Furniture &cabinetmaking

DESIGN • INSPIRATION • PROJECTS • TECHNIQUES • TESTS • ELLENCE

BOX CLEVER
Monumental achievement for NEJ Stevenson

Build the ultimate Lowfat Roubo bench on a budget

Project
Breakfront bookcase

Tool tech
4 power tool tips that will save you time

Restoration tech
Make patch repairs that disappear

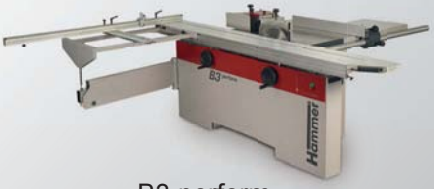
IF IN DOUBT..

...USE A HAMMER

Combination Machine

C3 31

Saw Spindle Moulders



B3 perform

B3 winner

B3 basic

Panel Saws

K4 perform

K3 winner comfort

K3 basic

Bandsaw

N4400
N3800

Horizontal Mortiser

D3

Mobile Dust Extractor

S01

Belt sander

HS 2200

Hammer®

The obvious choice!

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

FELDER-GROUP UK

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

www.ukhammer.co.uk

Request your free catalogue now!

Spindle moulder

F 3

Planer-Thicknessers/Planers/Thicknessers

A3 41

A3 31

A3 26

A3 41 A

A3 41 D

Combination Machines

C3 31 perform

C3 31

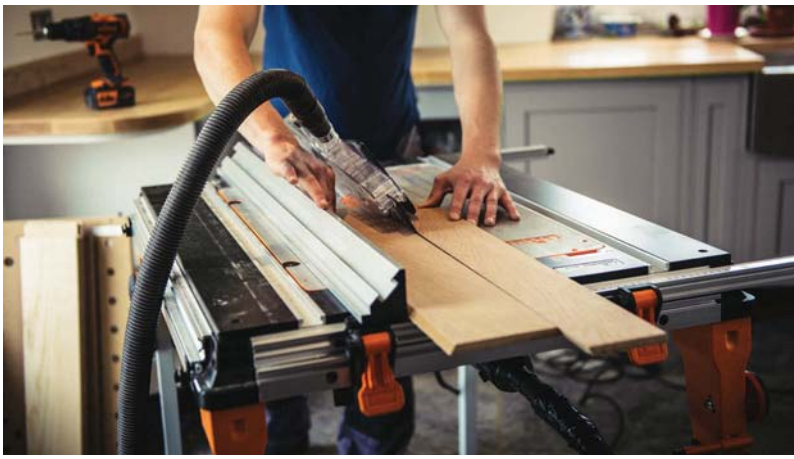
HAMMER
Quality and precision from
AUSTRIA

One Workcentre Many Tasks

TWX7 Workcentre Systems

The TWX7 brings the precision and convenience of the legendary Triton Workcentre to a new generation. Constructed using lightweight yet robust extruded aluminium sections, which support innovative low-friction work surfaces, the TWX7 is the ideal solution for the woodworking enthusiast. In addition the all new TWX7 is now a highly capable and mobile multi-purpose workshop for professional site use.

Router Table Module Precision router table & fence with featherboards



Contractor Saw Module Powerful & accurate table saw with full length fence

TWX7
Workcentre

Clamping Table Module

Clamping table supplied as standard
with 120Kg working load

Optional Modules

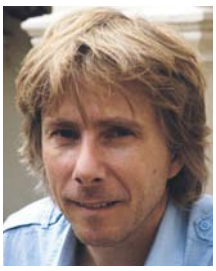
TWX7 RT001
Router Table Module

TWX7 CS001
Contractor Saw Module

triton
Precision Power Tools

Engineered Precision

tritontools.com



Welcome to...

...an exciting New Year

PHOTOGRAPH COURTESY OF GMC/DEREK JONES

I learned valuable new skills at Yannick Chastang's excellent marquetry course

So, here we are, our first official post-Christmas issue and we've hit the deck running. In every walk of life there are standout names, usually just one or two, that become synonymous with the subject and capture the essence of that craft in just a few syllables. Ron Hock is a perfect contemporary example and we've asked him to spill the beans on his rise to almost cult status amongst woodworkers. Ron has done for Stanley what Carroll Shelby did for the Mustang and John Cooper did for the BLMC Mini; taken an entry-level product and made it perform like a thoroughbred.

I doubt by the time he retires there will be a reputable 'shop in the English-speaking world without either a fully blown Hock tool or replacement blade upgrade. Don't worry, as far as we know, that day isn't likely to occur any time soon in case you were wondering.

Before we launch too far ahead with the 2016 programme it would be remiss of me not to mention one of last year's highlights and the influence it has had on my skill set; most recently the thoroughly addictive art of Boulle marquetry as performed on a donkey. I had Yannick Chastang to thank for this, and encourage anyone wishing to expand their decorative art skills to spend a few very agreeable days in his company and attend one of his courses. The next one is planned for 28 February. For more details visit www.marquetrycentre.com.

On a broader note, another figure that has touched many a woodworker's life this year is André Jacob Roubo. The ubiquitous Roubo bench must be on the wishlist of more woodworkers than any other item, but with single 8ft long by 2ft wide and 4in thick slabs of clear French oak (*Quercus robur*) being hard to come by, I suspect most of us will have to compromise. Subscriber to *F&C* Matt Morse has done precisely that by putting even my Lowfat Roubo bench to shame building his own version of the bench from recycled joists – see page 27. Now look into your neighbour's skip when you get home tonight and tell me what you see.

Finally, on the must-see list this month is our gallery feature on page 22. The workshops of NEJ Stephenson are one of, if not the most, significant commercial 'shops trading in the UK today. With a long list of professional accolades and prestigious commissions to their name, the Rugby-based company have allowed us a rare glimpse of some of their work and the stories behind them. If you like what you see, then make a note to join us next month as we go behind the scenes and speak to their senior craftsman. Right now, though, there's still enough time to raise a glass to 2016 and all that lies ahead, starting with the current issue.

Derek Jones

Derek Jones
derekj@thegmcgroup.com

Furniture &cabinetmaking

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

ASSISTANT EDITOR Briony Darnley
Email: briony.darnley@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: helenc@thegmcgroup.com

PRINTED IN THE UK
Stephens and George Print Group

DISTRIBUTION Seymour Distribution Ltd
Tel: 020 7429 4000

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

SUBSCRIPTION RATES (includes p&p)

	UK	Europe	Rest of World
12 issues	£51.00	£63.75	£71.40
24 issues	£102.00	£127.50	£142.80

US subscribers visit www.lightningpublications.com for subscription rates in USD $.

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

Post your order to: The Subscription Department, GMC Publications Ltd, 166 High Street, Lewes, East Sussex BN7 1XU Tel +44 (0)1273 488005, Fax +44 (0)1273 402866 Email: pubs@thegmcgroup.com
Website: www.thegmcgroup.com

Problems finding F&C? Call Tony Loveridge, our Circulation Manager, on 01273 477374 or email him at tonyl@thegmcgroup.com Alternatively, save up to 20% on the cover price by subscribing. Visit www.thegmcgroup.com/publications

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.

Contents

Issue 241 February 2016

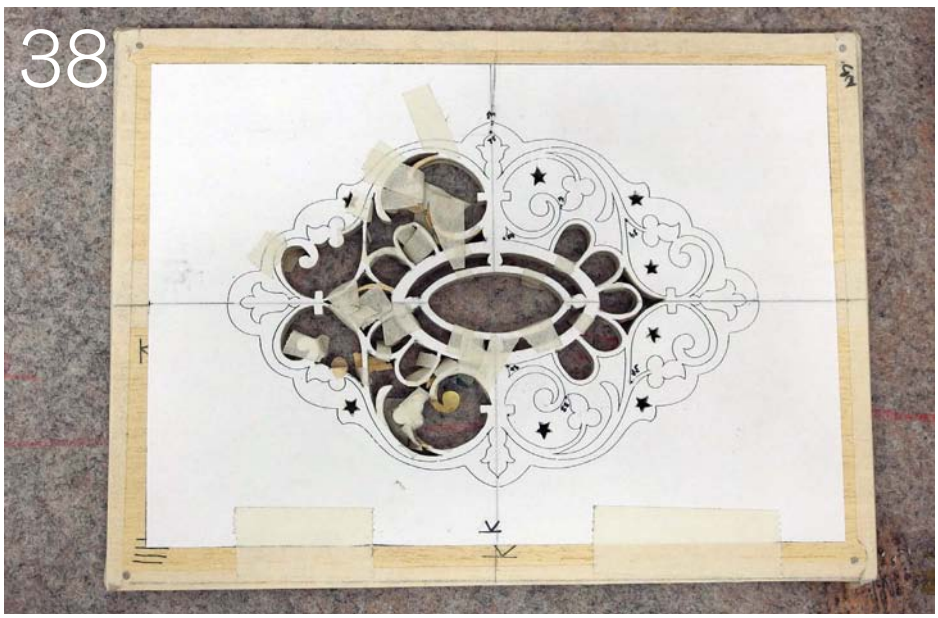
Toast to success: N.E.J. Stevenson – see page 22.
Front cover image courtesy of ©PLP/N.E.J. Stevenson

Design & Inspiration

Projects & Techniques

43

27



38

Your *F&C*

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

Contribute to these pages by telling us about matters of interest to furniture makers. Call Derek Jones on 01273 402 843 or email derekj@thegmcgroup.com. Please accompany information with relevant, hi-res images wherever it is possible

News&Events

W&A's rising star wins place in WorldSkills squad for 2017

After a final round of competition at the National Finals in Birmingham, Waters & Acland's talented cabinetmaker Angus Bruce-Gardner, 20, has made the squad for the 2017 WorldSkills tournament in Abu Dhabi.

Bruce-Gardner triumphed at the high-pressure event, in which the competitors had only 19 hours to produce a finished piece of high-quality furniture after a mere 10-minute glimpse at the drawings.

