamination is glued with a two-part epoxy and left in the clamps. After the glue hardened, I placed them in a separate jig in a stack and left them for a full week allowing the glue to fully set and the wood fibres to get used to the new conditions. My workshop is cool with fluctuating temperatures in the middle of winter and this therefore needs to be taken into consideration.



18 The jig is made from spruce or available softwood and two boards are glued and screwed together to get 76mm thickness

Slat joinery

I then trim the slat and cut accurately to length and the 76mm width is finished to 70mm. The connection to the seat frame uses a biscuit. This could also be done with a mortise and tenon or dowels. Tom set up a jig at the right height to cut the biscuits in the bottom of the slat. The 70mm width slat will take a No.20 biscuit. I mark out on the frame where the slot will be cut for the biscuit and plunge away on the four pencil marks. A board was clamped to the seat frame to keep the cutter from moving.



19 I then trim the slat and cut accurately to length and the 76mm width is finished to 70mm



20 The slats are glued on and the clamps left overnight

Slat joinery – cont'd

The slats are glued on and the clamps left overnight. The strip at the top of the chair is a jig to separate the slats and can be removed as soon as the clamps are in place. The three strips resting on the seat also act as spacers and should be removed as they may have some squeeze out glue on them.

The rail at the top of the chair is glued on later to the back of the chair. I debated long on whether it should be a turning or kept square. The square won out as it better reflects the seat frame structure and brings consistency to the design. It also offers a carrying handle to pull the chair back from the table before sitting. One day I may try it with a turning.



21 The rail at the top of the chair is glued on later to the back of the chair

Gluing & mechanical fixing



22 I chose to make a joint that will never come apart using No.10 screws



23 The counter-bored screw gets a wood cap or plug



24 The back slats get fixed with a No.6 screw and then capped or plugged with wood



25 Dowelling the super egg is not essential but if the glue should fail the dowel still holds it together

Engineers I have met prefer a mechanical fixing to back up the glue. It often feels like overkill but who knows in a hundred years which will prevent failure? I really like the debate about whether it is the joint or the leg that will break first when stressed. I have elected to make a joint that will never come apart. To add the No.10 screws I needed to pre-drill. It is a long screw and a snug fit so I added some wax to the screw. The counter-

bored screw gets a wood cap or plug. The back slats get fixed with a No.6 screw and then capped or plugged with wood. I like to make it a feature; when sitting the back does not feel the protrusions.

Dowelling the super egg is not essential but if the glue should fail the dowel still holds it together. Rather than using a steel connection in this chair, it will rely on a 8mm hard maple (*Acer campestre*) dowel.

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Finishing & finishes

The chair is hand sanded, keeping most of the edges square as they will get a chamfer later. Our best attempts at getting the slats to the correct length failed along the line somewhere. Sanding of the top on the oscillating sander became the final action to correct before final application of the stain.

This is my first time applying a stain to make a light wood look like a dark wood. I have frequently ebonised but I have never before made ash look like walnut (*Juglans regia*). It is an anachronism for me but I wanted to see how it would work out in this situation. We needed a high contrast when the chamfer was put on the edges.

Two coats of aniline dyes were used and then an oil-based urethane. I have been trying to get off oil-based paint and usually manage except when it comes to using the aniline dyes. Water-based dye and a water-based top coat have a nasty way of merging.



27 This is my first time applying a stain to make a light wood look like a dark wood

Next, it is the chamfer treatment for the edges before the final coat of urethane.

The chamfer worked out rather well although ash has a coarse grain and a tiny chamfer is not always perfect. There is a difficult balance in this context. It is a country chair, light and elegant but also sturdy for the teenage sons of the client.

The chamfer took off the corners and it also looks good. Also, as the chair ages the inevitable wear and tear on the corners won't be so noticeable. How furniture matures is critical to maintaining its aesthetic and economic value. The chamfer is removed with the tiny hand plane and a very sharp chisel. I had to be wary of the grain direction as it is easy to rip up an edge. I applied three final finishing coats of clear on the chair back and levelled the legs on a flat surface. Felt pads are glued on with a waterproof PVA.



28 The chamfer took off the corners and it also has the benefit of looking good



26 The chair is hand sanded, keeping most of the edges square as they will get a chamfer later



29 The chamfer is removed with the tiny hand plane and a very sharp chisel

Variations on the theme of connections

The connections of the leg to rail or arm to leg has many variations. The back rail to the leg connection is quite large at just under 76mm. The form is flowing and sculptural with lots of hand carving. At this scale, if the wood is not absolutely dry there will be wood movement and the joint will be emphasised.

How to join turned elements has been a major interest over the years. Most furniture is about connections and transitions. Bringing awareness of the structural issues delights the maker and many others interested in how things go together. Structure can be quite decorative and does not need to be utterly mechanical. In the same chair the quarter sphere has been painted with a coloured texture. *F&C*



30 Here is the completed Ker Chair



31 The connections of the leg to rail or arm to leg has many variations



32 How to join turned elements has been a major interest over the years

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Our correspondent...

Over the years *F&C* has acquired readers from all four points on the compass and since going digital in 2013, that trend has increased. You can find us anywhere in the world with a link to the web.

As the content of the magazine is a true reflection of our readership, we've decided to introduce a new style of article that will take us on a workshop tour of the globe.

Starting us off is a luthier from Bristol who has recently been on something of a personal journey himself and discovered cabinetwork to be the link with his past. Ladies and gentlemen, our global correspondent this month is Kieran Binnie.



hand tool heritage

Fresh from Christopher Schwarz's recent Anarchist's Tool Chest course, Kieran Binnie talks about the importance of hand tool heritage and passing down skills

For many people, conflating woodwork with ruminations on mortality will seem like an unusual thought process, but for me, the idea of heritage in hand tool work, transcending generations, has always been a pivotal idea.

My own woodworking journey started in 2007 when I enrolled on a course at the Totnes School of Guitar Making, and until recently, my workshop activity has been focused on building acoustic guitars. This summer, I attended the inaugural course run by the New English Workshop. Under the tutelage of Chris Schwarz we spent five days

building *The Anarchist's Tool Chest* from his book of the same name. Now, you may be familiar with this iconic project, but if not: in short, *The Anarchist's Tool Chest* is concerned with building an 18th-century traditional English tool chest. Because what better way to start learning traditional joinery than a five-day dovetail death march using southern yellow pine (*Pinus palustris*) – an evil material which has no place in the workshop! Needless to say, it wasn't easy!

What the chest represents

I blogged daily from the course – see www.overthewireless.wordpress.com – but what I want to reflect on here is why this class was of immense personal significance for me. This is not just because of building the chest, but also because of what the chest represents. Let me explain.

In *The Anarchist's Tool Chest*, Schwarz uses the chest as a literary conceit, a way of discussing the tools necessary to build furniture and the skills necessary to use them. The chest is a way of restricting your tool wishlist to the 50 essential tools and is a statement of intent for craftsmen and craftswomen who seek to lead an ethical and

sustainable life by building long-lasting furniture and so escaping the spiral of buying disposable, chipboard, furniture-shaped objects. I read the book some five years after the course in Totnes and it is hard to overemphasise the impact the book had on my thinking. The half articulated ideas, which had been slowly fermenting since the course in Totnes, finally coalesced, with Schwarz filling in the gaps and signposting where the path could lead. This was an approach that meshed with my own embryonic thoughts on woodworking, a 'Eureka!' moment when everything started to make sense – very much like the time I first took a wafer-thin shaving with my trusty Clifton No.5.

Personal significance

There is another reason why The Anarchist's Tool Chest was loaded with personal significance; it was the last project I discussed with my grandfather. Although I had not done any real woodwork before the course in Totnes, it was something I had grown up around thanks to my maternal grandfather, who built everything from wardrobes to toys in his shed – an Aladdin's cave of tools, many of which had belonged to his grandfather. So it was inevitable that when I took the luthier course in 2007, we bonded over woodwork, constantly discussing new projects, techniques, and yes, tools. In 2011, as he lay dying in hospital, we continued to talk about woodwork and he enthusiastically examined pictures of The Anarchist's Tool Chest I'd taken in for him and talked about timber selection and the construction techniques necessary for this project. So yes, this was a hugely important course, even before you consider that it was taught by Chris Schwarz himself – who is a huge hero of mine.



Wonderful shavings!



PHOTOGRAPHS BY KIERAN BUNNIE



Using hand tools to cut the dovetails



A selection of part-made tool chests

Course conclusions

The course was amazing: five days of solid woodwork, learning from an expert teacher, with 17 other passionate woodworkers. Camaraderie, banter and chopping dovetails. But the learning experience did not stop when we all packed our tools up on the Friday evening – and not just because I still have my first frame and panel lid to build before the chest can be painted. Because, you see, manhandling the tool chest onto the bench in my workshop got me thinking again, and I couldn't help but wonder whether there was a punchline to the course beyond having improved my dovetailing. And then it struck me. I knew exactly what I had attended the course to achieve. Building the chest is a way of representing the ideas I talked about at the start of this article; keeping the craft of hand tool work alive, of empowering woodworkers to build and to lead ethical lives without the crutch of cheap disposable furniture – or musical instruments. And yes, it will also keep my tools safe. This chest, which still connects me to my grandfather, is the means by which I can teach my children, and grandchildren, all of these things. The Anarchist's Tool Chest is essentially bombproof; built from southern yellow pine, dovetailed at the corners, with further dovetails on the upper and lower skirts, it should last for 100 years at the very least.

So here's my suggestion for the course's final and most important lesson: this chest will continue to represent these important ideas long after I've returned to the soil, and – with all probability – long after my grandchildren are gone too. The enormity and staggering simplicity of this is beautiful. *F&C*

Rebels without a cordless

Warwickshire College get three firsts this summer as they join up with New English Workshop to host a unique teaching experience. Madelyn McAlpine meets the main protagonists behind the UK's new workshop revolution



The hottest ticket in town this summer for any woodworker looking to improve their furniture making skills had to be a place at the bench of hand tool guru, Christopher Schwarz, as he made his UK teaching debut at Warwickshire College as part of the New English Workshop (NEW). Right now there's no bigger attraction than Mr Schwarz when it comes to debating the pros and cons of woodworking with hand tools and his dedication to this aspect of the craft is as infectious as it is refreshing.

Five-day intensive course

18 furniture enthusiasts arrived at Warwickshire College on Monday 21 July for the five-day intensive woodwork course led by woodworker and author of *The Anarchist's Tool Chest* Christopher Schwarz. This unique course focuses on getting back to the basics. Chris explains: "The idea behind *The Anarchist's Tool Chest* is to remind woodworkers that you don't

need thousands of tools to create beautiful furniture. The book – and this course – guide you through building a proper chest for your toolkit that follows ancient rules long forgotten or ignored."

Chris has been teaching the craft all over the world for years but this is the first time he has come to the UK. He explains: "I was approached by Paul Mayon from NEW about delivering a course in the UK. He said that he had found the perfect location and that he truly believed it would be a great success so I jumped at the chance. It's not that I've not wanted to teach in the UK; I've just never been asked. It's the 20th time I've taught the course, but it's the first time in the UK. It's ironic that you've got an American coming over here to explain how to build a very English chest, but it's great to be here. I've taught the course in the US, Germany, Australia and Canada – of course I had to change the name in Canada – anarchy doesn't sit so well with them! I'm really



PHOTOGRAPH BY RACHEL SPIVEY

Christopher Schwarz

impressed with the calibre of the students and Jamie [Ward] has been great to work with". Talking about the course itself, Chris said the following: "It's a lot of work for just one week but I know we will do it because these guys are very enthusiastic and it's passion that really counts."

Fantastic facilities

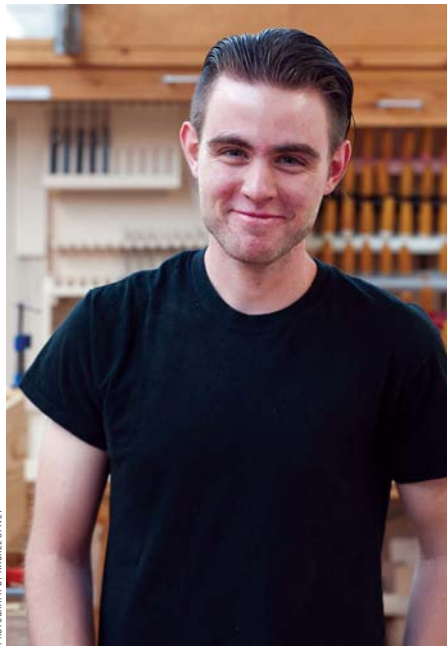
Warwickshire College has been running furniture crafts courses at its Leamington centre for over 60 years and has a track record in producing talented furniture makers. Students have won City and Guilds Medals for Excellence in each of the last five years. Jamie Ward, Lecturer at Warwickshire College, explains how these brand new short courses came about: "I had contacted Derek Jones in his capacity as Editor of *Furniture & Cabinetmaking* to see about getting publicity for the end of year show. When he called me back he asked if I was interested in hosting a short course on behalf of NEW. I thought this was a great opportunity to show the wider woodwork community what fantastic facilities we have here at the College."

Derek explains why he thought Warwickshire College would be the ideal location for the course. "I remember looking at the end of year projects that Jamie's students had created and thinking: 'these can't be the right ones; they've got to be degree level students' – the quality was incredible! This was at the same time that we'd approached Chris about doing a summer school for the New English Workshop. Initially it was all done on a hand shake, which is rare these days. Enthusiasm is a great motivator. We didn't struggle to fill spaces at all – it sold out within three weeks." The students are aged between 17-71 and range from professional woodworkers to complete beginners. One student didn't own any of his own tools and had never done any kind of woodworking before coming on the course.

New English Workshop

NEW is a partnership of professionals and enthusiasts who are passionate about preserving the craft of fine furniture making, so with their first ever teaching event, it wasn't hard to figure out who might be the perfect partner. Co-founder of NEW Paul Mayon said: "Chris has a long history of promoting the use of hand tools and his laid back, no-nonsense approach to delivering that message was the right choice."

Chris' book *The Anarchist's Tool Chest* has caught the imagination of woodworkers on nearly every continent, if the students lucky enough to get a place on one of the courses was anything to go by. 37 students in total worked to produce one of the two signature pieces that are synonymous with the author: a full-size English tool chest and a smaller Dutch tool chest. The first course to make the larger chest saw the students getting straight into cutting dovetails within a couple of hours of entering the workshop. It was a baptism of fire in more ways than one as temperatures in the workshop reached 30°C in the afternoons. Some of the students had never cut a joint in solid timber before, let alone a dovetail. In fact some had never built on this scale before either so the process for some was a revelation to see a live project come together so quickly. Derek went on to say: "Standing back and seeing 18 craftsmen all chopping and sawing away at the same task at the same time gave



PHOTOGRAPH BY RACHEL SPINNEY

New F&C contributor Marco Terenzi flew over from Detroit to take part in the course



If the first set of dovetails you cut are this good and in yellow pine, everything else will be child's play



Watch and learn. A short demonstration on cutting dovetails and then back to work



The class of 2014 Dutch chest students at the end of a gruelling two-day course

a sense of what it must have been like in a 19th-century joiner's shop. It's seriously hard work and very loud when they all get going." "The irony isn't completely lost on us by the way," says Paul "we've flown an American across the Atlantic to teach students how to build a classic English tool chest."