"There are four of us in the squad," explained Bruce-Gardner speaking to *F&C* a week after his NEC triumph, "but only one of us will go through to [represent the UK in] Abu Dhabi. That will be decided in May 2017."

He acknowledged that it would take a lot of hard work to secure that spot. "I'm doing [timed] practice runs every two weeks in the workshop for the next 18 months," he revealed. "They'll be with my colleagues at W&A, who are being really helpful.

"But I'm also training with ex-World Champion Gary [Tuddenham, of Parabola workshops]. It's great having him on board. He won best cabinetmaker in the world in 2007 and he knows how the competition works and what I need to look out for. He also knows the marking schemes very well."

It's also a big commitment for W&A, which insisted Bruce-Gardner "had improved as a maker due to his involvement with WorldSkills" and added that it was doing its utmost to help him "win the place on the plane to Abu Dhabi".

The 44th running of the WorldSkills competition will see 50 skills on show and feature some 1,200 competitors from 72 countries. And there's an added ambition for Bruce-Gardner as the UK is hoping to achieve a hat-trick.

"There's extra pressure because the UK has won the past two years in cabinetmaking," he revealed, "so obviously we want a third. But I'm really looking forward to it. It'll be a good journey."

If you would like to follow Bruce-Gardner's progress, check out W&A's Facebook page.

PHOTOGRAPHS COURTESY OF ANGUS BRUCE-GARDNER/WATERS&ACLAND

Bruce-Gardner alongside the cabinet that secured his place in the UK's WorldSkills squad

DETAILS:
Contact: WorldSkills UK Skills Competition
Details: www.findafuture.org

Bruce-Gardner is developing his own personal style of cabinetmaking with the help of W&A

Families flock to NEC show as young people seek new careers

Young people and children gave a big thumbs-up to the 2015 Skills Show, which also hosted the WorldSkills competition.

"The Skills Show's unique experiential careers advice model once again proved a big hit," commented Dr Neil Bentley, chief executive of Find a Future, the show's organiser. "It demonstrates how much demand there is for excellent careers advice on vocational education, training and apprenticeships."

Held across three days, the event welcomed a total of 78,324 visitors – 20,597 people, many of them families, attended on the Saturday – a 44% increase on 2014.

"Our Saturday opening saw high numbers of families attending together to learn about vocational careers – a clear indicator of how keen parents and guardians are to be involved in their children's career choices. In addition, significant numbers of parents, guardians and teachers took the opportunity to improve their own levels of understanding about the opportunities available in the dedicated areas."

One of the show's highlights was the WorldSkills UK competitions, which saw some 670 young people taking part in the final rounds of the WorldSkills competition (see left).

"The WorldSkills UK Skills finals are a vital part of show," insisted Dr Bentley.

"Watching their peers in action is motivating for young visitors. And we are confident those named in Squad UK for 2017 will continue to drive performance standards in competitions still further, and inspire even more young people to take up vocational careers."

Famous faces attending the event included entrepreneur Theo Paphitis, celebrity hairdresser Nicky Clarke, former rugby star Will Greenwood and Michelin-starred chef Theo Randall, all of whom shared their own careers experiences and provided guidance to visitors on taking the next step.

Business Secretary Sajiv Javid, who attended the Skills Show, endorsed the event: "We're proud the Government is really focused on apprenticeships. We want to show it's not just about university, there are lots of vocational skills available that can lead to excellent careers across the UK. This [event] is going to be a huge experience for so many young people. It's going to be inspiring to them all."

DETAILS:
Contact: NEC, Birmingham
Web: www.thenec.co.uk

PHOTOGRAPH COURTESY OF MANIFESTCOMMS.CO.UK

Business Secretary Sajiv Javid endorsed the event

Wolf on hunt for old power tools in anniversary exchange

Wolf Tools is tracking down examples of its oldest-surviving power tools as it marks 115 years in the business.

"Few people may be aware of the heritage of Wolf-branded tools," said its MD Mark Adams. "Over 115 years the Wolf name earned an enviable reputation for quality, reliability and innovation in power tools. In 1935, Wolf Electric Tools supplied all the power tools to the British aviation industry and in 1949 it manufactured the first UK DIY power drill.

"With the 'Wolf Oldest Tool Hunt' we hope to unearth some of the brand's oldest surviving power tools and would be pleased to hear from anyone and everyone who can add their Wolf tool story to the company's history."

The firm, which was established in England in 1900 and has gone on to offer innovative, technologically advanced, high-quality tools, hopes to find the five oldest examples of its power tools. In return, the tools' owners will be offered an exchange for a brand-new Wolf Ultimate Cordless Impact Driver, worth £99 – see it at ukhs.tv/Tools/Power-Tools/Wolf-Ultimate-10-8v-Impact-Driver.

If you would like to participate in Wolf's 'New Tools for Old' exchange, please email the details of the model, its approximate age and if possible a photo, along with your name and contact details, to: toolhunt@wolfdiy.com

Offer ends 5pm on 31 March, 2016.

PHOTOGRAPH COURTESY OF INSPIRATIONS.CO.UK

TIMBER TRADE NEWS

Blossom wilt

This disease attacks cherries *(Prunus spp.)* and related trees in the family Rosaceae. It is particularly serious on several popular flowering cherries, where a severe attack can ruin the appearance of the tree. It is also an important problem in commercial cherry orchards.

The causal organism is the fungus *Monilinia laxa*, formerly known as *Sclerotinia laxa*. The asexual state is called *Monilia laxa*. The form that attacks crab apples is identical in structure but does not infect cherries and is called *M. laxa forma specialis mali*. Flower trusses, leaves, shoot tips and fruits wither and turn brown, staying attached to the tree.

In wet conditions a sweet-smelling grey mould is visible on the affected fruits. On cherries, the fungus can also attack bark on young shoots, causing patches of gum to appear on the bark surface. Spring frost damage and bacterial canker (*Pseudomonas mors-prunorum*) cause similar symptoms. The fungus overwinters in infected bark and in the spring produces infective spores that are dispersed by wind, rain and insects.

Several fungicides give effective control, but most are not available to amateur gardeners. Removal of infected material is tedious, but effective. There is a slight reduction in vigour, but negligible effect on timber quality.

Chris Prior


PHOTOGRAPH COURTESY OF SHUTTERSTOCK

The cherry tree, pictured in all its glory in the spring, is susceptible to blossom wilt

Brian Blessed roars life into Forestry Commission movie

Actor, presenter and nature lover Brian Blessed talks trees with the Forestry Commission in a new film, which aims to raise awareness of England's forests and how they are sustainably managed for the future.

Best known for his booming voice, Blessed has starred in *Flash Gordon* as Prince Vultan; Lord Locksley in *Robin Hood: Prince of Thieves*, and King Richard IV in *Blackadder*.

He is passionate about trees, animals and nature and is a natural explorer. He has attempted to climb Mount Everest three times, is the oldest man to have trekked to the Magnetic North Pole on foot and has climbed Mount Kilimanjaro in Tanzania.

"I feel the Forestry Commission does a marvellous job," said Blessed, "and we need to protect our trees and forests for future generations. They are places to explore, to relax and to enjoy the species of plants and wildlife that make our country a joy.

"They are important for our wellbeing and a great place to enjoy stillness and silence. People sometimes wonder why trees are felled and just left there and we hope to help people understand the process in this film."

Set in Blessed's back garden in Surrey and on location in Cannock Chase in the Midlands, the film illustrates the scope of the Forestry Commission's work, which includes protecting wildlife by working with partners such as The Wildlife Trust and the RSPB.

The Commission's Head of Land Management Andrew Powers, who is filmed talking to the actor about the importance of England's forests and the role the Commission has in facing the challenges presented by climate change, said: "Brian was a natural choice for us as he is really passionate about trees.

"He was fantastic to work with and a real professional. He has a natural enthusiasm, but also a lot of knowledge about his natural environment."

Powers added: "There is an increasingly complex set of issues around our forests and we wanted to get that across to our visitors and the wider public in an engaging way.

The Commission hopes the film will also raise awareness of its role as a producer of timber as well as its management of sites for recreational use such as mountain biking, dog walking, rambling and concerts.

Outtakes of Brian will be released ahead of the film, made by Manchester-based

PHOTO COURTESY OF CREATIVE CONCERN

Blessed has branched out into new territory

communications agency Creative Concern, on social media. One clip includes Brian reciting a poem he wrote when he was eight years old about trees, of which he said: "It earned me a nine out of 10 from my teacher and a copy of *The Eagle* comic."

Blessed's appearance in the film can be seen on YouTube.

DETAILS:
Contact: Forestry Commission, England
Details: www.forestry.gov.uk/england

Gareth Neal in double celebration with George III 'extension' at New York show

PHOTOGRAPHS COURTESY OF GARETH NEAL

The George III extension

The latest addition to Gareth Neal's George range will be on show in New York in January.

The designer, whose studio is based in Dalston, London, will be exhibiting the piece in conjunction with US gallery Todd Merrill at the Winter Antiques Show.

"I'm really excited to reveal a new piece I've been working on for the past few months," said Neal. "The George Cabinet is an extension of the George III Chest, acquired by the V&A Museum in 2013, and is the largest piece of the range to date."

The design for the George III Chest, which hides the ghost of its past – a 1780s George III commode – was achieved through the combination of a computer-controlled routing machine, hand-carving techniques which see history, traditional craft and contemporary design merge.

The launch wasn't the only good news Neal received pre-Christmas. His VE-SEL collaboration with award-winning Iraqi-British architect Zaha Hadid won the 2015 'Wish List' project at the Wood Awards.

Hadid had commissioned Neal to create a bespoke design for something she had "always wanted but had never been able to find". The brief was simply "to create some form of tableware from wood."

The vessels were made in two parts on a CNC machine using American white oak. Known for its strength, it is a relatively heavy timber, with good machining properties. For Neal it has proved equally as successful in the awards stakes.

DETAILS:
When: 22–31 January, 2016
Where: Park Avenue Armory, New York, USA
Website: www.winterantiquesshow.com
Website: www.garethneal.co.uk

The award-winning collaboration VE-SEL

Charlie Whinney unveils courses for 2016

Cumbria-based studio Charlie Whinney has announced a raft of new courses for 2016, starting with a day's teaching course on 'How to use local wood' on 24 March.

Of the 11 short courses confirmed so far, topics covered include new green woodwork, beginners' steam bending, compression straps and hot laminating among others. There's also the fabulous opportunity to attend the 'Chair in a Day' course in June.

Numbers for the courses are strictly limited with a maximum of 10 people allowed on the studio's teaching days. The weekend workshops, meanwhile, require a minimum of five people to proceed.

Previous students have vouched for the tuition provided by Whinney, whose commissions include large-scale installations at the V&A museum in London. One Portuguese student who attended a 2015 steam-bending course, noted: "It was really inspiring. From the setting in Cumbria to witnessing first hand all these techniques. It demystified so many aspects of steam-bending for us. We came back [home] fully charged and focused into doing the bends we wanted to achieve and more, there were a few bending techniques and tips that really made the difference. It was also great to understand that we were on the right track."

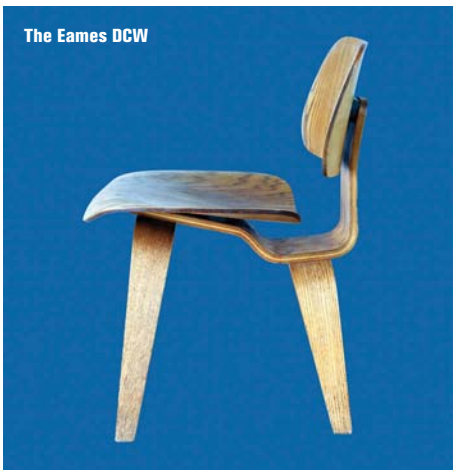
PHOTOGRAPH COURTESY OF CHARLIE WHINNEY STUDIO

The Studio's March 2016 courses are:

- How to use local wood on 24 March: how to source, process, dry and use local trees.
- New Green Woodwork on 25 March: steam-bending using freshly cut green wood.

DETAILS:
Contact: Charlie Whinney Studio
Where: Top Barn, Beck Head, Witherslack, Grange-Over-Sands, Cumbria, LA11 6SH.
Website: www.learnsteambending.com

MidCentury Modern comes to Dulwich



PINK FLAMINGOES AT MODERN SHOWS MARKETPLACE WWW.THEMODERNMARKETPLACE.COM

Scandi noir's become a regular term among TV fans of late with the advent of police series such as *The Killing* and *The Bridge*, but furniture connoisseurs have recognised the design value of European Bauhaus and French and German Industrial influences for decades.

Both groups, however, will find much to appeal at MidCentury Modern, which visits Dulwich College in London on Sunday 28 February, 2016. The exhibition promises "everything for the eclectic home from an original Cherner chair to a contemporary piece from a hot young British designer like the latest photographer for Apple, Kev Dutton, and his awesome graphic plant images on black backgrounds."

Over the past few years, Midcentury Modern and The Midcentury Show have built up a cult following of midcentury aficionados and design lovers from across the UK who gather one Sunday a few times a year to attend what has been described as an "inspiring museum-style pop up shop."

The event, held at at Erno Goldfinger's Haggerston School and Dulwich College, is acknowleged as an excellent place to source the latest furniture, wallpaper, ceramics, cushions, fabrics, art and glass.

DETAILS:
When: 28 February, 2016
Where: Dulwich College, London SE21 7LD
Details: modernshows.com

Top design brands head to Shanghai show

design SHANGHAI 设计上海

Some of the world's leading design firms have signalled their commitment to Design Shanghai, one of Asia's most prestigious shows.

The likes of Cassina, Vitra, Magis, Moroso, ibride, Seletti, Hay, Driade, Alessi, Artisan, Buzzi Space and Maxmarko are joining the growing Contemporary Design Hall exhibitor list for the event, which will be held at the Shanghai Exhibition Centre.

In 2015, the show welcomed 42,000 visitors to the four-day event. This included an exciting mix of never-seen-before designs from more than 300 participating brands and some of the world's top galleries. Visitors also saw a variety of installations and a comprehensve programme of events.

DETAILS:
When 9–12 March, 2016
Where: Shanghai Exhibition Centre, No. 1000 Yan'an Mid Road, Jing'an District, Shanghai 200040
Details: www.designshowshanghai.com

F&C UK

An open invitation for furniture makers to let us know what you're up to...

In the nick of time

Here at *F&C* UK we're always interested to find out what our fellow furniture-makers – be they hobbyists, students, professional studios or seasoned veterans – are up to. This month, thanks to a timely intervention by reader Paul Anderson, the Editor was happy to let us indulge in a spot of clock-watching...

It's not a pastime that's often encouraged by bosses, but when the *F&C* office received these images of two exquisite clocks, we couldn't help but stop and stare – and our Editor felt the same. The clocks' unassuming creator is Londoner Paul Anderson. A retired civil engineer, he and his wife Vas live in Jersey, where an adjoining cottage serves as his workshop.

"Making things, whether to my own designs or from plans and kits has been a passion from before starting school," he tells us. "My father was a keen DIY fan and had a fair selection of tools which he never discouraged me from trying out, generally when my mother was out.

"I spent a few months after school in an apprentice workshop which taught me some of the basics of using machine tools, but then I changed track and went on to college to study civil engineering. The only other formal training that I have had relevant to my hobby was a short course of evening classes on woodturning when I was working in London and a course on stained glass here in Jersey when I first retired."

Paul's wife isn't always as enamoured of his hobby, however. "To my wife's mounting horror, I rarely seem to be able to part with things that I have made," he admits. "We therefore have a house full of them. Apart from seven or eight clocks there is a dining table with chairs, a sideboard, various mirrors, a crib, display cabinets, model boats, etc., and a kit car in the garage. I do intersperse DIY projects to keep the peace!"

The 64-year-old's interest in clocks has really been in thinking up different ways of displaying the time. "I have almost exclusively used quartz movements to supply the motive power," he explains, "which does seem to be a bit of a cheat. The only real exception was a couple of years ago when I used a commercially available set of plans to make an entirely wooden, weight driven movement. I modified the design and incorporated it into a contemporary long-case clock.

"I don't prepare a detailed design beforehand and often don't know what the finished item will look like. They evolve, stage by stage. I did, however, have a definite source of inspiration for the 12-handed reel clock. On holiday, in June, we visited a clock museum in Germany. In a cabinet with no discernible information was a large gold pocket watch which was plain except for an arc of a window showing a minute scale with a single hour pointer.

PHOTOGRAPHS BY PAUL ANDERSON

I could not see how it worked and found it utterly intriguing. It became a bit of an obsession for the rest of the holiday to come up with a mechanism that would replicate it."

Surprisingly, Paul has a bit of a masochistic streak: "A particular, if somewhat perverse thrill, especially with the latest clocks is that the project has to be pretty far advanced before I know if it is going to work. There is a huge risk that so many moving parts will create more friction than the quartz movement can cope with. Luckily everything so far has worked, eventually. It's a great feeling when it does."

Both of Paul's recently completed clocks pictured here, which he is entering into the annual Jersey Arts & Crafts Eisteddfod in the spring, are driven by high torque quartz movements mounted in the base. The cabinets are constructed from ash (*Fraxinus excelsior*), while cold enamel is used on the time displays.

Meantime, Paul reveals that someone has already beaten him to a build suggested by his wife – a Jersey moo-moo clock. The Channel Island is, after all, famous for its cattle. Perhaps a Jersey Royal-themed timepiece instead…

Dragonfly clock

Vertical concentric shafts are driven by the quartz movement. Bevel gears on the hour and minute shafts drive horizontal shafts fitted with cams which in turn control the movement of the dragonfly hands. The seconds shaft is extended to rotate a small dragonfly in the top of the cabinet. The dragonflies are made from copper sheet and wire with cold enamel infill. Maple (*Acer saccharum*) and chestnut (*Castanea sativa*) are used for the face. The chestnut comes from a casualty of the great storm of 1987.

Twelve-handed reel clock

The hour shaft of the movement rotates the aluminium drum on the face via bevel gears. Each hour hand is connected to one of 12 small brass planetary pinion gears in the rim of the drum. Each pinion engages sequentially with a short arc of internal gear teeth as the drum rotates. This enables the current hour hand to indicate the minutes on the dial. Each hand other than the one indicating the current hour hangs freely. The frame supporting the dial is in maple.

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

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

PHOTOGRAPHS BY GMC/DEREK JONES

The other day in the workshop I was – quite rightly – accused of mission creep. To be fair, with four live projects on the go I couldn't really argue. So, have my project eyes finally become too big for my bench belly or am I just multi-tasking? I know which one I prefer. Seriously, it pays sometimes to have a couple of things on the go at the same time, because as one project reaches the gluing up stage another can be brought forward and so it goes.

All this means that at times things like clamps don't get much of a breather, especially when you're occupying a shared space. In a roundabout sort of way I'm preparing to pay homage to some of the workshop essentials that we take for granted. These items form the backbone of many a project and without them we'd be scuppered, so it pays to invest wisely for a future of uninterrupted workflow.

That said, the first item to which I'd like to draw your attention this month is one of the three big machines; a planer thicknesser. Axminster has been working hard in recent months to bring together a range of machines to cater for the serious hobbyist and the professional maker. It's unlikely that any part of these machines is truly unique to Axminster – in its defence that's not exactly unusual these days – but what I think you'll appreciate is the effort that's gone into speccing out each item in the range. In short you'll be able to cherry pick the machines in your 'shop according to your requirements, pick up the phone, haggle a bit and then order them from one outlet. It sounds obvious when you put it like that but I hear of so many stories where woodworkers hop around the internet shaving a few pounds off their bill here and there only to spend the next fortnight coordinating multiple delivery and installation schedules. There it is again, that uninterrupted workflow.