Teaching methods

Chris is a very hands-on teacher, what he does you do too, so at the same time the students were building their chests, Chris was building an identical one of his own. The larger of the two finished pieces is to be filled with tools donated by vendors and artisan tool makers from the UK and the USA. The chest and its contents are to be sold at the next available international tool auction by David Stanley Tool Auctions in Leicester.

"We've got no idea what it will raise. There are some very special tools in there and a few one-offs, so we have high hopes," says Paul. The entire proceeds of the sale will be returned to Warwickshire College for use in funding the furniture making courses. The contents alone are worth around £6,000 so the team is hoping to raise a good amount of money.

As part of the initiative NEW also made sure there were five places across the courses for students currently enrolled at the college to attend for free. Another place was sponsored by local furniture maker Will Self for 17-year-old first year student Daniel Chinn.

There were no absolute beginners on the courses although ability and experience were not a prerequisite for taking part, neither was owning a full tool kit. Derek went on to say:



Alex Primmer from Classic Hand Tools was one of the first students to sign up to the course

"That's one of the reasons we were drawn to Warwickshire. The facilities here are excellent and course leader Jamie Ward has worked really hard over the years to maintain the workshop in such great order."

Travis Winslow, an RAF Test and Evaluation Leader from Coningsby in Lincolnshire spoke about his experience. "With my job, I feel that furniture is my way of being creative and I've been making



Students on the shorter Dutch course were equally under pressure to complete their projects

furniture for my home for a while now. I'm self-taught – this is the first real class I've been to, but I've really enjoyed the experience. There are no big lectures – a five minute group huddle with Chris demonstrating and then it's straight into doing it yourself. The course has been intense, but we've all met up to socialise in the evening which has been great as well."

For Sue Johnson, a technology teacher



For some students a full size ATC was the first large scale project they'd attempted



Hand tools only. Ed Sutton cuts the sloping sides for his Dutch chest

from Lincolnshire, it was also the first time she'd done a course in furniture, though her background is in guitar-making. "It's been intense, sometimes even gruelling, but I've learnt a lot."

Dutch tool chest workshop

Three students got the chance to take part in the second course, a shorter two-day course to build the Dutch tool chest – a smaller chest built for easy transportation for the craftsman to carry his tools between jobs.

Holly Smith, 19, from Leamington has just completed Level 1 Furniture Crafts and is returning to study for the Level 2 qualification in September. She said, "The course has been really valuable – there have been lots of hints and tips which I'll be able to use on my course. Little things I have learned will make a big difference – such as techniques for using the saw."

Tom Golding, 25, from Lichfield is about to go into the second year of his Furniture Making course. He said, "I'm already a joiner but want to go on to do more furniture – so this has been really useful helping me to get ahead of the game and learn new skills. It's been intense, but enjoyable – I'd definitely recommend it."

All the students commented on how not using machinery meant they could refresh their basic hand skills and develop their techniques.

Daniel Chinn, 17, won his place on the course after designing a new interactive installation for the visitor centre at Coombe Country Park near Coventry. Daniel said,



"Remember, this is wood and it hates you"

"It's been really good and I've learned lots of new things which will really help me going forwards. Not using the machines has been a challenge, but getting back to basics has been really good."

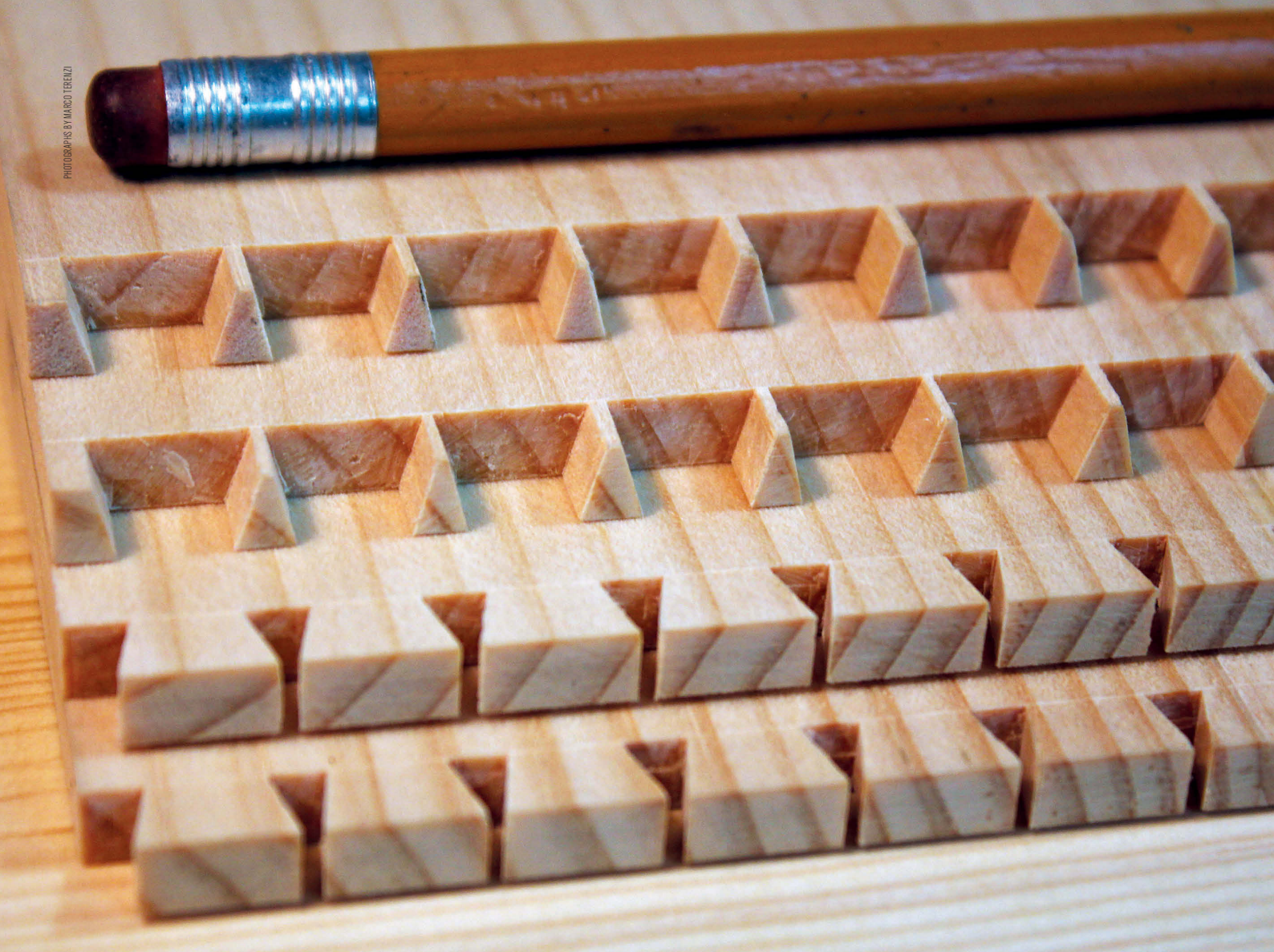
The courses have been so successful that NEW has already confirmed the return of Christopher Schwarz next summer, with the addition of renowned US craftsman Peter Follansbee. See opposite for more details. **F&C**

Contacts

Warwickshire College
– www.warwickshire.ac.uk

New English Workshop
– www.newenglishworkshop.co.uk

Lost Art Press – www.lostartpress.com



Miniature dovetail process

In the miniature world little details make a big difference. Marco Terenzi explains his technique for producing perfect joints at 1/4 scale

For the most part, executing dovetails on a small scale is similar to full scale. The layout principles and order of operations is the same. The fundamental differences are the size of the material, the tools and the overall delicate handling on the pieces. I recommend many practice pieces in whatever material you choose to use. Practice the layout, sawing straight as well as chopping the end grain. Practising on scraps will ensure no surprises when it comes to the actual project.

Miniature material selection



The process for preparing stock for jointing in miniature is similar to that of full scale work...



... using a shooting board and suitable shooting plane



Identifying the components is best done with labels rather than risking damaging the surface of a delicate material, such as white pine



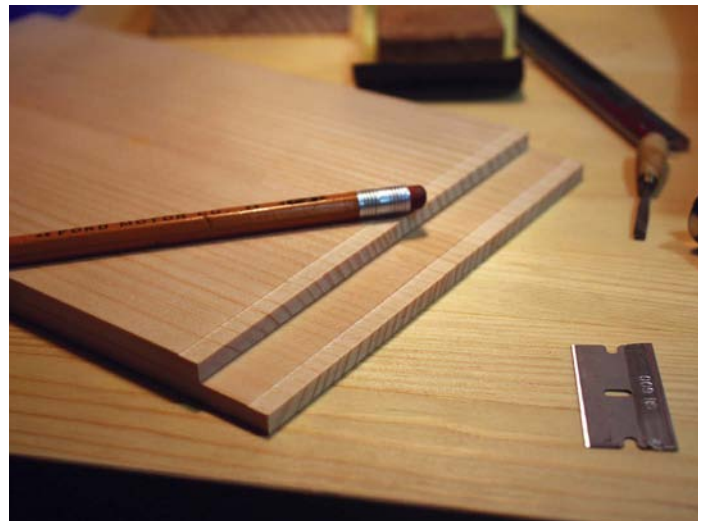
Check for square and correct dimension at every opportunity



Gang cutting components is a good way of introducing consistency



If you use a milling machine, a sacrificial clean carrier will protect the components



Scoring the line first with a scalpel will help prevent any furring of the edges

The rebate joint on the tool chest dovetails helps to align the tail board with the pin board for an accurate transfer of lines. This is not necessary, but greatly helps keep everything square. On a full-size piece, this is usually a 1 or 2mm deep rebate cut, slightly wider than the material being used. In scale, this cut had to be made .015in deep. I chose to do this on

a milling machine because it is a good way to remove such a small amount of material. A small shoulder plane can be used but as a first operation, the mill was a cleaner, more accurate, option. A wood jig was made to protect the delicate pine (*Pinus spp.*) from any unwanted metal chips or oil that may be on the mill table. The pieces were then taped square to the

wood jig table using double-sided tape. Using a razor blade, the shoulder of the rebate joint was marked out. It is important that the blade is sharp and slits the wood. If the joint is slit properly, then it will mill cleanly with zero tear-out past the score line. The milling was done with a 10mm carbide end mill in one pass at the full .015in depth.

< Layout

All layout on the miniatures is done with a bevel-edge utility razor blade. I use these blades because they are surgically sharp. They finely slit the grain leaving nothing 'pressed down'. The lines can sometimes be hard to see – often the lighting has to be adjusted to highlight them. Razor lines are used over pencils for a number of reasons:

the first being the thickness of a pencil line. When working micro scale, a pencil line is huge. Even if you use a mechanical pencil with a sharpened point, it is difficult to gauge on it where the cut should be made. With a razor line, there is no question of where the cut should be. The final cleanup cut with a chisel should be done by letting the

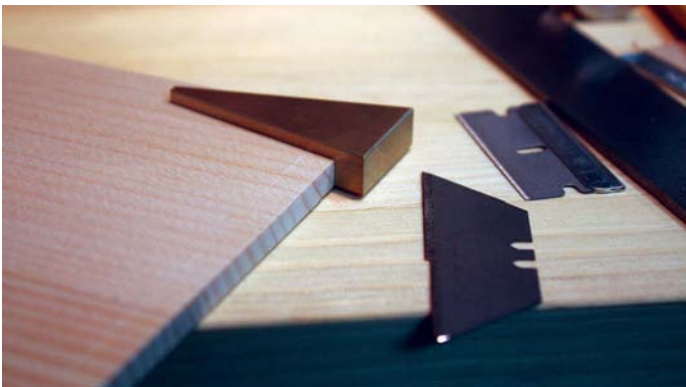
chisel fall into the score line. This ensures accuracy and consistency across the whole project. Pencils on thin soft pieces also cause the wood to be pressed down, even with featherweight pressure. These pressed in lines are difficult or impossible to remove without going past tolerance. I choose to do my tails before my pins.

Layout of the tails

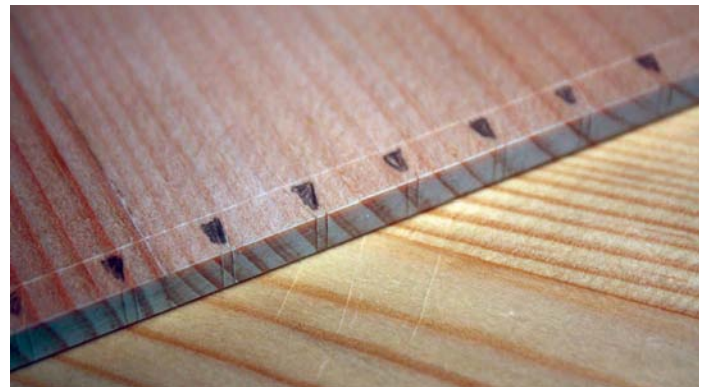
Since the wood is too soft to use dividers without damaging the material, a different method had to be created to layout the tails. I decided to lay them out on paper using a full-scale drawing of the dovetails. I then placed the paper template over my

material and, using a razor blade, made a tiny score to mark the location of each tail. I then used my small brass dovetail marker to transfer the lines around to all three sides of the joint. I mark every side as an extra precaution; this helps to

prevent tear-out. The white pine is very good and cuts clean if your tools are sharp. Harder woods, such as maple (*Acer saccharum*) and hickory (*Carya spp.*), however, are more prone to corner chips.



Using a dovetail marking gauge will add consistency to your joints

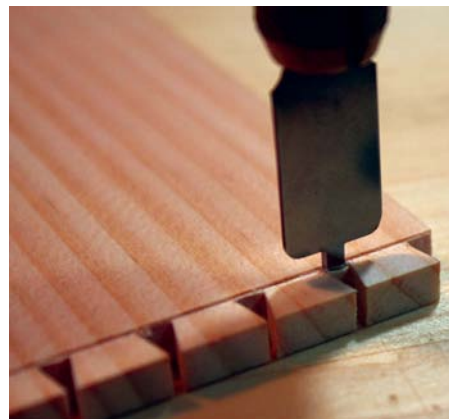


Just like with the full-scale joint, highlight the waste before removing it

Cutting



Cut shy of the baseline using a fine-bladed saw



Using a modified chisel helps to clean the joint down to the baseline



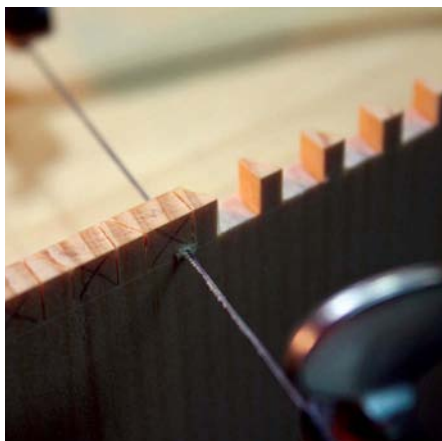
After transferring the outline of the pins, complete the tails and mark the waste

Cutting was done using a .01 kerf fine-tooth razor saw, which are often called hobby or craft saws. The actual sawing method is exactly the same as that used for producing full-size dovetails. Start the cut on the far corner and work the blade down the line as you cut. For the tail board, missing your marks is not a big deal because the pins are marked off of them. Most important is keeping the cuts square to the faces. Once all the sides have been cut, a fretsaw with a very fine jeweller's blade is used to remove the waste. Work the blade down the saw line until it hits the bottom. In one motion, make a

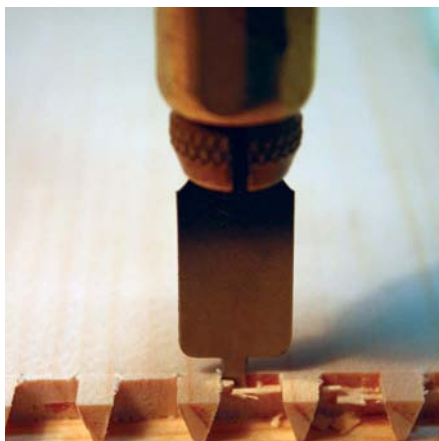
single stroke as you pull up slightly and turn the saw frame 90°; this orientates the blade parallel with the baseline. In a couple of strokes, the waste should fall out. The closer you get to the baseline, the less trim work you will have, although if you go over, it does cause a problem. To play it safe, it is wise to check your cut in relation to the baseline during the sawing. It is easy to get overly confident when sawing out the waste, but treat every cut like it is your first and you will be sure to stay clear of any problems.

Using the modified chisel blades, the tail boards are cleaned up to the baseline,

just like full scale. Keep splitting the waste amount until there is not enough to split, then it is time to drop the chisel into the razor line and make the final cut. This is done halfway through on both sides. If you chop all the way through on one side, you may find that it will chip out the bottom. It is very important to chop carefully as more time becomes invested into a piece, starting over becomes more of a chore. If you missed your lines on the slopes, don't worry at this stage, as the pin board will be cut to fit. Once the tail boards are cut and trimmed it is time to transfer lines to the pin board.

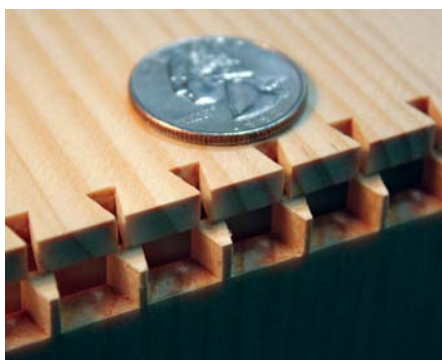


A fine jeweller's saw can be used with great effect to cut close to the baseline



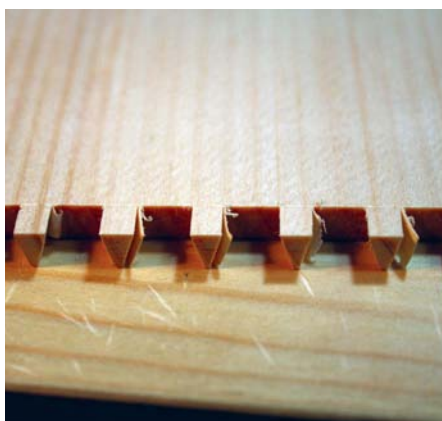
Trim back exactly as you would for full-scale joints

Layout



Test fit the joint carefully; this will avoid any burring of the pins or splintering of the edges

Using double-sided tape, stick the pin board to the edge of the bench with the top a hair above the bench. Now take the tail board and line it up on the pin board using the rebate cut as a reference for square. A square or straightedge helps to line up the edges of the two pieces flush with one another. Place a weight on the tail board to hold it down, keeping it from easily slipping when marking. Using a thin knife, mark the tails onto the pin boards. A series of very light slits works better than one good mark because of the blade's tendency to follow grain. Once the pins have been marked, remove the tail board and extend the lines to the remaining sides of the pins

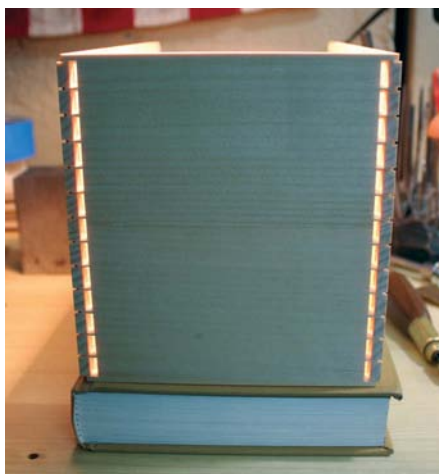


A scalpel or blade from a craft knife can be used to fine-tune the fit

with a razor blade and dovetail square.

Cut the pin boards in the same fashion as the tails, although it is wise to play it safe and cut slightly shy of the razor lines. You can always remove more material, but putting it back on is not so easy. Once the majority of the waste is knocked out with the saws, it's time to trim with the chisels. On the pin board you have to cut right to your razor lines. This part takes time and patience. Again, your mind has to be on the big picture outcome of what you are doing. It is easy to get frustrated if you think about "how much is left" or a "tiny mistake" too much.

Once you think they are satisfactory, bring the tail board in for a trial fit. It is important to not press it in too hard, because it may damage all the fragile pins on the way out. If it doesn't go in, look closely at where it is binding and start removing material accordingly. The compression rule does not work much with the miniature dovetails. If you ram the two pieces together, it may just crack or distort terribly. Work the sides of the pins or tails down carefully until the two boards slip together without too much resistance. When glue is applied the wood swells a bit, so if it's a hair loose, there is a good chance it will swell closed.



Don't try too many dry runs as this can soften the edges and create gaps in the joints

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Gluing up the dovetails

The glue up is usually the most stressful part of any project. With proper precautions taken and the proper order of operations in place, the glue up should go smoothly.

It is important to do a dry fit of your pieces with clamps on. Figure out which clamps would work best, how much pressure to apply and how quick they are to put on.

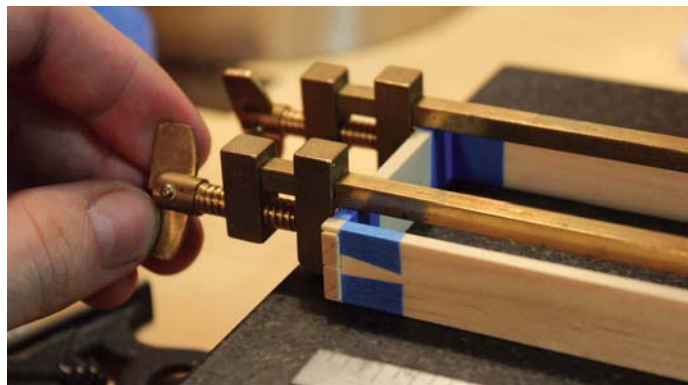
I like to use rubber bands for miniature casework, but sometimes they are not strong enough, or large enough. I also use small brass bar clamps made for modelling, which are available from Lee Valley. I double tape leather pads to the jaws, which ensures that they will not mark the wood.

I use blue painter's tape as a precaution

against glue squeeze out. The inside of the tool chest was to be unfinished in the end result, so there was zero room for squeeze out on the interior of the carcass. The painter's tape is very gentle and will not pull up the grain if removed carefully. The tape was put around the entire joint, both the tail and pin boards.



A low-tac masking tape will protect the surfaces from any excess glue



Modelling clamps make great sash clamps when you need them

Glue

I usually use hide glue – Titebond – for a number of reasons. I find that the water-based PVA glue tends to swell up the miniature pieces quite a bit. It also has a very short working time, which can be tragic on a small scale glue up. If you think about it, a very small amount of glue dries very fast. So if you have 13 tails to glue up, it will start to dry before you can even get to all of them. This is the reason I use the hide glue. More open time is what you are after. The hide glue also has its own tricky ways. It is thick right out of the bottle and can also be very stringy when applying tiny amounts with a little applicator. I combat this problem by warming the glue bottle up in warm water. If it is too hot, the glue becomes very thin and soaks in the end grain too fast. If it is not warm enough, it is a stringy mess.

I take the warmed up glue bottle and squeeze out enough to fill a bottle cap. The whole cap full does not get used, but it acts as a greater thermal mass to stay warm longer. Using a metal pointed rod, I dip it in the glue and apply a dot/dab onto each space between the pins. You do not want

squeeze out on the inside – think about this and decide how much glue to apply. Once each space has its dot of glue, I use a small thin strip of wood to carefully smear the dab up the sides of the pins. No glue is put on the tail board.

I assemble as I glue and once all the joints are glued up, swiftly clamp it up exactly how it was practised. Let the glue dry its recommended amount of time, then carefully peel up the masking tape and inspect the glue up. Trimming of the joint flush is done with the same style thin chisel blades, which I use without a handle. They are placed flat on the carcass and eased towards the part to be trimmed. It is a very gentle sweeping motion. If there is more than a blade's thickness to remove, it is wise to use sandpaper to knock it down a bit before attempting the blade: it can cause serious problems if too much is taken with the blade in one motion. 600 grit sandpaper stuck with double-sided sticky tape to a cork block can be used to do the final smoothing of the joint. It helps to even out the texture from the sheared end grain to the sanded faces. *F&C*

Little details



It's not just the overall proportions of the piece that will make your miniature convincing. The interior fitments or other details have to be in scale as well. The sides of the tills inside the chest are dovetailed just as they were on the original. This means that you may have to produce a lot of modified tools to cope with the work.



Using fine abrasive stuck to a cork block with double-sided tape will allow you to clean up the interior faces



Don't apply glue straight from the pot – you can't control it and it will dispense much more than you need

Next month

Marco turns his attention to fitting out the interior of the ATC and creating the hardware for the project.

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Metal machine plate makes it a convenient place to store the Tormek AngleMaster, which has magnetic feet.



With the sleeves for the Universal Support now being cast in the zinc top, the precision has been improved significantly.

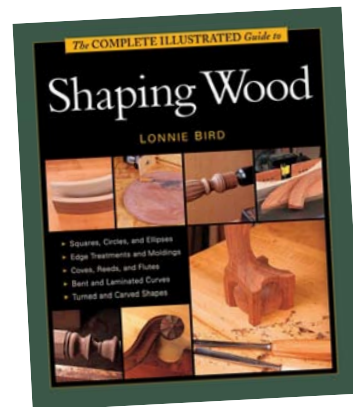


An integrated handle makes the machine easy to place and move when necessary.

* Compared to Tormek T-3

Creating carved elements

Lonnie Bird explains how to design and carve embellishments for furniture



The Complete Illustrated Guide to Shaping Wood

This is an extract from *The Complete Illustrated Guide to Shaping Wood* by Lonnie Bird, which is published by The Taunton Press. It can be purchased from GMC Publications for the fantastic price of just £14 (plus P&P). For more details of this offer, see our workshop library on pages 74-75



Carved elements have been used since the beginning of time as furniture embellishment. Despite the seeming complexity of the carvings, anyone with hand-tool skills can learn to carve simple shells, fans and rosettes – all of which can add interest to a piece of furniture. Why add carving to your repertoire of woodworking skills? Obviously, if your goal is making reproduction furniture of certain periods, especially

the 18th century, you know that carvings are an essential element in many pieces. But there's another reason: carving allows you a way to express yourself in a way that few other aspects of woodworking do. Even if you're attempting to reproduce a historical carving, yours will never be exactly the same as the original. A carving is made one patient cut at a time. And each cut is made by the individual maker's hand. Why not yours?



This chair back features a carved shell and carved volutes

Designing carvings

Successful carving begins with a good design. You don't have to be an artist to design carvings. Beautifully designed carvings have been used to decorate furniture for centuries. Get some good books that show carved details and study them for inspiration. Remember that it's important to blend the carving with the furniture design on which it will be used. An ornate 18th-century motif will look out of place

on a modern piece. Proportion is also essential. If the carved ornament is disproportionate with the scale of the overall piece, it will distract from rather than add to the piece.

Once you've chosen the motif you want to carve and determined its proportions, the next step is to create a drawing. It's difficult to overemphasise the importance of the drawing; it provides an essential road map for carving.

Create the drawing full size and add the details. This means not simply the outlines of the carving and its highest points. Because carving is three-dimensional, you'll need to consider the play of light on the parts. Indicate the highs and lows with shading. Once you're satisfied with your sketch, transfer it to your workpiece to use as a guide when you begin to cut.

Secure the work

If the carved surface is not secure you run the risk of two things: ruining your carving or, worse, cutting yourself. The way you secure your carving is determined by the work itself. Directly carved work may be secured by clamping the part on which it is carved. However, many carvings are glued or fastened to a backup board. Feet, such as the trifold

and ball and claw, can be secured in a pipe clamp. Sometimes, as in the case of the flame finial, it's necessary to devise a special jig to clamp the work without damaging it. Applied carvings, such as the shell, can be glued to a backup board for carving. Make sure to clamp the backup board to a sturdy surface such as a workbench.



You can use clamps mounted in a vice to hold complex shaped carvings

Keep the tools sharp

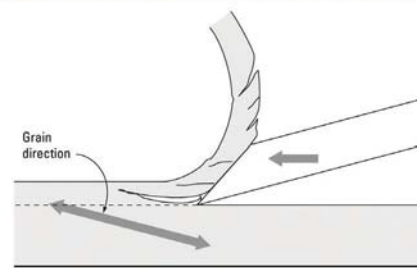
Your best work begins with sharp tools. There's nothing more frustrating than having a gouge slip because it's not sharp enough to bite into the wood. Invest in a set of good slipstones for honing the many shapes of carving tools. A small number of tapered slipstones can service many shapes. Keep a leather strop nearby for quick touch-ups, and hone the tools often, especially when carving fine details.



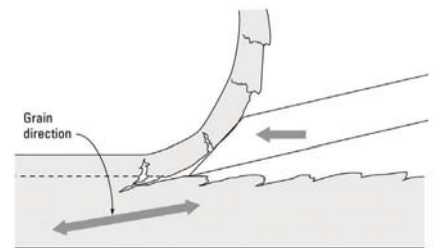
An assortment of slipstones in various shapes is useful for keeping your carving tools sharp

Go with the grain

CUT WITH OR ACROSS THE GRAIN



Cutting with the grain leaves the surface smooth.



Cutting against the grain leaves the surface torn and rough.