Someone who knows a lot about that is Shane Skelton from Skelton Saws. In 2015, he launched a range of handmade saws that have caught the attention of more than a few hand tool aficionados. His 15in sash saw – see opposite – is one of a handful of new products scheduled for release from the Yorkshire-based firm this year. Keep your eyes peeled for these, along with an article or two, in *F&C* in the months ahead.

I'll admit to being more than a bit late to the party when it comes to the output of Austrailian tool makers HNT Gordon. I clapped eyes on a few of its planes at the European Woodworking Show last year on David Barron's stand. The fillister featured opposite is a new line and towards the top of its range but there is plenty to tempt you further down the ranks if you hanker after some truly exotic timber and tradition.

My last hot pick this month is nowhere near as appealing in style or concept to any of the above. Unless you have a specific need for it, hide glue is almost universally sneered at by woodworkers. Personally, I think it's a stage we all have to go through, the equivalent of those rebellious teenage years perhaps. Now if I could show you a product and explain the benefits of using it, and why I think it would improve your game, you'd be all ears wouldn't you? Well, let's put that on the list for later but for now see over the page for La Colle, a new hide glue from the workshops of Yannick Chastang.

Axminster Planer Thicknessers

Whether you are an enthusiastic hobby user or a busy trade workshop, Axminster Tools & Machinery has a planer thicknesser that will easily cope with your woodworking needs. For hobby users, the new Axminster Hobby Series AH106PT is only a small step down from the old Trade Series model, while for trade workshops there is a choice of machines between the Axminster Trade Series AT107PT and AT129PT. The former model would also suit the very keen and ambitious hobby user.

15in Sash Saw

Skelton Saws' 15in sash saw has a beautifully crafted rosewood (*Dalbergia latifolia*) handle which is claimed to create deeper cuts in furniture joinery. A heavy brass back and a 0.025in tapered/canted blade enhances the saw's performance, allowing for the precision of a straight yet fast cut. With its beautiful curves and excellent balance, Skelton Saws claims the Sash Saw complements both the Skelton Dovetail and Carcass Saw in its appearance. Just a couple of the saw's features include: a canted blade 3-5/16in at heel to 3in at toe; .004in set per side; 30° handle hand; closed rosewood handle size M-L, though other sizes can be custom made; a rip cut at 12ppi/11tpi–8° rake angle; and a crosscut sat 13ppi/12tpi–12° Rake Angle/15° Fleam.

Moving Fillister plane with TS blade

The Moving Fillister plane from H.N.T. Gordon and Co. is 267mm long with a 43mm width of cit. The plane includes a fully adjustable blade, depthstop, nicker and fence. The depthstop and fence have mm scale, so no ruler is required to set depth and width of fence to make a precise rebate.

H.N.T. Gordon and Co. also makes imperial scale planes for those who prefer it. It comes with an 01 TS blade, with a 60° blade pitch with a 20° skew, which creates a smooth finish across the grain or with the grain in cranky wood. The nicker blade is M2 HSS. The Moving Fillister plane is also available using ringed gidgee (*Acacia cambagei*) and bull oak (*Allocasuarina luehmannii*) and ebony (*Diospyros spp.*) for the handles.

CTL SYS mobile dust extractor

The CTL SYS mobile dust extractor from Festool is a small, lightweight and compact extractor in a SYSTAINER format for maximum mobility. The extractor can be transported using either the handle or shoulder strap, meaning it's at hand in an instant. The CTL SYS mobile dust extractor is compatible with T-LOC in a SYSTAINER system for optimum workplace organisation. For dust with limit values > 1 mg/m³, the extractor is ideal for final clean-up.

£300

£36

Damascus Steel Billets

From Workshop Heaven, these Damascus steel billets can either be ground directly – stock removal method – reforged, machined or cut and filed into shape, supplied in the annealed condition and ready to work with. With careful heat treatment and honing this material will take and hold an acceptable edge. Heat treatment guidelines: Harden from 900°C, quench in oil, temper at 200°C.

La Colle

The new high-quality general purpose protein glue by Yannick Chastang is ideal for gluing joints and veneer. La Colle is a superior glue of higher quality than commonly sold hide glue, pearl glue or bone glue. This high-grade protein glue is a mix of various grades of hide glues and bone glues that have been carefully selected for their excellent quality, strength and flexibility. La Colle is a marriage of traditional materials and techniques refined using the latest hydrolysis technology together with Yannick Chastang's understanding of what makes perfect glue.

£39.99

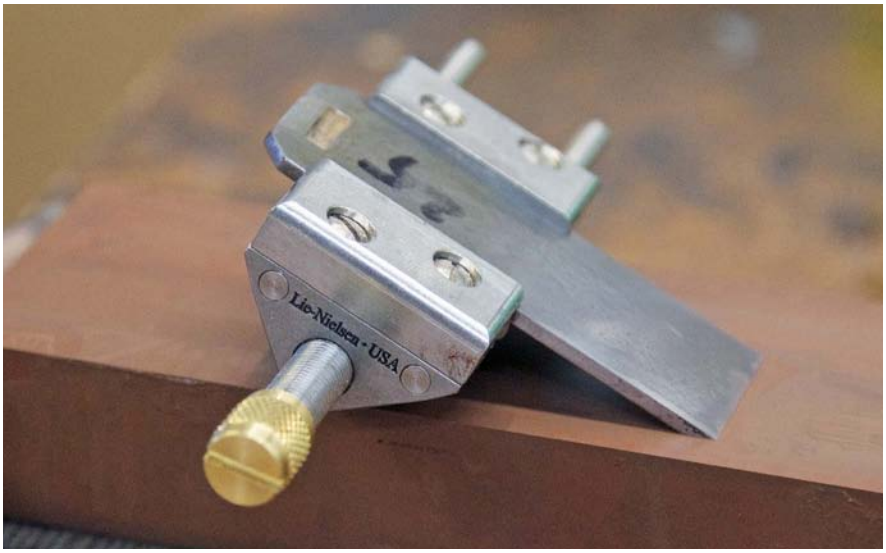
£8.40

Naniwa sharpening stone

The Naniwa sharpening stone is a unique new Japanese waterstone from Naniwa. It has upgraded their process to make the old Super Stones even better. The tighter controls of grit particle size far exceeds the old standards employed by Naniwa resulting in a stone that has superior uniformity and therefore cuts more smoothly and cleanly than any previously available Naniwa stone.

Like all Waterstones, these stones require water. Unlike traditional Japanese stones, however, these do not require soaking ahead of time. To use these new stones simply apply a little water to the surface and you're ready to sharpen.

MINI TEST: Lie-Nielsen Honing Guide



PHOTOGRAPHS BY ANTON GERNER

Over the years I have tried most of the honing guides on the market and have never really been happy with any of them, both in terms of build quality and function. The new Lie-Nielsen honing guide addresses both these issues and in my view is now the best available.

Based on the old Eclipse honing guide, this is a side-clamping guide, which I prefer as I find it holds the blades better and offers more control over squareness. Made from stainless steel, with a bronze bearing, this is a serious tool which is very well machined and thought out.

One of the main features of the Lie-Nielsen honing guide is the removable jaws that are designed to hold different types of blades. The standard one that comes with the jig is designed for most plane blades and most chisels, with optional jaws available for narrow chisels, mortise chisels, very short blades and for skew blades. Lie-Nielsen says the guide is designed to hold its own blades, however I've used it with Sorby bevel edge chisels and Japanese chisels with no problem.

During use I found the guide sits on the stone well, with no play in the roller at all. Due to the low profile it's easy to hold and use. The fine thread pitch on the blade tightening screw only needs to be finger tight to clamp the blade well. There is a screwdriver slot should you wish to really tighten it, although I haven't had it come loose yet. At first I thought the long rods – which allow clamping up to a 3in blade – would make the tool unbalanced, but I was wrong. It's very well balanced indeed. Although the jig is made from stainless steel and shouldn't rust, I wash mine after use and then blow it dry with the compressed air gun.

What I like most about the Lie-Nielsen honing guide is that it is a one-piece guide that is fast and simple to set up, with no fiddly bits. Simplicity is the key; with the amount the blade protrudes from the guide determining the bevel angle and simple shop made set blocks help to quickly achieve this. *Anton Gerner*

Contacts

15in Sash Saw
Contact: Skelton Saws
Tel: 01723 448202
Web: skeltonsaws.co.uk

Axminster Planer Thicknessers
Contact: Axminster Tools & Machinery
Tel: 03332 406 406
Web: www.axminster.co.uk

CTL SYS mobile dust extractor
Contact: Festool
Tel: 01284 760 791
Web: www.festool.co.uk

Damascus Steel Billets
Contact: Workshop Heaven
Tel: 01295 678941
Web: www.workshopheaven.com

Flexcut knife strop
Contact: Brimarc
Tel: 03332 406967
Web: www.brimarc.com

La Colle
Contact: The Marquetry Centre
Tel: 01795 228252
Web: www.marquetrycentre.com

Lie-Nielsen Honing Guide
Contact: Classic Handtools
Tel: 01473 784983
Web: www.classichandtools.com

Moving Fillister Plane with TS blade
Contact: H.N.T. Gordon and Co. Classic Plane Makers of Australia
Tel: 612 6628 7222
Web: www.hntgordon.com.au

Naniwa sharpening stone
Contact: Johnson Tools
Web: www.johnsontools.co.uk

Flexcut knife strop

Although Flexcut call this a knife strop, it can also be used for other edge tools. If a blade has already been honed, it will benefit from stropping to polish the steel further and give extra sharpness. Regular stropping of a blade means less honing, saving time and effort. It comes with a block of Flexcut Gold

Machine Mart

NOW 65 SUPERSTORES NATIONWIDE

WHERE QUALITY COSTS LESS

Clarke 4" BELT/ 6" DISC SANDER

CS4-6D

- Dust extraction facility
- 4" x 36" belt tilts & locks 0-90°
- 225mm x 160mm table, tilts 0-90°
- 370w, 230v motor

£84.99 EX.VAT £101.99 INC.VAT

Clarke 6" BELT/ 9" DISC SANDER

- Includes stand
- 1 Hp/ 230v/ 1ph motor

CS6-9C

£209.00 EX.VAT £250.80 INC.VAT

NEW 4" BELT/ 8" DISC SANDER

CS4-8

- Includes two tables
- 550w 230v motor.