Always cut with or across the grain

Always cut with the grain or across it, never against it. When you cut against the grain, you risk splintering and tearing out the wood instead of cutting it. Sometimes it's hard to determine the grain direction, especially in multilayered, complex carvings. Try taking a

light cut. If the tool is digging in instead of cutting cleanly, turn around. Cutting across the grain is a good method for initial shaping and quickly removing excess stock. When possible, the final surface should be created by cutting with the grain.

Use the tools to your advantage

Gouges come in various widths and sweeps to create the curves. Although many carvings can be accomplished with a dozen or so tools, it's necessary to have a good assortment. Don't cramp your style by attempting to carve complex designs with two or three gouges. On the other

hand don't go out and buy a set of tools just to have a selection. Start with a few basic shapes and learn to use each well. You can always add individual carving tools for a given project. Before you begin to cut, study the project to determine which tools you'll need to accomplish the carving.



Furniture carvings can be created with just a small assortment of tools

Keep the details crisp

The best carvings show the clean definition achieved by cutting the wood rather than abrading it. A rasp may help remove large amounts of material, but when you come to the final surface, pick up your carving tools. Avoid excessive sanding. Use

light sanding to smooth the carving, not shape it. Coarse abrasive and excessive sanding only spoil the crisp edges and details that you worked so hard to create. And don't try to remove all of the tool marks; they're the true sign of hand carved work.

The hazards of sandpaper

When carving, use sandpaper as little as possible. If you sand between stages, the abrasive grit will lodge in the pores of the wood, quickly dulling your tools later in the carving process.

Think twice about sanding the finished product. It's easy to quickly and inadvertently sand away the crisp details that you created with the carving tools. If you must sand, be careful and use a fine abrasive – 240 grit – a minimal amount.

► Carving a shell

The first step is to draw and proportion the shell that you would like to carve. All carvings, including shells, can be varied in size and proportion to fit with the design of the furniture to which they're applied. The shell shown here – **see step 1** – is a five-lobe example that I designed for a Pennsylvania armchair – **see step 2**.

When you're satisfied with the drawing, make several photocopies of it. Next, glue a copy of the drawing to the stock for the shell – **see step 3**. After carving, this shell will be glued to the front seat rail of the chair; it's important that the grain in the shell runs from side to side to coincide with the grain in the seat rail.

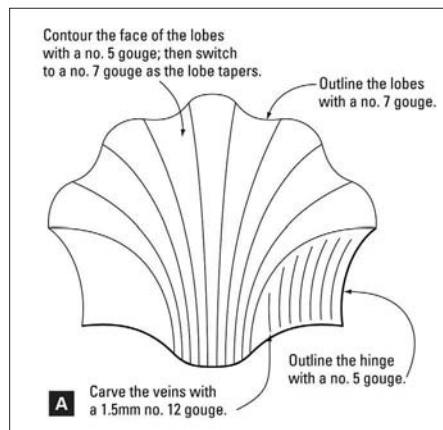
The next step is to select the gouges for carving. The sweep, or curvature, of the gouge should closely follow the outline that you sketched earlier. For the lobes on this shell, use a No. 7, 14mm gouge – **see step 4**. For the area around the hinge, use a No. 5, 25mm gouge. Although the narrow gouge could be used for both, the wide gouge is more efficient and easily yields smooth, uninterrupted curves around the hinge.

The next step is to bandsaw the outline of the shell to remove the excess stock. It's important to saw approximately 1.5mm from the line – **see step 5** – because the final outline of the shell is created with carving tools.

Next, begin incising the perimeter of the shell with gouges – **see step 6**. Be aware that the grain at the top centre lobe has a tendency to split off. To avoid this problem, position the corner of the gouge beyond the stock when incising the concave areas that flank the centre lobe – **see step 7**. This will prevent the centre lobe from splitting – **see step 8**. The entire outline will later be inverted to become the base of the shell so it's not necessary to incise beyond 4.5mm deep – **see step 9**.

When incising the outline of the shell, it's important to keep the cuts vertical. To achieve this, you'll need to angle the gouge away from the work for the concave cuts. This will compensate for the bevel on the edge of the tool. Also, concentrate on keeping the cuts interconnected and flowing uninterrupted around the shell.

When you're satisfied with the outline of the shell – **see step 10** – you're ready to move on. The next step is to glue it face down to a short length of inexpensive stock. Afterward, the clamps are positioned on the scrap stock to give you full access to the shell for carving. Don't use a lot of glue; the shell must be pried up after carving. Besides, a small amount of glue is all that's necessary to hold it firmly – **see step 11**. Clamp the shell to the board and allow the glue to thoroughly dry – **see step 12**. The next stage of the process is to contour the face of the shell. But first mark the high point of the contour. The point is centred left to right and slightly below centre from top to bottom – **see step 13**. Now select a No. 2, 25mm gouge for shaping the contour. The goal of this process is to produce sweeping curves from left to



Step 1 drawing for carving a shell



Step 2 a five-lobe example of a shell



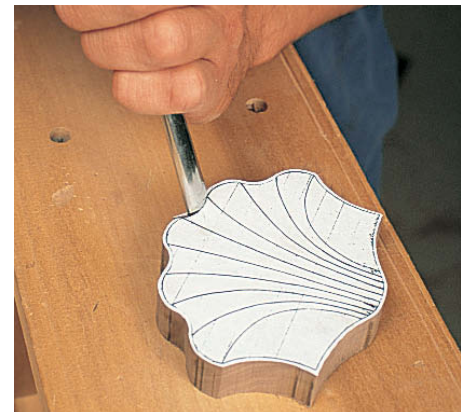
Step 3 glue a copy of the drawing to the stock for the shell



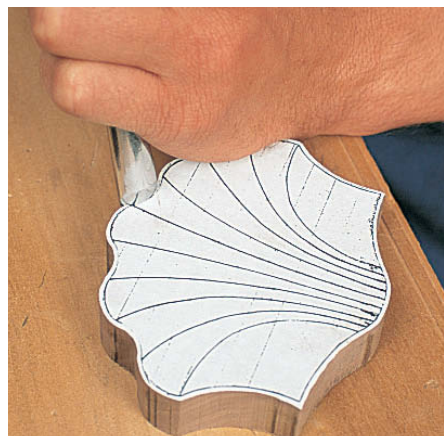
Step 4 for the lobes on this shell, use a No. 7, 14mm gouge



Step 5 saw approximately 1.5mm from the line because the final outline of the shell is created with carving tools



Step 6 begin incising the perimeter of the shell with gouges



Step 7 position the corner of the gouge beyond the stock when incising the concave areas that flank the centre lobe...



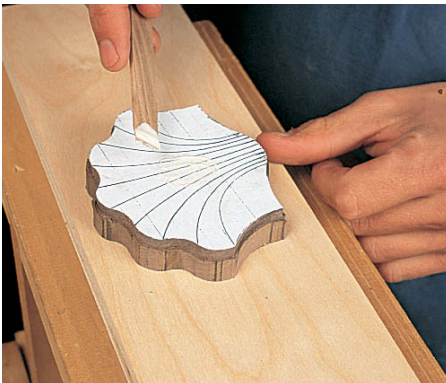
Step 8 ... this will prevent the centre lobe from splitting



Step 9 the entire outline will later be inverted to become the base of the shell



Step 10 when you're satisfied with the outline of the shell, you're ready to move on



Step 11 a small amount of glue is all that's necessary to hold the shell firmly



Step 12 clamp the shell to the board and allow the glue to thoroughly dry



Step 13 mark the high point of the contour before you contour the face of the shell



Step 14 use a No. 2, 25mm gouge to shape the contour, producing sweeping curves from left to right



Step 15 after carving the contour, you can remove any remaining facets with a smooth file



Step 16 a small amount of glue is all that's necessary to hold the shell firmly

right and top to bottom – **see step 14.**

After paring the face of the shell, the only original surface remaining will be the high point that you marked earlier. Watch the grain direction and cut with the grain or across; you'll want to produce clean shavings, not splinters. Carve the surface down to the 4.5mm perimeter that you incised in the first step.

After carving the contour, you can remove any remaining facets with a smooth file – **see step 15.** Avoid using sandpaper though – the abrasive grit will settle in the pores of the wood and quickly dull your tools later in the process. The next step is to draw the lobes as a guide for carving. Using your original drawing as a guide, locate the points of the lobes with dividers – **see step 16.** Then divide the base of the shell into equal spaces – **see step 17.** Next, connect the points by sketching smooth, flowing curves – **see step 18.** To achieve visual balance in the carving, spacing is important. Examine the curves closely and, if necessary, redraw any that need improvement.

Now you're ready for the next stage of carving. The first step in this stage is to incise the hinge area. Hold a No. 5, 25mm gouge nearly vertical to create a steep wall – **see step 19** – and carve this area gradually until you reach the layout line – **see step 20.** Finish the inside corner with a No. 7, 6mm gouge. Take long, sweeping cuts to blend the wall with the hinge area – **see step 21.**

The next step is to outline the curves on the face of the shell with a V-gouge. For greatest control, take several light cuts and progressively deepen the V. Also, as you carve the V's, watch the spacing and flow of the curves; if necessary, make corrections as you deepen the cuts – **see step 22.** Next, carve the convex lobes. Start by contouring the ends of the lobes with a No. 5, 12mm gouge – **see step 23.** As the lobe tapers back, the curvature becomes tighter, so you'll need to switch to a No. 7, 10mm gouge; then a No. 7, 6mm gouge. Gradually, as the lobe reaches the apex of the shell, switch to a No. 7, 4mm gouge. Finally, the curve on the face of the lobe diminishes.

Next, carve the concave rays between the lobes – **see step 24.** Beginning with a No. 7, 10mm gouge, work back gradually; then switch to a No. 7, 6mm and, finally, a No. 7, 4mm gouge. As you carve the rays and lobes, use the gouges to blend the curves – **see step 25.** During the entire process, stop periodically and hone the gouges; sharpness is the key to accuracy and control. The final step is to carve the veins into the surface of the hinge. These tiny U-shaped grooves break up the flat surface to add more interesting detail. Starting at the outer edge, sketch each vein with a pencil – **see step 26.** Keep the spacing uniform and follow the curve at the edge of the hinge. Next, use a No. 11, 1.5mm gouge to carve the veins – **see step 27.** The completed carving should be crisp, flowing and full of visual details – **see step 28.** You can smooth the carving lightly with 240 grit sandpaper to blend the facets. But be careful not to spoil the sharp details.



Step 17 ... you can then divide the base of the shell into equal spaces



Step 18 connect the points by sketching smooth, flowing curves



Step 19 to incise the hinge area, hold a No. 5, 25mm gouge nearly vertical to create a steep wall...



Step 20 ... and carve this area gradually until you reach the layout line



Step 21 take long, sweeping cuts to blend the wall with the hinge area



Step 22 as you carve the Vs, watch the spacing and flow of the curves



Step 23 to carve the convex lobes, start by contouring the ends of the lobes with a No. 5, 12mm gouge



Step 24 carve the concave rays between the lobes



Step 25 ...as you carve the rays and lobes, use the gouges to blend the curves



Step 26 starting at the outer edge, sketch each vein with a pencil



Step 27 use a No. 11, 1.5mm gouge to carve the veins



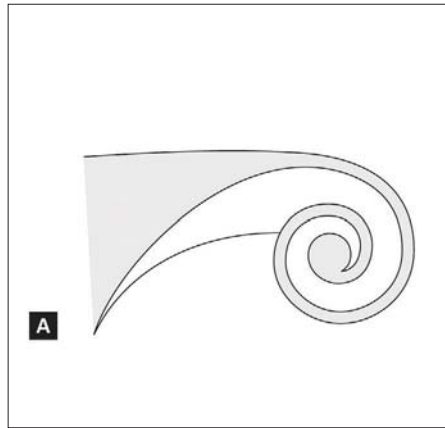
Step 28 the completed carving should be crisp, flowing and full of visual details

Carving a volute

A volute is a spiral – **see step 1**. It's used as embellishment on the ends of arms and the backs of chairs – among other areas – to create the appearance of a scroll. As the volute unwinds, the curve naturally broadens. This beautiful effect is easily created by using a series of gouges. Begin by drawing the volute. Although it would be easy if the volute fit within a mathematical framework, it seldom does. Instead, the volute must fit within the area of the workpiece on which it will be carved. For this example, I've connected volutes of two sizes to create a sample carving block.

Whether found on furniture or architecture, volutes are typically carved in pairs. As you might imagine, drawing accurate pairs of volutes can be time-consuming. So for ease of duplication, I prefer to make a plastic template. First draw the design on paper; then position a transparent plastic sheet over the drawing and incise the outline to form a template – **see step 2**. Next, trace the template onto the stock – **see step 3** – and begin carving – **see step 4**. Beginning with the centre hub, incise the outline of the volute with the same series of gouges that you used to incise the template – **see step 5**. As the curves become broader, use wider gouges with less sweep – **see step 6**. A typical series of cuts would begin with a No.7, progress to a No. 5 and end with a No.3 gouge. Incise the volute to a depth of 3mm.

Next, make a second series of cuts that intersect the first cut at a shallow angle – **see step 7**. Each time you make a cut, a small chip of wood should be released. This will have the effect of creating a raised spiral ridge – **see step 8**. After this procedure is followed around the entire spiral, a series of facets will remain. Use a No. 3 gouge and take sweeping cuts around the volute to remove the facets – **see step 9**. *F&C*



Step 1 a volute is a spiral



Step 2 draw the design on paper, then position a transparent plastic sheet over the drawing



Step 3 trace the template onto the stock...