£139.98 EX.VAT £167.98 INC.VAT

Clarke RANDOM ORBITAL SANDER

CROS1

£29.98 EX.VAT £35.98 INC.VAT

- For sanding & polishing
- 125mm diameter sanding discs
- 4000-11000 opm

INC 5 DISCS

Clarke ELECTRIC POWER FILE

CPF13

- Variable belt speed
- Tilting head

FROM ONLY £44.99 EX.VAT £53.99 INC.VAT

*Black & Decker

MODEL	MOTOR	EXC.VAT	INC.VAT
CPF13	400W/230V	£44.99	£53.99
KA900E*	350W/230V	£49.98	£59.98

Clarke DISC SANDER (305MM)

- Powerful, bench mounted disc sander
- 900W
- No load disc speed: 1490rpm
- 305mm Disc Dia. (1 x 60 grit sanding disc included)
- Dimensions (LWH): 440x437 x386mm

CDS300B

£119.98 EX.VAT £143.98 INC.VAT

Clarke SHEET SANDERS

CON300

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

*110V in stock

MODEL	SHEET SIZE	MOTOR	EXC.VAT	INC.VAT
COS200	190X90mm	150W	£13.99	£16.79
CON300	230X115mm	330W	£32.99	£39.59
Makita BO455*	112X102mm	200W	£54.99	£65.99

Clarke QUALITY CAST IRON STOVES

OVER 20 GREAT STYLES IN STOCK

LARGE & XL MODELS IN STOCK

11.8kW BARREL £209.00 EX.VAT £250.80 INC.VAT

£89.98 EX.VAT £107.98 INC.VAT

6.9kW POT BELLY

6kW £249.00 EX.VAT £298.80 INC.VAT

FLUES, COWLS & ACCESSORIES IN STOCK

BUCKINGHAM

VAC KING WET & DRY VACUUM CLEANERS

FROM ONLY £47.99 EX.VAT £57.59 INC.VAT

- Compact, high performance wet & dry vacuum cleaners for use around the home, workshop, garage etc.

* SS = Stainless Steel

MODEL	MOTOR	CAPACITY WET/DRY	EXC. VAT	INC. VAT
CVAC20P	1250W	16/12ltr	£47.99	£57.59
CVAC20SS*	1400W	16/12ltr	£59.98	£71.98
CVAC25SS*	1400W	19/17ltr	£64.99	£77.99
CVAC30SSR*	1400W	24/21ltr	£86.99	£104.39

Clarke ELECTRIC HEATERS

Honeywell

Huge range of quality electric models – From DIY, trade to Industrial

CZ-2104

FROM ONLY £39.98 EX.VAT £47.98 INC.VAT

DEVIL7003

MODEL	VOLTAGE	HEAT OUTPUT KW	EXC.VAT	INC.VAT
CZ-2104	230v	2.5	£39.98	£47.98
DEVIL 6002	230V	0.7-2	£39.98	£47.98
DEVIL 6003	230V	1.5-3	£49.98	£59.98
DEVIL 7003	230V	3	£54.99	£65.99
DEVIL 6005	400V	2.5-5	£74.99	£89.99
DEVIL 7005	400V	5	£79.98	£95.98
DEVIL 6009*	400V	4.5-9	£119.00	£142.80
DEVIL 7009	400V	9	£137.99	£165.59
DEVIL 6015‡	400V	5-10-15	£179.00	£214.80

*was £155.98 inc.VAT ‡was £227.98 inc.VAT

Clarke BANDSAWS

NEW RANGE

Top Quality Bandsaws - ideal for professional workshop use. Strong steel body with solid cast iron table featuring induction motors

- Table tilts 45°
- Adjustable blade guide
- Supplied with 4 TPI wood cutting blade, rip fence, mitre guide and push stick

MAGNIFIED MITRE GUIDE

BLADE TENSIONING CONTROL

FLEXIBLE LED WORKLIGHT

SOLID GROUND CAST IRON TABLE

CBS300

QUICK RELEASE FENCE

DRIVE-BELT TENSIONING

CBS350

MULTI-STEP DUST EXTRACTION OUTLET

REMOVABLE DUST TRAY

ONLY £349.98 EX.VAT £419.98 INC.VAT

ONLY £449.00 EX.VAT £538.80 INC.VAT

MODEL	THROAT DEPTH	MAX CUT 90°	MAX CUT 45°	EXC.VAT	INC.VAT
CBS300	305mm/12"	165mm	115mm	£349.98	£419.98
CBS350	340mm/14"	225mm	160mm	£449.00	£538.80

Clarke STAPLE/ NAIL GUNS

- All models include nail/staple pack and tough moulded case

FROM ONLY £19.98 EX.VAT £23.98 INC.VAT

LITHIUM-ION

CONSN118LI

SPARE NAILS / STAPLES IN STOCK

ELECTRIC AND CORDLESS MODELS IN STOCK

MODEL	TYPE	STAPLE/NAIL GAUGE	EXC. VAT	INC. VAT
CESNG1	Electric	22/18	£19.98	£23.98
CCT48	Cordless 4.8v Ni-MH	22/18	£29.98	£35.98
CESNG2	Electric	18/18	£39.98	£47.98
CONSN18Li	Cordless 18v Lithium-Ion	18/18	£109.98	£131.98

Clarke CONTRACTOR BELT SANDERS

Clarke • Ideal for surface removal, sanding and finishing

Makita ABRASIVE SANDING BELTS IN STOCK

BS1

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

MODEL	WATT	M/MIN	EXC.VAT	INC.VAT
Clarke BS1	900W	380	£29.98	£35.98
Clarke CBS2	1200W	480	£69.98	£83.98
Makita 9911	650W	75-270	£94.99	£113.99

Clarke STATIC PHASE CONVERTERS

PC60

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

PRICE CUT NOW FROM £209.00 EX.VAT £250.80 INC.VAT WAS £382.80 inc.VAT

ROTARY PHASE CONVERTERS ALSO AVAILABLE

CONVERT 230V 1PH TO 400V 3PH

‡ was £274.80 inc.VAT
# was £322.80 inc.VAT
† was £382.80 inc.VAT

MODEL	MAX. MOTOR HP	FUSE	EXC.VAT	INC.VAT
PC20‡	2HP	10Amps	£209.00	£250.80
PC40#	3.5HP	20Amps	£249.00	£298.80
PC60 †	5.5HP	32Amps	£299.00	£358.80

Clarke POWER PLANERS

BLACK & DECKER

FROM ONLY £23.99 EX.VAT £28.79 INC.VAT

- 82mm cutting width

CEP1

MODEL	INPUT POWER	DEPTH OF CUT	EXC.VAT	INC.VAT
Clarke CEP1	650W	2mm	£23.99	£28.79
Einhell RT-PL82	850W	3mm	£49.98	£59.98
B&D KW750K - GB	750W	2mm	£57.99	£69.59

Clarke TABLE SAWS

CLK3 LEG STAND KIT FOR CTS10D - £29.99 INC VAT. LEG STAND KIT FOR CTS11 - £27.59 INC VAT

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

CTS10D

INCLUDES LEFT & RIGHT TABLE EXTENSION

*Moulded base

MODEL	MOTOR	BLADE	EXC.VAT	INC.VAT
CTS800B	600w	200mm	£69.98	£83.98
CTS11*	1500w	254mm	£139.98	£167.98
CTS10D	1500w	254mm	£159.98	£191.98

Clarke TABLE SAW WITH EXTENSION TABLES (250mm)

CTS14

- Ideal for cross cutting, ripping, angle and mitre cutting
- Easy release /locking mechanism for table extensions
- 0-45° tilting blade
- Cutting depth: 72mm at 90° / 65mm at 45°
- 230V/50Hz, Motor: 1800W,

£119.98 EX.VAT £143.98 INC.VAT

Shown with optional leg kit CLK5 £22.99 exc.VAT £27.59 inc.VAT

EVOLUTION 255mm MULTI-PURPOSE TABLE SAWS

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

MODEL	MAX DEPTH CUT 45°	MAX DEPTH CUT 90°	TABLE SIZE (mm)	EXC. VAT	INC. VAT
FURY5*	54mm	73mm	625x444	£149.98	£179.98
RAGE5‡	55mm	79mm	868x444	£269.00	£322.80

*FURY power: 1500w (110V available)
‡RAGE power: 1800w/230V (110V available)
table extensions included

Clarke CIRCULAR SAWS

- Great range of DIY and professional saws
- Ideal for bevel cutting (0-45°)

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

CON185

*Includes laser guide

MODEL	MOTOR	MAX CUT 90/45 (mm)	EXC.VAT	INC.VAT
CCS185B	1200W	65/44	£34.99	£41.99
CON185*#	1600W	60/40	£56.99	£68.39
CCS2	1300W	60/45	£59.98	£71.98

was £71.98 inc.VAT

Clarke MULTI FUNCTION TOOL WITH ACCESSORY KIT

- Great for sawing, cutting, sanding, polishing, chiselling & much more
- 250w motor
- Variable speed

£36.99 EX.VAT £44.39 INC.VAT

CMFT250

Clarke BOLTLESS SHELVING BENCHES

- Simple fast assembly in minutes using only a hammer

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

SAVE 10% WHEN YOU BUY ANY MIX OF 5 FROM THIS RANGE SAVE AT LEAST £17.99 INC.VAT

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

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

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

ALSO EXTRA WIDE INDUSTRIAL UNITS AVAILABLE

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

Clarke PLANERS & THICKNESSERS

CPT800

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

FROM ONLY £169.98 EX.VAT £203.98 INC.VAT

MODEL	MOTOR	MAX THICK. CAPACITY	EXC. VAT	INC. VAT
CPT600	1250W	120mm	£169.98	£203.98
CPT800	1250W	120mm	£199.98	£239.98
CPT1000 NEW	1500W	120mm	£269.98	£323.98