Step 4 ... and begin carving



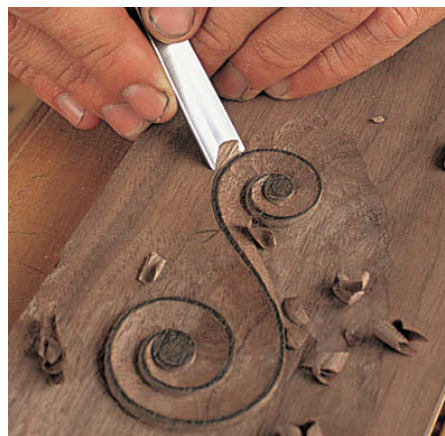
Step 5 beginning with the centre hub, incise the outline of the volute with the same series of gouges that you used to incise the template



Step 6 as the curves become broader, use wider gouges with less sweep



Step 7 make a second series of cuts that intersect the first cut at a shallow angle



Step 8 each time you make a cut, a small chip of wood should be released to create a raised spiral ridge



Step 9 use a No.3 gouge and take sweeping cuts around the volute to remove the facets

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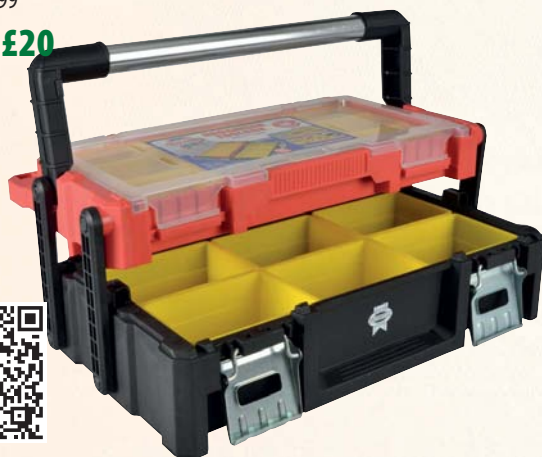


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Router table joinery part 3

Reproduce the joint that was once the height of industrial sophistication with a clever little jig and your router table

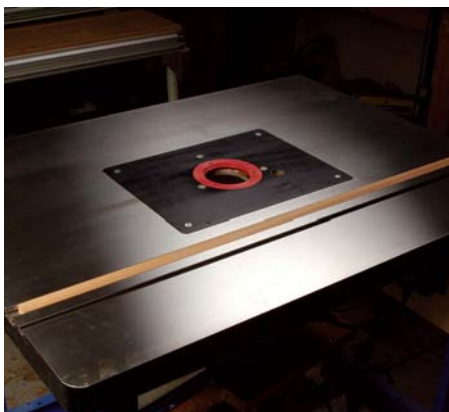
This is a jig that I've been wanting to make for a long time now. I seem to have acquired a number of small individual tool boxes that all feature finger joints. It's not a joint that succumbs easily to hand tools, although, obviously, it can be done. The origins of the joint lie in the early industrialisation of timber-made goods and would have been used as a direct replacement for dovetails perhaps.

The cutting of this joint is made simple by the clever use of a jig and that's what we are going to focus on this month. Like any jig intended for repeat use, it pays to build them well and with an eye on their future use. So, select your material wisely – I've gone for birch-faced ply but a moisture resistant MDF will serve you just as well. That's the green one by the way.

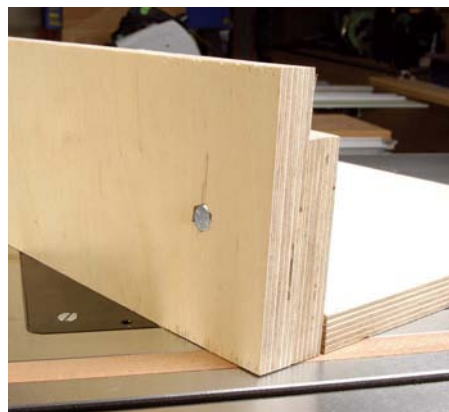


PHOTOGRAPHS BY GIANCERRE JONES

Time for T



Start with a clear table and a rod planed to fit one of the two T-slots



Make an L-shaped T-slide with a second adjustable faceplate



Use easily adjustable nuts to secure the faceplate in place

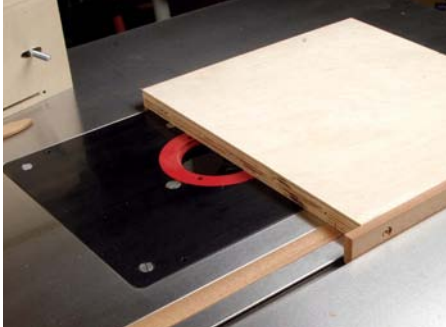
You don't need a fence for this operation so remove it from your table and drop the router below the surface. On our table there are two slots and you need to start by repairing a section of timber to fit as well as you can in the wider of the two slots. A little bit of friction is good. Make the rod

as long as the table or thereabouts. Now make up an L-shaped bracket that will stretch from the sliding rod to roughly the same distance on the other side of the centre hole. Make sure to offset any screws a safe distance from the centre of the router. Add a second face to your bracket – we're

going to call it a T-slide from here on – and secure it with c/s bolts or hex heads if you want. Elongate the holes in the back of the T-slide so the front face has some lateral movement. Fasten it with some wing nuts if you have them or just plain nuts if you don't.

Tight fit

As the T-slots are a long way from the cutter and this jig needs a good level of accuracy to work, it makes sense to use both slots to stiffen things up. Prepare a second rod and attach it to the edge of the base on the T-slide. Note I've disassembled my T-slide for this. No glue at this stage, please. Position the long rod in the middle of the table and the base of the T-slide on top



Set the baseplate to fit onto the guide rod

with the second of the rods engaged in its slot. Slide it up to the middle of the table so it crosses roughly where the cutter will project. Using a drill bit smaller than the size of the screws you will use to fasten things together, drill holes through the base of the T-slide and into the rod beneath. Re-drill the rod with larger holes, countersink them and attach to the base.



Attach the two pieces together

Tool size

This jig is made to work with the chosen cutter and will not work with a different one. In fact, you may well find that two 6mm cutters are not the same size at all. OK, we're talking somewhere in the range of 0.01-0.04mm so not a lot but in the worse case, doubled up it equates to sloppy fitting finger joints.

If you think finger jointing is likely to be a regular occurrence, it may be worth at least designating a single cutter for this purpose or buying a couple of spares at the same time.

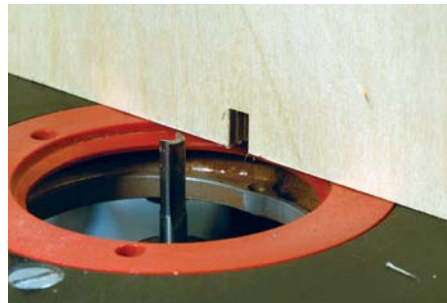
Sizing things up

Having selected your cutter, fit it to the router and extend it to just higher than the thickness of the stock you're using. This 'just higher' dimension is the amount of material you will have to plane off to flush the outside of the box when it's finished, so you decide how much this will be.



Set the adjustable faceplate to one side

Now set the sliding face of the T-slide to one side, roughly twice the diameter of the cutter. It just happens to be flush with the edge of my baseboard but yours may be different. Tighten the setting and make a cut into the front of the face to the depth of the material – 18mm in this case.



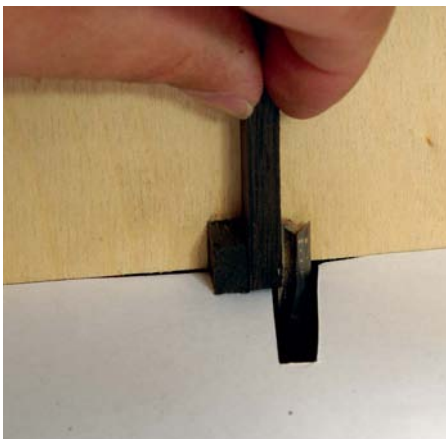
Make a cut into faceplate the full depth of the material

Make a peg to fit tightly into the channel you have just machined. This little peg will be the register for each pass when you start machining the joint. Use a hard-wearing material and make it a good fit. Make it longer than you need because the offcut will be used later.



Fix the peg in place with glue, dowel or screw

Final setup



Trim the peg and use the offcut to set the jig up for use



Make a trial pass into the faceplate to half the diameter of the cutter

Cut the peg back so that what's left sticking out of the face is equal to about the thickness of the stock. It's not crucial by any means. This next bit is, though.

You need to adjust the face by exactly the same size as the cutter so use the offcut to gauge the distance from the edge of the cutter and the side of the peg. Retighten the wing nuts at the back and make a single pass to about half the diameter of the cutter into the front of the face on the T-slide. Gently soften the top edges of the peg with a fine abrasive. *F&G*

Next month...

We'll look at setting out the joints for a box with a base and lid and complete the job

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Technical Specification:

wheel diameter	600mm
throat	580mm
depth under guide	370mm
Blade width	10-35mm
motor power	2.2 kw 3.0 hp
table size	700 x 608 mm
table tilts	0-20 degrees
blade length	4470 mm
dust outlet	100mm
Shipping	230x860x2080mm

iTECH C300 Universal Woodworker 220v 1 phase



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The new C300 Universal Machine is the latest addition to the iTECH family. It has been specifically designed for the small professional workshop or home user. This industrially rated machine features a table saw and sliding table, planer, thicknesser and spindle moulder unit. The cast iron construction, accurate cross cut fence and superb build quality put this machine in a class of its own.

Features:

Panel saw sliding beam
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Cast iron tables
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3 x 2.0 hp class 1 motors

Technical specification:

PLANER:

Max planing capacity: 300 x 220mm
Length of tables: 1500mm
Cutter Block Dia : 70mm
Fence angle tilt: 90° 45°
No of knives: 3 300x20x3
Max Stock removal: 4 mm
Feed rate: 7 m/min

CIRCULAR SAW:

Blade tilt: 0° - 45°
Blade diameter: 250mm
Scoring Blade 90 mm
Max blade height 90°: 80mm
Sliding carriage: 1250 x 315 mm
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iTECH DC001S 1 Bag Dust Extractor is a ruggedly extractor is designed for small workshops. The industrial construction and quality finish sets it apart from others.

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Technical Specification:

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Motor power	2hp
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Technical Specification:

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Belt speed	1033m/min
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Platen tilting	0 - 90 degrees

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Six hand tool tricks for your workshop

Charles Mak reveals six helpful tricks for traditional woodworkers



A low-angle block plane used like a No.3 smoothing plane



PHOTOGRAPHS BY CHARLES MAK

Every seasoned woodworker has a bag of 'shop tricks' collected over the years that he or she can dip into or share with other fellow woodworkers. Whenever I get something done using some of my favourite traditional woodworking tricks, whether developed in my shop or learned from other woodworkers, the feeling is rewarding. So if your 'shop' is your hideaway where clever shortcuts are welcome, here are a few more ways to make it more productive and satisfying.

Two is better than one

A marking knife or gauge often gives more precise lines than a pencil. But for some tasks such as resawing, pencil lines are easier to see and follow. When I mark cutlines for resawing by hand, I borrow a bandsawing trick: I pencil not one line but two – they are parallel and about 1.5mm or the thickness of the blade apart. Not only is it clear where to place the saw teeth when you start – at the gap between the lines – it is also easier to follow and more accurate to saw with than trying to stay on one side of a single line. This trick, equally good for cutting curves with a coping or fretsaw, also eliminates any error of cutting on the wrong side of the line. Try it and you'll change the way you layout lines for resawing. ►



Sawing between two parallel lines gives better results

◀ Two-in-one block plane

'Should I get a standard block plane or a low-angle block plane?' is a common question. The answer I often hear, keeping a budget in mind, is to get a low-block plane if end grain work is involved; otherwise a standard block plane will suffice. My own advice sometimes raises some eyebrows: 'Get both – but pay only for the price of one, well almost'.

The key is to understand that the fundamental difference between the two types of block planes lies in their effective cutting angles: 45° for a standard block plane with a 20° bed and a 25° blade vs 37° for a low-angle plane with a 12° bed. So, why not get a low-angle block plane with an extra blade, sharpen its bevel to 33° and use it in a low-angle block plane, turning the plane into a standard block plane.

As a bonus, I can fit a knob and tote to my low-angle block plane and use it much like a No.3 smoothing plane for small-scale work. Economy aside, this trick of packing three planes into one is great for my small shop where storage space for tools, power or hand, is scarce.



Increase the cutting angle of a low-angle block plane to 45° with a 33° blade

Shooting with or without a shooting board

To many woodworkers' shooting boards are synonymous with square ends. Shooting boards, however, also work well on long grain edges, even for narrow or small pieces. Rob Porcaro, an American furniture maker, cleverly uses an auxiliary board with a shooting board to work on a stock's edge.

What if a workpiece is too big for your shooting board? You can still shoot even without a shooting board. First, raise the workpiece above a benchtop with scraps of equal thickness underneath and clamp the workpiece down on the bench. Place a plane with a straight blade on its side and plane the long edge with the grain. As long as you work with a flat surface and a properly set plane, you will get a true edge.



Trimming narrow, long edges with a shooting board

Walking the chisel

How good are you at placing a chisel vertically on a cutline, say, for a hinge mortise, quickly and precisely? Try this: draw a straight line and use a chisel to make overlapping chopping cuts along the line. Did you find yourself struggling with placing the chisel edge on the line or taking too much time to do so? If your answer is yes, you are not alone, and you probably haven't heard about 'walking' the chisel – a term American craftsman Frank Klausz uses for the technique.

Holding a chisel vertically by its handle, which many woodworkers do, gives you little control of the tool for delicate cuts. For the best control, hold the blade between the thumb and three fingers and rest the palm and little finger on the workpiece. Angle the chisel up slightly and place one corner of the chisel on the cutline, then tip the edge down on the line. Make a few practice cuts and you will soon be able to 'walk' any chisel.



The little finger rests with the palm on the work, steadying both the hand and the chisel



Place the corner of the chisel on the line and then roll the edge down, guillotine-fashion

The cross-cut mirror trick

When you're standing in front of a workpiece, it's not easy to tell if you're holding the blade perpendicular to the wood. Here, you can use the reflection characteristic of a saw blade to your advantage. Under the so-called 'mirror trick', you rest the saw on the edge of the workpiece and find the reflection of that same edge in the blade. Then tilt the blade from side to side till the edge seen in the reflection lines up with the actual edge of the workpiece. When it appears to run straight through the saw, you are square. I also sometimes darken the edges of a lighter wood to make them reflect better.



Tilt the saw blade side to side until the edges in the reflection line up straight with the actual edges

No tail vice? No problem



Thinner pieces will require a thinner batten



With the stock locked in the notch, you can plane across or towards the front of the stock

Some woodworkers consider a tail vice a necessity for their workbenches. Used with bench dogs, tail vices are very good at holding long stock flat on the bench surface. Well, it is not really a 'vice' if your workbench is not equipped with a tail vice, because you can use a batten trick in its place. Traditional tail vices, however, have their share of disadvantages such as sagging with use and wear. Richard Maguire, an English maker of workbenches, uses a notched batten with a holdfast to secure work on the bench. His method is quicker to set up than the slow winding of a tail vice.

The batten is simple and easy to make and use: cut out a 90° notch angled at about 45° on one end of a scrap of the desired thickness. Butt the front of the board near the middle against a bench dog and cradle the corner of the board in the notch. Cramp the batten down on the bench and the board is now securely locked. To see this primitive holding method in action, check out the demonstration video here: www.youtube.com/watch?v=WNrof3cd1cA. *F&C*

Charles Mak is a woodworking author, tipster and teacher. He takes advantage of both power and hand tools in his projects.