Clarke OSCILLATING BOBBIN SANDER

Provides exceptional finishes for deep & wide work pieces, front edges & narrow inner curves

- Dust collection port
- Inc. 5 sanding sleeves/ bobbins
- 330mm table height

COBS1

ONLY £119.98 EX.VAT £143.98 INC.VAT

NEW

24664LH

Clarke MORTISING MACHINE CBM1B

£149.98 EXC.VAT £179.98 INC.VAT

- Accurately creates deep square recesses
- Table size 150 x 340mm
- Maximum chisel cap.76mm
- Robust cast iron base & column ensures stability & accuracy
- 95mm depth of cut

"It is fast and accurate with a good solid feel...Excellent value for money, I'm really pleased with it." See www.machinemart.co.uk

CHISELS AVAILABLE FROM £6.99 EX VAT £8.39 INC VAT

FOR OVER 15,000 PRODUCTS INCLUDING NEW Xtra WOODWORKING MACHINES visit machinemart.co.uk

FREE 500 PAGE CATALOGUE

1100 PRICE CUTS & NEW PRODUCTS

GET YOUR FREE COPY NOW!

- IN-STORE
- ONLINE
- PHONE

0844 880 1265

Clarke WOODWORKING VICES

FROM ONLY £13.49 EX.VAT £16.19 INC.VAT

Record WV7

MODEL	MOUNTING	JAW (WIDTH/OPENING /DEPTH)mm	EXC.VAT	INC.VAT
Clarke CHT152	Bolted	150/152/61	£13.49	£16.19
Stanley Multi Angle	Clamped	72/60/40	£16.99	£20.39
Record V75B	Clamped	75/50/32	£19.98	£23.98
Clarke WV7	Bolted	180/205/78	£24.99	£29.99

Clarke 10" SLIDING COMPOUND MITRE SAW

- For fast, accurate cross, bevel & mitre cutting in most hard & soft woods
- 1800W motor
- Laser guide

£129.98 EXC.VAT £155.98 INC.VAT

CMS10S2

Clarke MITRE SAW STAND

CFMSS1

- Suitable for most sizes/makes of saw
- Inc. outriggers & rollers

£64.99 EXC.VAT £77.99 INC.VAT

NEW FOLDING MITRE SAW STAND IN STOCK – CONMW1 ONLY £119.98 INC VAT

MITRE SAWS

Makita

FROM ONLY £56.99 EX.VAT £68.39 INC.VAT

TH-SM 2534

- Quality Range of Mitre saws and blades available

MODEL	BLADE DIA	BORE (mm)	MAX CUT DEPTH/CROSS	EXC. VAT	INC. VAT
Einhell TH-MS 2112	210/30	55/120mm		£56.99	£68.39
Fury 3	210/25.4	60/220mm		£119.98	£143.98
Einhell TH-SM2534	250/30	75/340mm		£159.98	£191.98
Makita LS1040	260/30	95/130mm		£199.98	£239.98

Clarke DUST EXTRACTOR/ CHIP COLLECTORS

£129.98 EXC.VAT £155.98 INC.VAT

METABO ALSO AVAILABLE

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

MODEL	MOTOR	FLOW RATE	BAG CAP.	EXC.VAT	INC.VAT
CDE35B	750W	850 M3/h	56Ltrs	£129.98	£155.98
CDE7B	750W	850 M3/h	114Ltrs	£149.98	£179.98

Clarke CORDLESS DRILL/ DRIVERS

BOSCH Power Tools

Clarke CONTRACTOR

CON18Li

PSR18

FROM ONLY £36.99 EX.VAT £44.39 INC.VAT

* was £77.99 inc.VAT

MODEL	VOLTS	BATTS	EXC. VAT	INC.VAT
CCD180	18V	1	£36.99	£44.39
CDD240	24V	1	£39.98	£47.98
Bosch PSR18	18V	1	£54.99	£65.99
CON18Ni*	18V	2 x Ni-Cd	£59.98	£71.98
CON18Li	18V	2 x Li-Ion	£84.99	£101.99

airmaster TURBO AIR COMPRESSORS

FROM ONLY £79.98 EX.VAT £95.98 INC.VAT

8/250

HUGE RANGE OF AIR TOOLS IN STOCK

- Superb range ideal for DIY, hobby & semi-professional use * V-Twin

MODEL	MOTOR	CFM	TANK	EXC.VAT	INC.VAT
Tiger 8/250	2HP	7.5	24ltr	£79.98	£95.98
Tiger 7/250	2 HP	7	24ltr	£89.98	£107.98
Tiger 11/250	2.5HP	9.5	24ltr	£119.98	£143.98
Tiger 8/510	2HP	7.5	50ltr	£129.98	£155.98
Tiger 11/510	2.5HP	9.5	50ltr	£149.98	£179.98
Tiger 16/510*	3 HP	14.5	50ltr	£219.98	£263.98
Tiger 16/1010*	3 HP	14.5	100ltr	£269.98	£323.98

Clarke DOVETAIL JIG

- Simple, easy to set up & use for producing a variety of joints
- Cuts work pieces with a thickness of 8-32mm
- Includes a 1/2" comb template guide & holes for bench mounting

PRICE CUT £49.98 EXC.VAT £59.98 INC.VAT WAS £65.99 INC.VAT

CDTJ12 Router not included

Clarke ROTARY TOOL KIT

CRT40

£29.98 EXC.VAT £35.98 INC.VAT

Kit includes:

- Height adjustable stand with clamp
- Rotary tool
- 1m flexible drive
- 40x accessories/consumables

Clarke 5PCE FORSTNER BIT SET

- Contains 15, 20, 25, 30 & 35mm bits
- Titanium nitride coated for improved cutting finish

£9.98 EXC.VAT £11.98 INC.VAT

CHT365

Clarke PORTABLE THICKNESSER

- Max thickness capacity 130mm
- Planing depths adjustable from 0-2.5mm
- Powerful 1250W motor
- 8000rpm no-load speed

£189.98 EXC.VAT £227.98 INC.VAT

CPT250

Clarke 6" BENCH GRINDER WITH SANDING BELT

- For sanding/shaping wood, plastic & metal
- Supplied with coarse grinding wheel & sanding belt

£49.98 EXC.VAT £59.98 INC.VAT

CBG6SB

Clarke BENCH GRINDERS & STANDS

- Stands come complete with bolt mountings and feet anchor holes

6" & 8" AVAILABLE WITH LIGHT

STAND AVAILABLE FROM ONLY £39.98 EX.VAT £47.98 INC.VAT

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

CBG8W features 8" whetstone & 6"drystone.

With sanding belt

MODEL	DUTY	WHEEL DIA.	EXC.VAT	INC.VAT
CBG6RP	DIY	150mm	£29.98	£35.98
CBG6RZ	PRO	150mm	£39.98	£47.98
CBG6RSC	HD	150mm	£49.98	£59.98
CBG6SB#	PRO	150mm	£49.98	£59.98
CBG6RWC	HD	150mm	£54.99	£65.99
CBG8W (wet)	HD	150/200mm	£55.99	£67.19

Clarke HARDWOOD WORKBENCH

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

CHB1500

£129.98 EXC.VAT £155.98 INC.VAT

Clarke BOSCH Power Tools JIGSAWS

FROM ONLY £12.99 EX.VAT £15.59 INC.VAT

*DIY #Professional ‡ was £59.98 inc.VAT

CJS380

MODEL	POWER (W)	DEPTH OF CUT (WOOD/STEEL)	EXC. VAT	INC VAT
Clarke CJS380*	420W	55/6mm	£12.99	£15.59
Clarke CON750#	750W	80/10mm	£24.99	£29.99
Bosch PST700E*‡	500W	70/4mm	£44.99	£53.99
B & D KSTR8K-GB#	600W	85/5mm	£66.99	£80.39

Clarke SCROLL SAWS

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

- 120w, 230v motor
- 50mm max cut thickness
- 400-1,700rpm variable speed
- Air-blower removes dust from cutting area

CSS16V

MODEL	MOTOR	SPEED RPM	EXC. VAT	INC. VAT
CSS400B	85W	1450	£69.98	£83.98
CSS16V	120W	400-1700	£79.98	£95.98
CSS400C*	90W	550-1600	£99.98	£119.98

* Includes flexible drive kit for grinding/polishing/sanding

Clarke CONTRACTOR CR2 ROUTER

£109.98 EXC.VAT £131.98 INC.VAT

- Powerful heavy duty machine ideal for trade use
- Variable speed control from 7,400-21, 600 rpm
- 2100W motor
- 0-60mm plunge depth.