Email: thecanadianwoodworker@gmail.com

References

Mak, Charles, 12 Workholding Tricks You Should Know, *Furniture & Cabinetmaking*. No.205, May 2013: 45-47

Wearing, Robert. *Making Woodwork Aids & Devices*, revised edition. Sterling Publishing Co., Inc. 1985

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Precisa 4.0 - P-2
Professional Series



Precisa 3.0 - P-1
Workshop Series

Model	Product Group Series	Specification includes (as per quoted price)	HP 240v / 415v	Depth of cut & Length of stroke	Price Exc VAT Plus Carriage	Price Inc VAT Plus Carriage
Precisa 3.0 P-1	Workshop	Inc STC + TWE + TLE (see below for explanation)	3.5 / N/A	90 mm x 1400 mm	£1207.50	£1449.00
Precisa 4.0 P-1	Professional	Inc 1.4m STC + TLE (ditto)	3.5 / 5.2	87 mm x 800 mm	£1775.00	£2130.00
Precisa 4.0 P-2	Professional	Inc 1.4m STC + TWE + TLE (ditto)	3.5 / 5.2	87 mm x 800 mm	£1980.00	£2376.00
Precisa 6.0 P-1	Professional	Inc 2m STC + TLE (ditto)	4.0 / 6.5	110 mm x 1400 mm	£2416.67	£2900.00
Precisa 6.0 P-2	Professional	Inc 2m STC + TWE + TLE (ditto)	4.0 / 6.5	110 mm x 1400 mm	£2590.00	£3108.00
Precisa 6.0 VR P-1	Professional	Inc 2m STC + TWE + TLE + scorer (ditto)	4.0 / 6.5 + HP scorer	110 mm x 1400 mm	£2890.00	£3468.00

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

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

Adversity and triumph: the steely resolve of Henry Disston

Mark Harrell looks at the life and achievements of Henry Disston,
the man behind the long and fruitful Disston saw legacy



PHOTOGRAPH BY MARK HARRELL. UNLESS OTHERWISE STATED

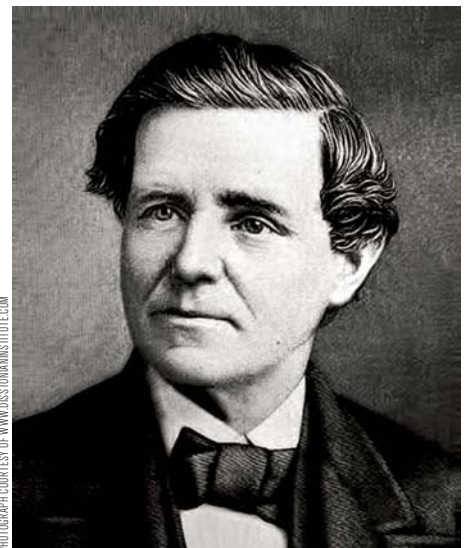
What was a young British boy of 14 from Derby made of as he and his sister watched their father convulse and die of a stroke not three days after their arrival in Philadelphia in 1833 to market a lace machine? Steel. Young Henry Disston – founder and patriarch of the famed Disston & Sons Keystone Saw Works – was made of steel far tougher than any alloy extant today. Henry Disston would go on to become one of America's wealthiest men, a prominent leader of the exploding industrial age and a capitalist visionary whose ruthlessness in business was matched only by his compassion and remarkable loyalty to the workforce he employed and protected.

Bright spark

Disston's father, Thomas, must have seen something special in his second oldest child, having selected Henry and his older sister

Marianna from his eight children for the 60-day voyage across the Atlantic. There were qualities apart from young Henry's natural mechanical ability, where talent stops and character begins. Perhaps it was the resolve in his steady blue eyes and the way his strong jaw and thick shock of dark brown hair evinced an air of determination. Henry's spirit conveyed resilience, even a ruthless fixation to prevail, his visage yet conveying the temperance of a restless and compassionate soul.

Some children mature early because they have no choice, and such was the lot of young Henry and Marianna. Taken in reluctantly by friends, Henry had to find work while Marianna was groomed for domestic service and expedited marriage. Lives had to get on back in 1833 – they were lived on a far more abbreviated basis than today's medical advances allow.



PHOTOGRAPH COURTESY OF WWW.DISSTONMUSEUM.COM

Henry Disston (1819–1878)

Discovering steel

Henry found work in a local saw shop – an enterprise owned by the Johnson brothers – a struggling firm beholden to British Sheffield steel because of the strong prejudice against tools made in America at the time. Henry matured into adulthood learning how to operate a fly press to cut teeth and coining them into a proper hammer-set; understanding how pitch, plate gauge and the hang of a handle worked in a harmony of efficiency to sever wood fibre quickly while promoting an aesthetic serving form as well as function. His father, a skilled mechanical engineer, had taught his son well: a good mechanic and businessman will always prosper, as long as he confronts adversity head on, with imagination and a strong drive to persevere.

Henry's masters floundered by the close of the 1830s and by the time he came of age, his severance pay arrived in the form of \$350 worth of materials, jigs and a head churning with ambition. Like other young men seeking their way in the hardscrabble Philadelphia of 1840, Henry was determined to carve his own mark in a world filled with opportunity and someday out-compete the British sawmaking industry in his adopted home.

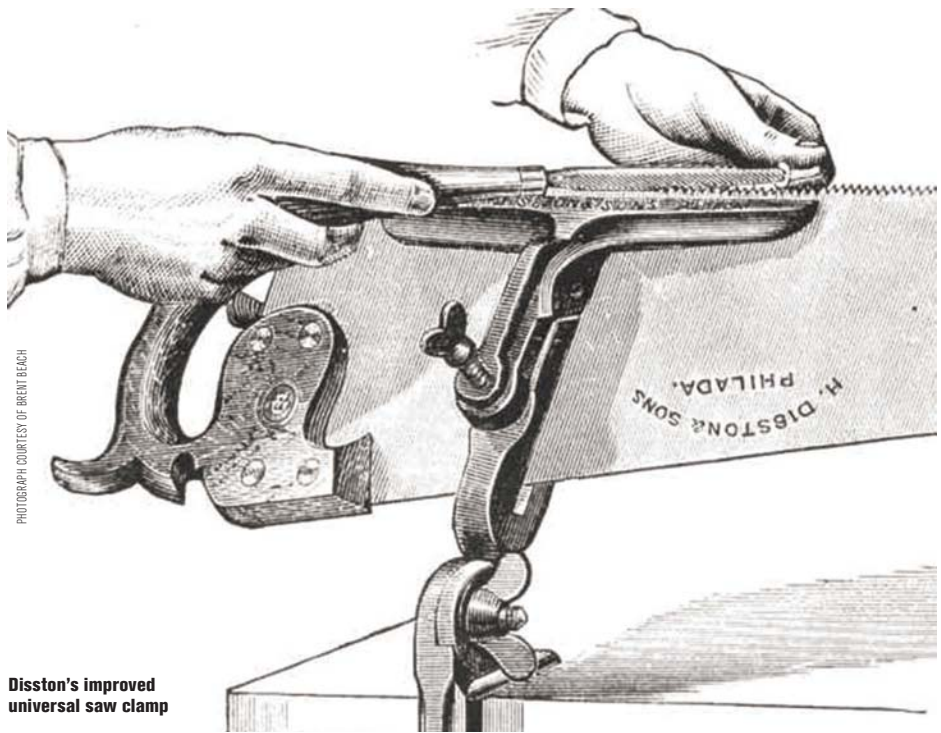
Renting a basement hovel at 21 Bread Street, Henry hand-built a furnace and carted coal from the wharf over a mile away to fire it. He then tempered his own saws, hammer-smithed them into proper tension, ground the plates, cut the teeth, set and filed them razor-sharp. He carved the handles, machined the brass fasteners, folded the sawbacks and trued everything into proper alignment. That Disston was able to produce at all bears testament to his sense of unyielding determination to make it, confronting daily the jungle law struggle of a one-man shop with rent to pay, groceries to buy, coal to cart and materials to source. Despite the kind of odds that turn achievers into quitters, Henry Disston nonetheless brought to market over a dozen handmade saws a week.

The best saws in Philadelphia

His typical strategy was to cart his wares to a hardware store, ask the proprietor for his best British saw and then proceed to snap it across his knee. Before the aghast store owner could say anything, Henry produced one of his own, claiming: "Try that with mine. You are welcome to it; this is the best saw in Philadelphia." And he was as good as his word.

Courtship, marriage and children follows any man's initial blush of success and the young entrepreneur moved out of his basement flat into his first real shop, while he and his bride Amanda eagerly awaited the arrival of twins, but the twins died shortly after they were born, with Amanda following afterward. And then, his shop burned to the ground. Henry Disston had landed at rock bottom, crushed in spirit and penniless at the age of 23.

Slammed by soul-sucking grief, medical bills and demanding creditors, Henry started all over again on the strength of a \$5 loan



Disston's improved universal saw clamp

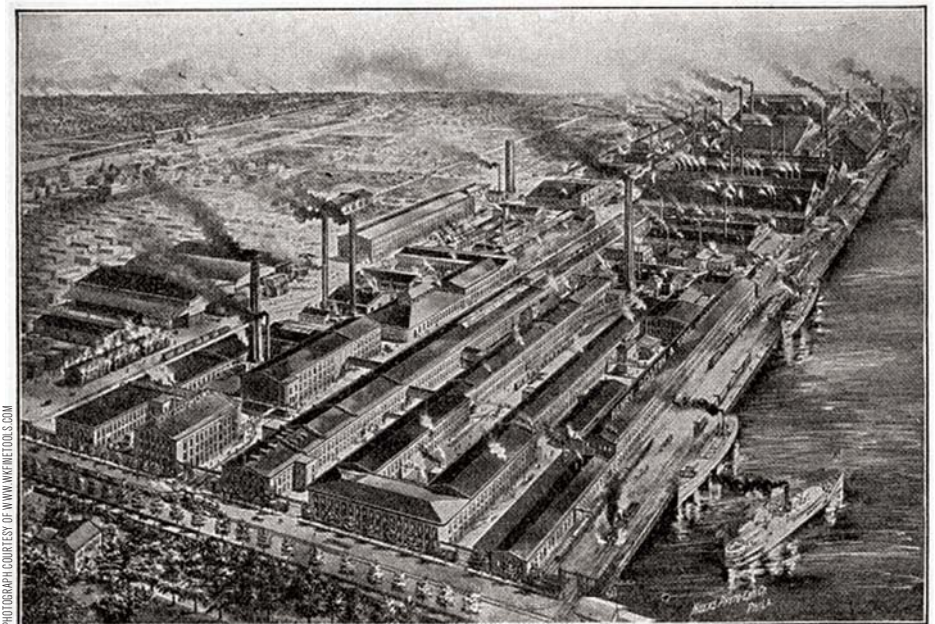
from a friend and went back to work. He spent three days of each week marketing his wares and taking orders, then drove himself mercilessly over the next three days making saws to fill those orders. Deliveries followed on Saturday, whereafter he would collapse in his Bread Street hovel, attend church on Sunday and prepare for the next week. Somewhere in the misery, Henry met his second wife Mary and remarried – a ray of light piercing what had become an abysmally dark decade. He re-established his product line among the Philadelphia hardware stores and life improved. Mary Disston bore a son – Hamilton Disston – and four more sons would follow. But the 1840s were not yet finished with Henry.

Responding to the lure of a steam-powered shop in 1844 and indebting himself to equip it, the speculator posing as the owner of the

property was arrested for fraud. Authorities seized Henry's equipment, selling it for back rent owed by his dishonest landlord. Henry indebted himself yet again, this time with doubled rent, forcing him to move his operation shortly afterward to new premises on Third and Arch Streets. Two years later, he was turned out once more and moved to a third location on Laurel Street. The only good to come out of the last move was the inclusion of steam power for his new shop. Despite the dizzying cycle of relocations, Henry continued making saws, firmly entrenching himself in the Philadelphia market as a tough young businessman with an incredibly steadfast commitment to quality.

Market domination

By 1846, the war with Mexico was on and demand for saws and other tools bolstered ➤



Reproduction of the plant of Henry Disston & Sons Ltd, the largest saw manufacturing house in the world

► the fledgling Henry Disston Keystone Saw Works. Finally flush with success, misfortune dealt Henry yet another blow in 1849 when a boiler explosion blew his shop into smithereens. Miraculously, Henry and his employees escaped unhurt. Now completely fed up with renting, he had the scratch to purchase his own property in a nearby lot close to Laurel Street, where the 1850s ushered in a far more prosperous era. The dark days of the 1840s were behind him. Henry Disston sent for his brothers back in England, who joined him at his Philadelphia plant with some of the best British metalworkers in tow.

Henry had always sought to mix his own alloy, and in 1855 poured the first heat of crucible saw steel produced in America. By now, he not only made saws, but also knives, circular saws for lumbermen and other carpenter tools. By the close of the decade, Henry Disston and his Keystone Saw Works was firmly established as a leading Philadelphia concern making international headway.

By 1861, Henry Disston dominated the American saw market, spurred in part by a tariff on foreign materials with the advent of the Civil War. His oldest boy, Hamilton Disston, volunteered to enlist in the Army, despite Henry's strong opposition and intent to buy his draft replacement. 25 other workmen from Disston Keystone Saw Works joined Hamilton. Throughout the war, Henry profited immensely from fabricating armaments for the Union Army and became one of the wealthiest men in the country. But he wasn't just another robber baron.

Intensely patriotic to his adopted country, Disston paid a sum equal to half their Army pay to workers enlisting, with the promise that their jobs would be waiting for them upon their return from the war. Henry also offered his manufacturing base to the Federal Government, fabricating swords, guns, armoured plate and a multitude of other metal items related to the war effort.

Explosive growth

Hamilton Disston miraculously survived the war, returning home a local hero and that was when Henry changed the name of his company from 'Henry Disston' to 'Disston and Son'. During the next several years, Hamilton Disston's four other brothers followed suit. Disston & Sons had become a family dynasty and their progeny would carry the company through the next hundred years.

The 1870s saw explosive growth with Disston & Sons. Disston's zeal for patenting each new technological development was matched only by his utter ruthlessness with the competition. He often sued other companies for patent infringement and bought out those he could. Names such as Jackson, Richardson and Harvey Peace fell under Disston's sway, now a juggernaut as the world's leading sawmaker. With an unquenchable thirst for innovation, he employed a team of metallurgists to experiment with mixes of alloys to field only the best steel and constantly experimented

PHOTOGRAPH COURTESY OF WWW.VINTAGESAWS.COM



The 1940 medallion



Hammer-smithing a vintage Disston sawplate back into true

"If you want a Saw, it is best to get one with a name on it which has a reputation. A man who has made a reputation for his goods, knows its value as well as its cost, and will maintain it."
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This advertisement highlights the venerable Disston D8, a product as synonymous with the Disston name as the Model T is to Henry Ford



Henry Disston & Sons, Inc., saw blade advertisement in *American Machinist*, 1920

with saw design, such as the venerable Disston D8 Handsaw. Calling his plant superintendent into his office one day in 1873, Henry chalked out a design for a skew-backed saw designed for lighter weight without sacrificing cutting action and within a matter of days, put into production what is now known as the Disston D8, the most popular and ubiquitous hand saw in the world, thousands of which are still sold on eBay today – a testament to Henry Disston's entrepreneurial vision.

Leaving a legacy

But Disston was not just another ruthless, powerful capitalist, milking every dime out of his labour force. He was a very devout man, whose caring, paternal leadership style was underscored by a deep concern for every employee in his company. America had rapidly industrialised and urban living conditions were horrific. Henry cast his eyes on the Tacony district a few miles northeast of Philadelphia. Ever concerned for the ➤



Henry Disston Jr, a direct descendant of the founder of the Disston Saw Company – grandson of Jacob S. Disston Jr



Laurel Hill Cemetery, located on 3822 Ridge Ave, Philadelphia, is home to the mausoleum of the Disston family



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The great plane-makers – Henry Disston

- safety, morale and welfare of his rapidly growing employee base, Henry envisioned a neighbourhood free of brothels, tanneries and saloons – a clean, well-lit place to live and work, where a man could raise his family in a safe environment, where his family could worship in a church representative to their faith, where they could picnic at a park and enrich their lives with a library and cultural centre. Henry Disston brought what many called a 'utopian fantasy' to fruition and broke ground on a six-acre plot in 1871 – which eventually expanded to the district's ultimate size of over 350 acres, 122 employee-owned homes, serviced by proper sewers, a waterworks, public schools, a library and cultural centre.

Henry Disston did not live to see Tacony blossom into full. Like his father before him, he succumbed to a series of strokes in 1878 shortly before turning 59 and passed away. He left behind a legacy of excellence, production and a tradition not just of sound and ethical business practices, but also of the moral responsibility any leader must shoulder for those in their charge, to ensure that the common good promotes good work and sound product.

Visionary entrepreneur. Patriotic industrialist. Ruthless capitalist. Humanitarian leader. These are all qualities Henry Disston evinced every day of his well-lived life, through spirit and through deed. He



Sharpening a Disston D8 from the 1887-1896 era

was truly one of the unsung heroes of the industrial age whose products still cannot be surpassed, as Disston hand saws remain a staple of any 21st-century hand tool

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Disston Star hammer saw set, patented 1876



Disston saw sharpening vise No.3D

References

A Place to Live and Work: The Henry Disston Saw Works and the Tacony Community of Philadelphia. Harry C. Silcox. University Park: Pennsylvania State University Press, copyright 1994

Henry Disston – a Biographical Sketch. Jacob S. Disston Jr. © 1950. An address presented at a Newcomen Society Dinner, Jan 17, 1950
Von Sneidern, Erik. (2 August, 2014). The Disstonian Institute. Retrieved from www.disstonianinstitute.com



By 1916, Disston & Sons employed over 2,800 men and women on its 64-acre factory plant

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New Designers 2014

Between 25 June and 5 July, the Business Design Centre, London played host to the annual New Designers exhibition, a showcase of the widespread design talent emerging from post and undergraduate courses in universities across the UK



New Designers Part 1 ran from 25–28 June and included Textiles, Fashion & Accessories, Contemporary Applied Arts – including Ceramics & Glass – and Jewellery & Precious Metalwork. New Designers Part 2 followed from 2–5 July with the design disciplines including Visual Communications – including Graphic Design & Illustration – Furniture & Product Design – including Spatial & Industrial design – and Motion Arts & Theatre Design. Both exhibitions also included the highly regarded One Year On show, giving attendees a chance to sample some of the progress and success of last year's exhibitors.

Changing industry

As a first time visitor at New Designers, it struck me how the state of the design industry and education is changing; the overall feel of the furniture and products being displayed had a very clean, simplistic and midcentury modern influence. It was also quite apparent that CNC machines and laser cutters are now playing a fundamental role in design.



PHOTOGRAPHS BY AMBER BAILEY

Visitors viewing the work of students from Nottingham Trent University

The show was a great success with all the exhibitors that I spoke to talking positively of industry interest or individual visitors making purchases.

Award-winning work

As always, the show's sponsor and partner awards played a significant role and effectively highlighted some of the most distinguished pieces of design. Two individuals held the torch for furniture, both of whom scooped highly acclaimed awards.

Douglas Pulman of Plymouth University won the New Designers '100% Design Award' for his Brace Furniture Range project. The judges stated: "The focus for this range is in the use of design engineering to create the bracket mechanism. We also felt that the use of contrasting materials led this product to be visually appealing and commercially compelling." On the result Pulman commented: "I use a design process that starts with the development of the bracket or brace before naturally developing the furniture piece from there. I use the properties of the materials to their full and am pleased that people can appreciate my approach and relate to the work despite its 'simplistic' style."

Kit Shadbolt of Buckinghamshire New University took home the 'New Designers John Lewis Award' for his 'Ease Trestles' project. The judges said: "A beautiful and innovative interpretation of a traditional trestle design, well-resolved and ready to manufacture. Kit is clearly a very talented designer." Shadbolt commented: "I'm excited about the chance to get my ideas seen here at New Designers and now at John Lewis. It's fantastic to have the John Lewis name associated with my work – it is invaluable for marketing."

Product design

Despite the success of the furniture and design courses on display, in time these will have slowly diminished after the shock news



James Birkbeck with his product 'Stack'



Samples by Laura Krumina of Birmingham City University made using laser cutting and CNC machines

of the closure of a number of undergraduate programmes at Buckinghamshire New University as well as other universities also taking the hit in recent years. Design education will now focus on products and commercial manufacture rather than crafts with some very strong examples of ingenuity at this year's show. Yet not all felt the need to stick with the very latest materials and technologies, shying away from designing domestic furniture from off the shelf materials. The work of James Birkbeck, a Product Design student of York St John University caught my eye. A functional space-saving piece aptly named 'Stack' is a series of triangular birch ply forms used as shelving and storage which can be built up in a pyramid or stacked neatly away, one

on top of the other. A practical solution to an everyday problem.

The few courses left that still proudly demonstrated their craftsmen roots were able to prove to the masses that good old-fashioned woodworking is still going strong. *F&C* friends Rycotewood and Buckinghamshire New University were at New Designers to show exactly what good quality furniture design and making should and does look like, leaving us with an expectation of great things to be seen from this year's cohort in the future. *F&C*

Details

For details of the exhibition or any of its exhibitors, see www.newdesigners.com

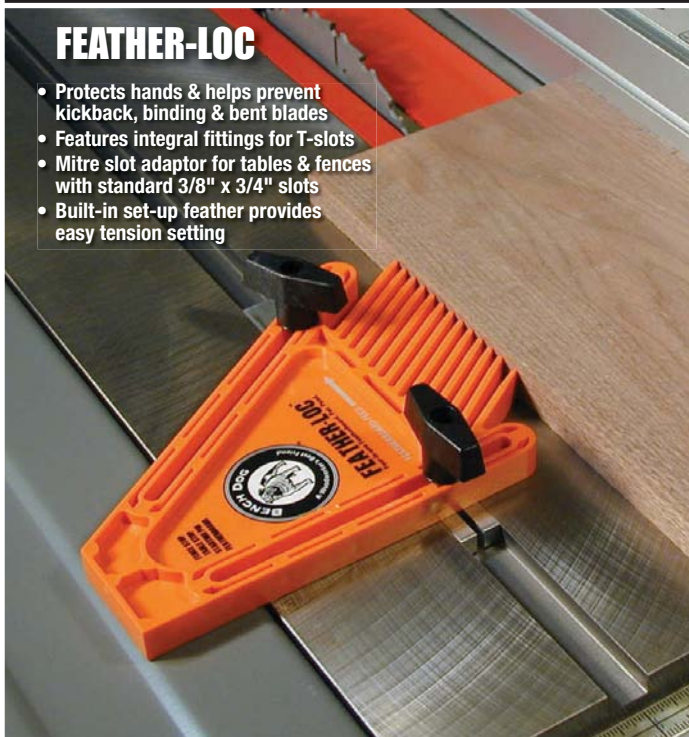


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20 minutes with... Tom Fidgen

Paul Mayon talks to Canadian hand tool woodworker Tom Fidgen



PHOTOGRAPH BY CHRISTOPHER WALZAK

PHOTOGRAPH BY TOM FIDGEN, UNLESS OTHERWISE STATED

Earlier this year Paul spent some time in Toronto with the renowned Canadian hand tool woodworker Tom Fidgen. Tom is author of the bestselling woodwork book of 2010 *Made by Hand* and in 2013 released a second title *The Unplugged Woodshop*, which promises to be just as successful. Paul joined Tom for a cold beer in the Bier Markt on King Street West just

next to Lee Valley's downtown Toronto store, where they talked woodworking, technique and tools.

Paul Mayon: Your latest book *The Unplugged Woodshop* has a distinctive look to all of the pieces: what are the factors that drive your design ethic?

Tom Fidgen: I like simple and modern

pieces, that also somehow have a retro feel to them – a nod to the past if you will. Alvar Aalto is a good example of the sort of thing I like and there are some pieces that I did for the book that are almost like his work but you know, ultimately, I like to let the wood dictate the design.

PM: What was the piece from the book that you found most satisfying to make?

TF: The wooden tote was a really satisfying piece not only to make, but also to use because it is something that I use every day. It is an incredibly useful piece, so I think that really is my favourite.

PM: Have you always made furniture?

TF: I have always made things, but for a period I was building boats out in Cape Breton where I lived for half of the year. Over a four year period, I built six traditional Cape Breton wooden boats. That experience gives you a real sense of the environment shaping the object and I think that has possibly translated into my furniture.

PM: It has been said before that there is a fundamental commonality between woodworking and music that has been raised by several people, Jeff Miller included – who is a former professional classical trumpeter. As a former full-time professional musician, what is your take on that?

TF: Yes; there is a commonality: both things are about creativity and there is much to learn in terms of practising techniques, but also through a process of discovery in finding out what works for you so that you develop your own 'voice'. That is especially true if you are designing your own pieces as well as making them. Designing a piece is almost like writing a song. Sometimes I find I am thinking of lyrics when I am making something and occasionally thinking about the form of a piece when I am playing.

PM: What do you think made your first book so successful?

TF: I honestly don't know the exact reason. Perhaps I was just lucky. I think I maybe hit on a change of mood at the right time when people couldn't afford these huge shops with tons of power tools.

PM: Are you aiming your books at a particular audience?

TF: Not really. I design pieces and I make them in my 3.6 x 3.6m hand tool workshop

here in Toronto and then I write about that. If people like what I do – and they do appear to – then that is great.

PM: Whose work do you admire most?

TF: There are so many great makers to choose from. I'd have to say James Krenov, not just for the pieces, but because he was so much into why you did a piece in a certain way. Alan Peters is of course an influence for the way he approached the craft and I always like the work created by Garrett Hack: his work has real integrity to it.

PM: What sort of students do you find you are getting coming through into your classes?

TF: It is perhaps surprising to some but I am finding that 60-70% of my classes are women. I do some classes that are not necessarily focused on project pieces, but are more on technique and why we do some things in the craft in certain ways. Perhaps that appeals to female woodworkers. I do find there has been a massive increase in the female woodworking population over the past decade. I think it is because of working with a natural material and that hand tool working, although it is physical, is not working with noisy machines. It is a more contemplative activity.

PM: What is the one tool you couldn't live without?

TF: I know we are sat right next door to the Veritas store and all, but I have to say that it would be my Veritas jack plane. It isn't that I couldn't live without this particular one, because Veritas tools are so consistent but I definitely couldn't live without one of these in my tool kit.

PM: What will be next for you, then?

TF: I have classes planned throughout the year and I hope to do some more international teaching later this year and in 2015, so keep an eye on the website.

In fact, Tom has just agreed to work with New English Workshop in 2015 – details to follow.



'Architect Table'



'Medicine Chest'



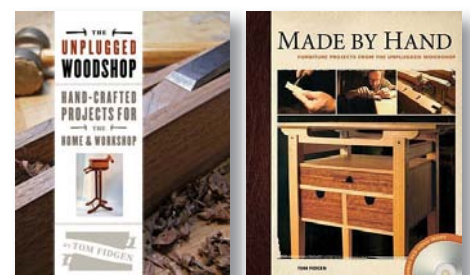
'Autodidact's Chair'

Contact:

Email: tomfidgen@yahoo.ca

Web: www.theunpluggedwoodshop.com

Tom has written two books, *Made by Hand* and *The Unplugged Woodshop*. both can be purchased through his website. Price: \$30 (£18) each (plus shipping & taxes) Contact: Tom Fidgen Web: www.theunpluggedwoodshop.com



Workshop library

This month, Barrie Hope reviews a compendium of European picture frames and takes a look at advanced veneering techniques. Website of the month is from Tom Fidgen

BOOKS



Schmitz Compendium of European Picture Frames – 1730–1930

by Tobias Schmitz; translation by Faith Puleston

This book explores in dedicated and systematic detail 19th-century European picture frames. The extended dates shown in the title illustrate the attention to trends and sources before the start of the period and the continuing influence thereafter. Additionally, the great attention paid to historicism means that all early historical influences, particularly those of Italian



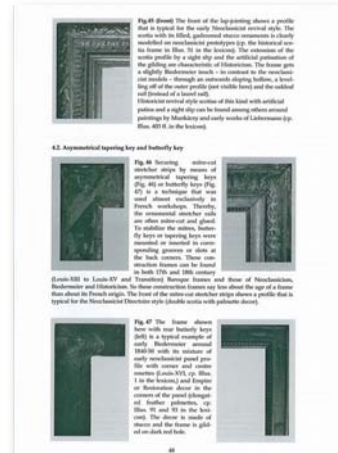
Italian-style panel frames

Renaissance, Greek and Roman periods, are covered.

What makes the book fascinating is the direct connection of the frame style to particular artists, there is even an appendix linking all the artists in the text to particular illustrations of the frames they preferred and used. However, as described, modern galleries in the 20th century often thought the original frames were 'old-fashioned' and unsuitable for the buildings that housed them. In many galleries there was a wholesale changeover to 'modern' frames. Fortunately, a movement to rescue the old frames from the basements and restore them to their original

paintings is reported. This new awareness of the importance of the original frames makes this book a welcome addition to the literature for restorers, galleries, auctioneers and art-lovers, not to mention picture-framers.

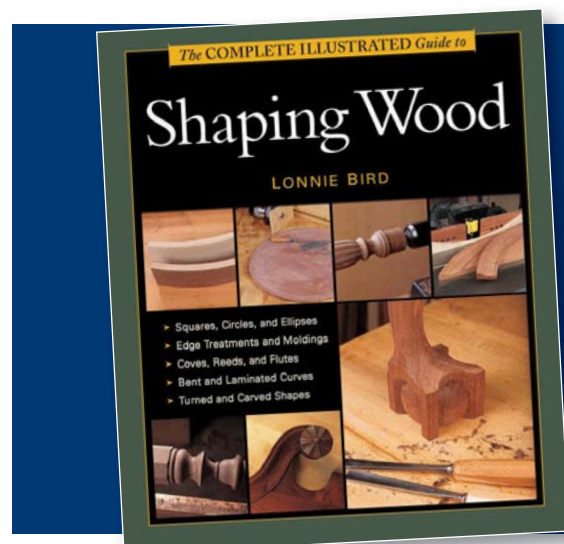
The main part of the book contains 444 drawings of frame corners and cross-sections classified by their period, namely Neoclassicism, Romanticism, Biedermeier, Historicism and Jugendstil. While it is written from a German perspective, all important European art history for the period is related and there are valuable accounts of the changes and influences in artistic philosophy. For instance,



As well as drawings of the frames, there are also photographs

William Morris and the Arts & Crafts movement, described as 'utopist', are covered and this approach, seen with Continental eyes and placed within an overall context makes a refreshing change from the usual Anglo-centric perspective. For any of the specialist readers listed above, this would be a worthwhile, perhaps essential book. Also for anyone deeply interested in art and who enjoys seeing a subject dealt with in fine detail, this is the book for them.