INCLUDES 15 PIECE SET WORTH OVER £20

Clarke DRILL PRESSES

CDP5EB

CDS3

Clarke DRILL STANDS

ONLY £19.98 EX.VAT £23.98 INC.VAT

ONLY £59.98 EX.VAT £71.98 INC.VAT

Drill not included

Clarke 13" MINI WOOD LATHE

£134.99 EX.VAT £161.39 INC.VAT

CWL325V

- Ideal for enthusiasts/ hobbyists with small workshops
- 325mm distance between centres
- 200mm max. turning capacity (dia)
- 0.2HP motor

Clarke ROUTERS

BOSCH

CR1C

FROM ONLY £39.98 EX.VAT £47.98 INC.VAT

ACCESSORIES IN STOCK

*DIY

MODEL	MOTOR (W)	PLUNGE (mm)	EXC.VAT	INC.VAT
CR1C*	1200	0-50	£39.98	£47.98
Bosch POF1400ACE	1400	0-55	£79.98	£95.98

Clarke ROUTER TABLE

CRT-1

Router not included

BEST SELLER

- Converts your router into a stationary router table
- Suitable for most routers (up to 155mm dia. Base plate)

£59.98 EX.VAT £71.98 INC.VAT

BISCUIT JOINTER

- 860W Motor
- 11000rpm Operating Speed
- 14mm Cutting Depth

BJ900

£49.98 EX.VAT £59.98 INC.VAT

VISIT YOUR LOCAL SUPERSTORE

OPEN MON-FRI 8.30-6.00, SAT 8.30-5.30, SUN 10.00-4.00

BARNSLEY Pontefract Rd, Barnsley, S71 1EZ	01226 732297	**EXETER** 16 Trusham Rd. EX2 8QG	01392 256 744
B'HAM GREAT BARR 4 Birmingham Rd.	0121 358 7977	**GATESHEAD** 50 Lobley Hill Rd. NE8 4YJ	0191 493 2520
B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills	0121 7713433	**GLASGOW** 280 Gt Western Rd. G4 9EJ	0141 332 9231
BOLTON 1 Thynne St. BL3 6BD	01204 365799	**GLOUCESTER** 221A Barton St. GL1 4HY	01452 417 948
BRADFORD 105-107 Manningham Lane. BD1 3BN	01274 390962	**GRIMSBY ELLIS WAY,** DN32 9BD	01472 354435
BRIGHTON 123 Lewes Rd, BN2 3QB	01273 915999	**HULL** 8-10 Holderness Rd. HU9 1EG	01482 223161
BRISTOL 1-3 Church Rd, Lawrence Hill. BS5 9JJ	0117 935 1060	**ILFORD** 746-748 Eastern Ave. IG2 7HU	0208 518 4286
BURTON UPON TRENT 12a Lichfield St. DE14 3QZ	01283 564 708	**IPSWICH** Unit 1 Ipswich Trade Centre, Commercial Road	01473 221253
CAMBRIDGE 181-183 Histon Road, Cambridge. CB4 3HL	01223 322675	**LEEDS** 227-229 Kirkstall Rd. LS4 2AS	0113 231 0400
CARDIFF 44-46 City Rd. CF24 3DN	029 2046 5424	**LEICESTER** 69 Melton Rd. LE4 6PN	0116 261 0688
CARLISLE 85 London Rd. CA1 2LG	01228 591666	**LINCOLN** Unit 5. The Pelham Centre. LN5 8HG	01522 543 036
CHELTENHAM 84 Fairview Road. GL52 2EH	01242 514 402	**LIVERPOOL** 80-88 London Rd. L3 5NF	0151 709 4484
CHESTER 43-45 St. James Street. CH1 3EY	01244 311258	**LONDON CATFORD** 289/291 Southend Lane SE6 3RS	0208 695 5684
COLCHESTER 4 North Station Rd. CO1 1RE	01206 762831	**LONDON** 6 Kendal Parade, Edmonton N18	020 8803 0861
COVENTRY Bishop St. CV1 1HT	024 7622 4227	**LONDON** 503-507 Lea Bridge Rd. Leyton, E10	020 8558 8284
CROYDON 423-427 Brighton Rd, Sth Croydon	020 8763 0640	**LONDON** 100 The Highway, Docklands	020 7488 2129
DARLINGTON 214 Northgate. DL1 1RB	01325 380 841	**LUTON** Unit 1, 326 Dunstable Rd, Luton LU4 8JS	01582 728 063
DEAL (KENT) 182-186 High St. CT14 6BQ	01304 373 434	**MAIDSTONE** 57 Upper Stone St. ME15 6HE	01622 769 572
DERBY Derwent St. DE1 2ED	01332 290 931	**MANCHESTER ALTRINCHAM** 71 Manchester Rd. Altrincham	0161 9412 666
DONCASTER Wheatley Hall Road	01302 245 999	**MANCHESTER CENTRAL** 209 Bury New Road M8 8DU	0161 241 1851
DUNDEE 24-26 Trades Lane. DD1 3ET	01382 225 140	**MANCHESTER OPENSHAW** Unit 5, Tower Mill, Ashton Old Rd	0161 223 8376
EDINBURGH 163-171 Piersfield Terrace	0131 659 5919	**MANSFIELD** 169 Chesterfield Rd. South	01623 622160
		MIDDLESBROUGH Mandale Triangle, Thornaby	01642 677881
		NORWICH 282a Heigham St. NR2 4LZ	01603 766402
		NOTTINGHAM 211 Lower Parliament St.	0115 956 1811
		PETERBOROUGH 417 Lincoln Rd. Millfield	01733 311770
		PLYMOUTH 58-64 Embankment Rd. PL4 9HY	01752 254050
		POOLE 137-139 Bournemouth Rd. Parkstone	01202 717913
		PORTSMOUTH 277-283 Copnor Rd. Copnor	023 9265 4777
		PRESTON 53 Blackpool Rd. PR2 6BU	01772 703263
		SHEFFIELD 453 London Rd. Heeley. S2 4HJ	0114 258 0831
		SIDCUP 13 Blackfen Parade, Blackfen Rd	0208 3042069
		SOUTHAMPTON 516-518 Portswood Rd.	023 8055 7788
		SOUTHEND 1139-1141 London Rd. Leigh on Sea	01702 483 742
		STOKE-ON-TRENT 382-396 Waterloo Rd. Hanley	01782 287321
		SUNDERLAND 13-15 Ryhope Rd. Grangetown	0191 510 8773
		SWANSEA 7 Samlet Rd. Llansamlet. SA7 9AG	01792 792969
		SWINDON 21 Victoria Rd. SN1 3AW	01793 491717
		TWICKENHAM 83-85 Heath Rd.TW1 4AW	020 8892 9117
		WARRINGTON Unit 3, Hawley's Trade Pk.	01925 630 937
		WIGAN 2 Harrison Street, WN5 9AU	01942 323 785
		WOLVERHAMPTON Parkfield Rd. Bilston	01902 494186
		WORCESTER 48a Upper Tything. WR1 1JZ	01905 723451

OPEN 7 DAYS

4 EASY WAYS TO BUY...

IN-STORE 65 SUPERSTORES

ONLINE www.machinemart.co.uk

MAIL ORDER 0115 956 5555

CLICK & COLLECT

PHOTOGRAPHS BY RON HOCK

Would the real Iron Man please step forward

Ron Hock looks back on his previous career and tells Anne Briggs Bohnett how he eventually managed to cut it as a tool maker in the 21st century

Over the past few years, I've had the incredible privilege of getting to know Ron and Linda of Hock Tools. I've long used their replacement blades in my vintage Stanley planes and thought Ron would be the perfect person to kick off my new series of candid profiles for *Furniture & Cabinetmaking*. Cue a string of emails, over which I was able to conduct a virtual 'sit-down interview' with Mr Hock. Here's what he told me…

Going solo

"I do not consider myself an artist or a craftsman. I am a manufacturer. Oh, I guess I was a craftsperson way back when I was making knives one at a time in my little shop in the backyard. I exhibited them at crafts fairs. You may notice I said 'exhibited them' at crafts fairs instead of 'sold them' at crafts fairs, though I did sell a few…

As you know, it has never been easy for non-represented crafters to go it on their own. But being a craftsperson in the pre-internet world was even more difficult than it is today. There were only four basic ways – not including opening your own storefront – to get the word out. First, direct mail, which meant building or buying a mailing

... to being a large-scale blade manufacturer. Anne, like thousands of woodworkers, opts for a Hock blade to upgrade their favourite Bailey or Bedrock plane

list and included the costs of printing and mailing. Second, buying an ad in a magazine, though this was expensive then, just as it is now. Both of the above raise the question of 'what do I show in the mailer or ad?'. Most craftspeople I know make something new and wonderful each time. Mailers and ads can only show a few pieces at a time and those pieces may or may not be available for purchase.

The third method? Much like today, there were craft fairs. As helpful as the American Craft Council Fairs were – juried and broad-based so that lots of people came to exhibits of pre-selected fine crafts – unless you hit the big time with a large reseller, they did not alleviate the other relentless and expensive marketing struggles. For me, I just burned out on the whole craft fair thing.

The fourth way to sell was gallery consignments, wherein you got to store your inventory in someone else's display case until it sold, or they gave it back because it had rusty fingerprints on it from improper care. Consigning specialty knives held too many problems and basically an unsold knife was not sellable once returned, so I came to distrust the consignment model and still believe it to be a cruel and exploitative business model that should be illegal. A bit like hiring unpaid interns.

Then came the internet, which has become a part of our daily lives. Worldwide exposure to millions of potential customers for nearly free. Our blades found a niche on the internet and sales more than doubled right away just by having a website. And I'm going back to the mid-1990s!

Social media now keeps us connected with our clientele, existing and potential. The whole marketing business is much more fun with the internet. Our current ability to reach out to an international market with so little effort would have seemed like a dream 'way back when'. This revolution in self-marketing is particularly apparent with the 'maker movement'. The internet allows independent crafters to sell their wares without involving galleries or crafts fairs or expensive mailing lists. An appealing website, an occasional blog post and an email newsletter keep you at the front of mind for your growing list of customers. Digital photography and desktop publishing make professional presentations possible with minimal expense, effort or learning curve. This is an unprecedented time: break the bottle over the bow and launch your craft!

"It's a cruel and exploitative business model that should be illegal"

Opportunity knocks

The College of the Redwoods Fine Woodworking Program had been up and running less than a year when one of James Krenov's instructors, along with one of the students, first showed up at my shop in 1981 asking for blades for these wooden planes they were making. I was doggedly pursuing my knife-making dream and didn't want to confuse myself with something I understood so little, so I was reluctant to oblige. I was eventually talked into making a test batch. Then another. This dipping of my toe into the pond was met with considerable enthusiasm and I was lucky enough to see an opportunity in the unsatisfied demand! By the way, this was about the same time Thomas Lie-Nielsen was putting on his big-boy pants, *Fine Woodworking* – the only national woodworking magazine in the US in those days – was but a few years old and still in black and white.