Published by Tobias Schmitz
320 pages £66 (hardcover)
ISBN: 9783000395673



Book offer

This month, we have a great offer on another one of the books from Taunton's *The Complete Illustrated Guide* series. This particular book, written by Lonnie Bird, looks at the subject of shaping wood – see page 40 for the extract on creating carved elements.

ISBN: 9781627107662
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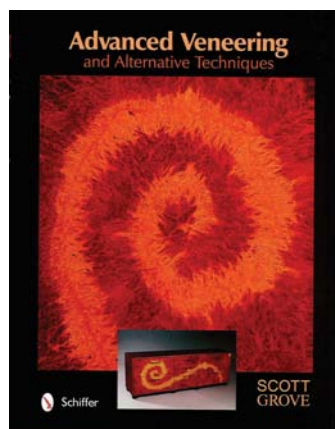
Advanced Veneering and Alternative Techniques

by Scott Grove

The author of this book comes well recommended – Marc Adams writes the foreword and says: “Scott has placed himself on a scale with no equals.”

This is certainly an outstanding and unusual book, which takes the reader through the world of veneers from the tree to the finished article. Specific and understandable advanced techniques for producing the finest work are described, but more importantly, illustrated with a wealth of detailed photographs. One is left with the impression that a master is divulging his hard-earned secrets, simply for the price of a book. If there is one caveat it would be that Scott Grove obviously specialises in burl veneer and the book illustrates this throughout. We are assured, however, that it is a straightforward matter to use the same techniques with standard veneer.

The first section deals with the technology of how veneer is prepared, together with some interesting facts about why using veneers is kind to the environment – ‘no forest is destroyed to harvest wood used for decorative purposes’. This advocacy is reinforced by assuring the reader that the bad press for veneered furniture



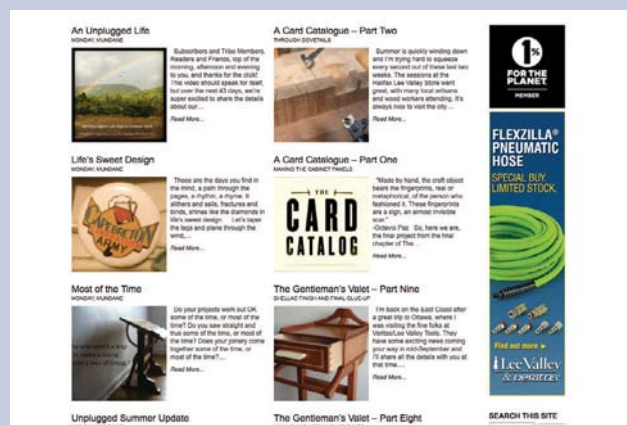
belongs to the past and that modern substrates are now ‘far superior to their predecessors’. Veneering gives ‘42 times more surface area than using standard hardwoods.’

The rest of the book is a step-by-step account of working with veneer to produce the finest work. The alternative techniques referred to include the ‘wavy contour seam’ and the ‘spiral match pattern.’ Scott says: “Once you step away from traditional linear seaming and symmetrical pattern matching, the design door opens wide.”

The way in which he describes the techniques is exact and clearly written, helped by the excellent photographs. Scott Grove’s enthusiastic approach and masterly knowledge inspire confidence – this book is thoroughly recommended.

Published by Schiffer
176 pages \$39.99 (£24.11)
ISBN: 9780764338465

Website of the month The Unplugged Woodshop



This month's Website of the Month is theunpluggedwoodshop.com, which is run by woodworker Tom Fidgen, who is also the subject of this month's 20 minute interview. The homepage simply presents six tabs at the top of the page, including: ‘Home’, ‘Woodworking Classes’, ‘Books’, ‘Music’, ‘About’ and ‘Contact’. The homepage also shows Tom's last 14 posts on the site with short snippets of the articles next to the images. The site is easy to navigate, but is very much text-based.

In the ‘Woodworking Classes’ tab, Tom makes it clear that the classes are held in Toronto and that he is happy to customise a class for a customer, should they feel that what they would like to be covered, currently isn't. Scrolling down the page, each class Tom runs has a good description about it, a time-frame and a price. At the very bottom of the woodworking page there are a couple of reviews/feedback notes from previous customers.

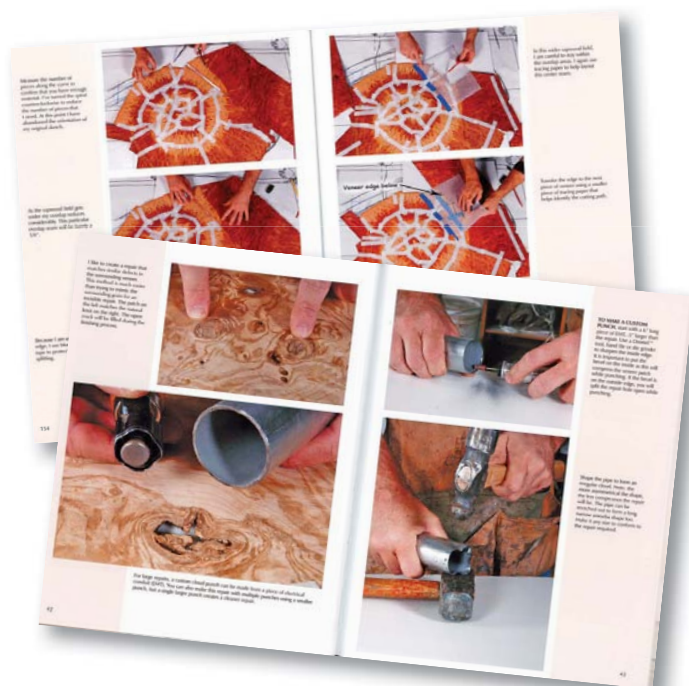
The next tab is ‘Books’, where you can easily purchase Tom's own books: *The Unplugged Workshop*, *Hand-crafted Projects for Home & Workshop* and *Made by Hand*. The following tab is ‘Music’, where you can purchase Tom's own albums, possibly to listen to in your own workshop.

There is only a short introduction to Tom Fidgen in the ‘About’ page, describing him as ‘an author, musician and designer-maker’. Tom not only teaches in his home workshop in Toronto, but also travels and teaches internationally.

The only thing that I feel is missing from this website is a gallery of Tom Fidgen's work, showing the reader what they can do and possibly give them some inspiration for their future projects. Throughout Tom's blog posts he has various projects on the go, posting instructional videos with them. These videos come in very handy as they can be paused or skipped back, should you need to. Tom also links to some of the tools he uses himself in the videos, making them easy to find if the reader is interested. Overall, the website is to the point and makes it easy to find out more about Tom's classes, books and music.

Details

Web: www.theunpluggedwoodshop.com



The veneering techniques are explained in a step-by-step manner

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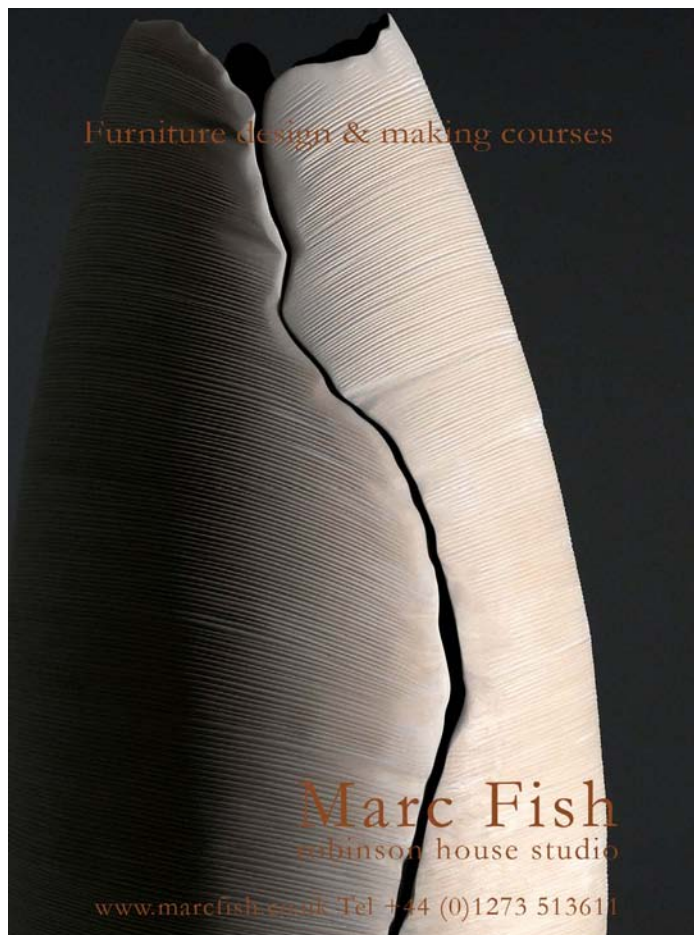
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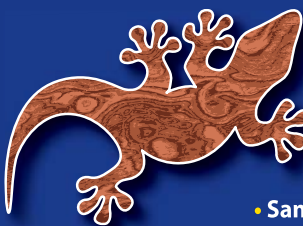
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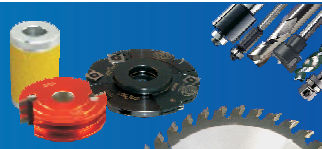
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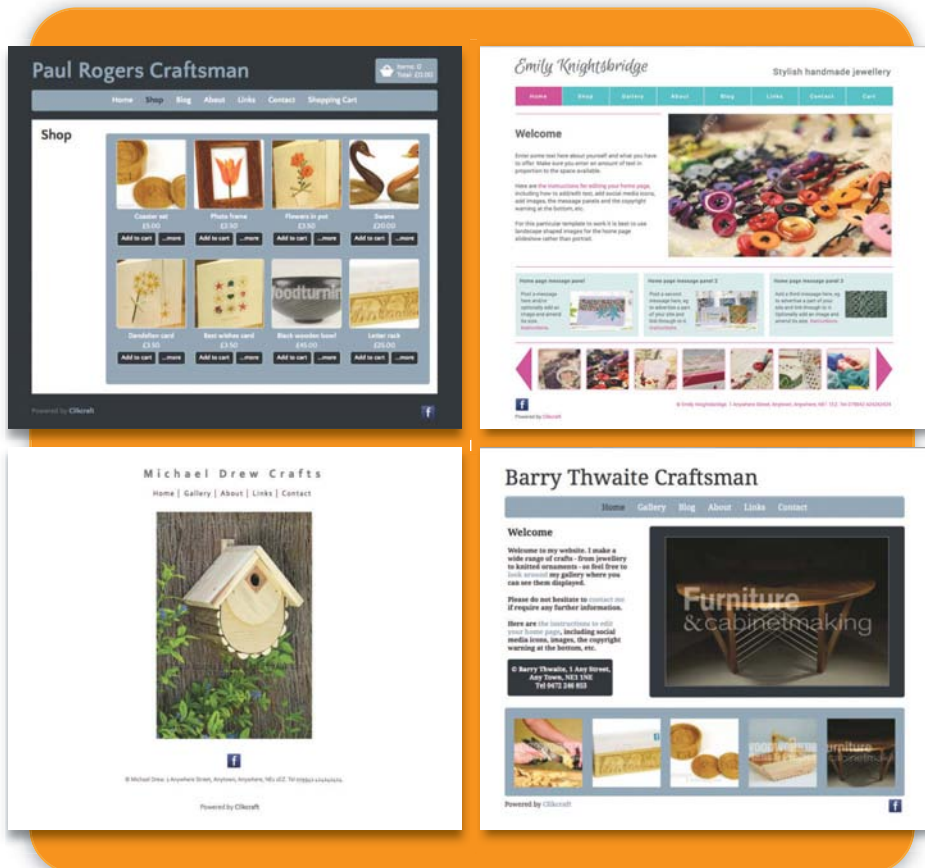
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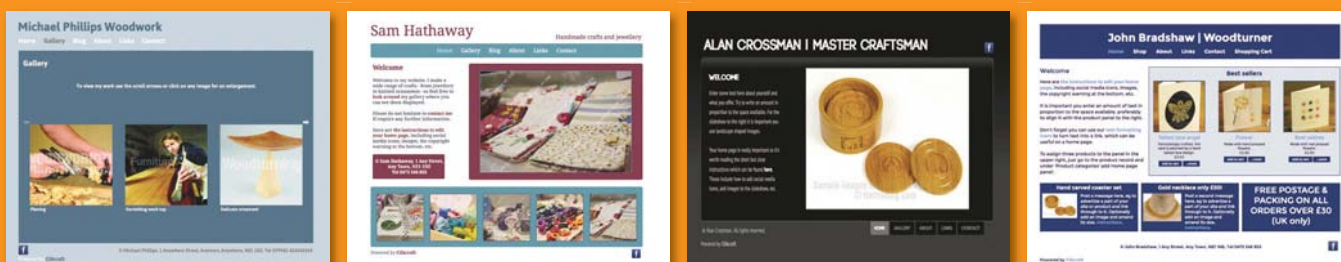
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UNDER THE HAMMER: Late 19th-century French side cabinets

These stunning side cabinets went under the hammer at Bonhams' recent European Furniture and Works of Art auction and fetched £13,125



PHOTOGRAPHS COURTESY OF BONHAMS

Lot 151, a pair of French late 19th-century brass and mother-of-pearl inlaid, ebonised and gilt metal-mounted side cabinets, 460mm wide x 1,090mm deep x 1,140mm high

Bonhams' Fine European Furniture department specialises in French and Continental furniture from the Renaissance to the late 19th century. Past sale highlights have included stamped pieces by 18th-century makers, such as Beneman, Birclet, Boulle, Criaerd, Sageot, Migeon and Beurdeley, Dasson, Sormani and Linke from the 19th century. The Fine European Furniture, Sculpture and Works of Art auctions also feature

decorative objects such as sculpture, clocks, gilt bronzes, ormolu-mounted porcelain, ceramics, enamel, pietre dure, micro-mosaics, glass and tapestries. These auctions are held up to 10 times a year globally, in London New Bond Street, New York, Los Angeles and San Francisco.

However, the particular lot that we're concentrating on here – lot 151 – is a pair of French late 19th-century brass and mother-of-pearl inlaid, ebonised and gilt metal-mounted side

cabinets, which recently went under the hammer at Bonhams and reached just over £13,000.

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