Planemaker Scott Meeks exclusively uses Hock blades in his Krenov-style planes

Ron Hock on O1 vs A2 steel

O1 is a simple high carbon tool steel with very little added to the iron/steel alloy other than 1.1% manganese. That pinch of Mn allows the steel to harden with an oil quench (the 'O' in O1 stands for Oil.) Oil removes heat more slowly than water, reducing the thermal shock that occurs when orange-hot steel is plunged into water. Reducing that thermal shock minimizes the risk of cracking or distortion in the hardened piece. With an alloy as simple as O1, containing so few alloying elements, the hardened grain structure is as fine as possible which allows honing to the sharpest possible edge.

A2 differs from O1 with the addition of 5% chromium and 1.1% molybdenum, allowing it to quench in still air ('A' for Air.) While 'stainless' amounts of chromium (12% or more) make tool steel 'gummy' and hard to sharpen, the modest amount of chromium in A2 improves its toughness and abrasion resistance, but imparts only a slight measure of corrosion resistance.

But there is a trade off. During heat treatment the chromium addition combines with some of the carbon in the alloy to form chromium carbides – tough, hard particles dispersed through the steel. These carbides are the primary contributors to A2's celebrated edge retention. However, during heat treatment, the chromium carbides can grow quite large – large enough to affect your ability to hone the edge as close to zero-radius as you may want. And these carbides are held in place with less strength than the rest of the steel matrix which can allow them to pop out under the stress of honing or cutting leaving a small gap in the edge.

To strengthen the edge Ron recommends a larger bevel angle for A2 than we would use for O1. For a bench plane iron, try your A2 blade at about 30° or 33°. A chisel or block plane blade can be even steeper; try 35° or so and see if edge retention is improved.

For more on this subject and a whole lot more besides, check out the Hock Tools website: www.hocktools.com

Change of course

I felt my boat changing course. As this new course became clearer, its name changed from SS Knifemaker to SS Toolmaker. In what now seems no time at all, I was making Krenov-style blades as well as aftermarket blades to replace the chrome-vanadium junk that so commonly accompanied planes of a certain vintage. This was no longer craft, but manufacture. Batches of a hundred or more identical things became the norm and my background in industrial engineering became a greater asset than my background in the arts. I listened to my customers and adjusted course as demand dictated. It was an uphill struggle. I'm lucky and grateful to have a wife who was willing to work to keep things afloat as our business grew.

The key to success in craft, or most anything, really, is perseverance. If you can stick with it long enough, you will succeed. Woody Allen is credited with saying '90% of success is simply showing up' – a little research will show that he actually said, '80% of life is showing up'. I like the first one better, so that's the one I prefer to quote.

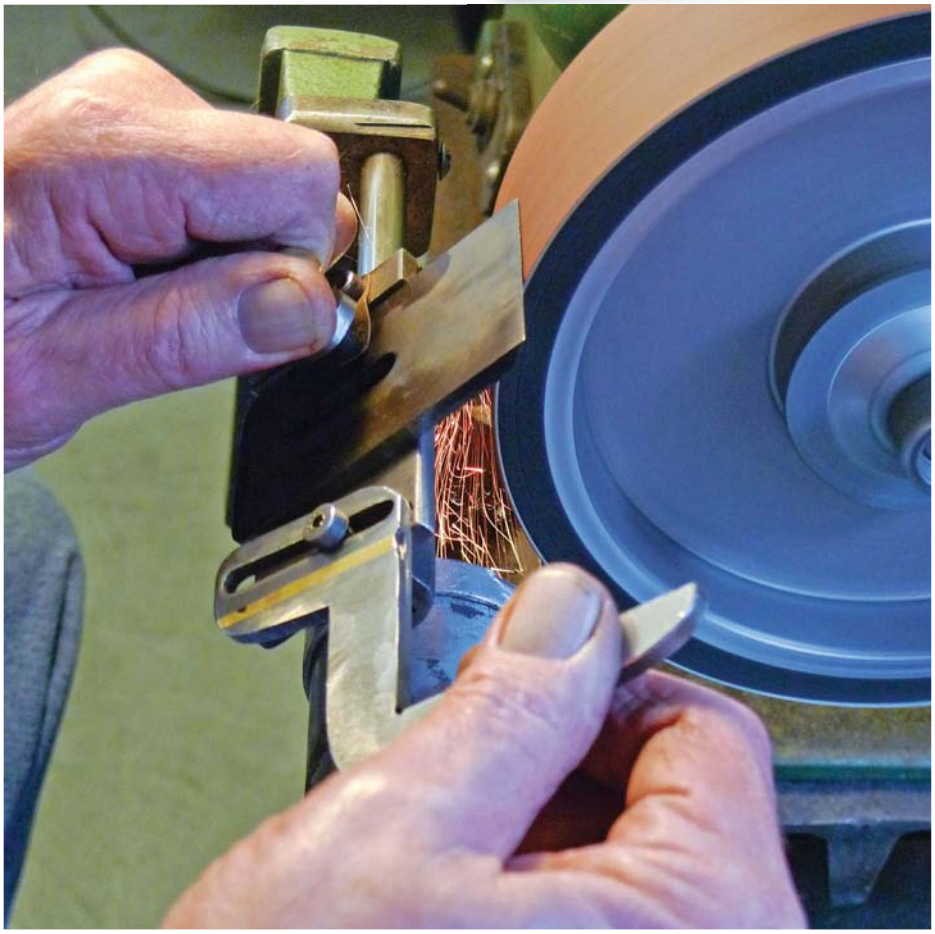
That's my best piece of unsolicited advice, stick to it! Stay open to opportunities that may arise. You never know what new thing may throw you a rope to pull your craft in a new direction. You might begin as a crafter and then because of demand, sheer quantity and efficiencies in production become a manufacturer as I did. But if you love it and remain true to the issues of quality and good design, does a definition really matter?" *F&C*

Ron, Linda and Anne at WIA14

The Perfect Edge

This is by far the best overall text on sharpening available and it's clear that Ron has real enthusiasm for his subject. Ron covers the metallurgy of blades; how, why and when to sharpen them plus abrasives and all of the sharpening systems. Despite this wealth of information Ron also covers how to sharpen almost every cutting edge you are likely to need.

Published by: Popular Woodworking Books
ISBN: 978-1-55870-858-7
Price: £17.99



Though made in large batch runs Hock blades still have an air of hand crafted quality about them

Andrew Hall

Mick Hanbury

Jennie Starbuck

Wayne Mack

Tony Wilson

Michael Painter

Peter Sefton

Emma 'Tiny Turner'

Nic Westermann

MIDLANDS WOODWORKING & POWER TOOL SHOW

NEWARK SHOWGROUND NG24 2NY

18TH & 19TH MARCH 2016

FOLLOW US ON FACEBOOK

FOLLOW US ON TWITTER

A great day out full of Demonstrations, Personalities, Trade Stands, Advice & Fun

Advance tickets can be purchased by calling the ticket hotline:

01474 536535

or securely through PayPal at

www.nelton.co.uk

Free parking, Showguide and Raffle.

Open Hours:

10:00am – 4:00pm Both Days.

Entry:

One day £8 / In advance £6

Two days £12 / In advance £8

Under 16's Free

Advance tickets on sale from 5th January 2016

(Ticket Hotline closes 14th March 2016)

PHOTOGRAPHS COURTESY OF N.E.J. STEVENSON

Toast to success

From high-end cabinetry to luxury drinks packaging, Neil Stevenson tells us how the company he founded has crafted a charming cocktail of commissions

"The past few years have seen an unexpected demand in a sector which we had previously not explored. We were privileged to be commissioned for several exciting projects in the luxury drinks sector for some very well-known luxury brands. Although this particular market was not one that anyone at N.E.J. Stevenson had ever considered as an area of potential work, we went on to complete four major projects and the fit now seems like an obvious one. After all, in the same way that the finest Whisky, Cognac and Champagne is created with crucial attention to detail, here at N.E.J Stevenson, we also believe that a bespoke commission requires a great deal of skill, care and attention in its craftsmanship. What could be better for the finest vintages than the finest handcrafted boxes?

"My talented team and I feel privileged to have been offered the unique opportunity to create these truly bespoke products for this market and are delighted with the stunning outcome of all four of these commissions."

The Coronation Obelisks

"One of our earlier notable commissions in this market was for Pol Roger, the prestigious Champagne house. It asked us to create 250 luxury bespoke packages to commemorate Her Majesty The Queen's Coronation. They were to house two of the brand's most exclusive products – Hine Cognac and Glenfarclas vintage malt whisky.

The principal demand of the brief was to create an obelisk shaped box – an unusual, tall, four-sided tower, ending with a pyramid shape on the top. The choice of an obelisk was driven by two elements, firstly the requirement to move away from a basic box construction but still to be able to completely encase a bottle, and secondly, the need to have an imposing and elegant shape. Obelisks have historically been used to demonstrate power and importance both in pairs and singularly and their imposing grandeur was felt to be a fitting adjunct to these two unique brands. Our obelisks were made in two sections from English oak and secured using rare earth magnets. The upper tall tapering shaft hides the bottle neck, whilst the lower square pedestal hides the bottle base. When both sections are separated they reveal either of the two numbered bottles of rare 1953 Hine or 1953 Glenfarclas vintage malt. Each obelisk features a secret drawer faced with either oak from the 1953 Hine or 1953 Glenfarclas casks.

Unusually the company did not require corporate branding on its packing, meaning that we could work with a blank canvas and create a truly stunning outcome."

The Savoy 125th Anniversary Case

"In the same year, we were also asked to craft a unique, presentation case for a limited edition and extremely rare, handcrafted decanter of Speyside single malt to mark the 125th anniversary of luxury London hotel, The Savoy. Upon release, there were just 15 bottles of the 48 year old Macallan whisky in the world and only three were available to purchase from the Savoy for the price of £18,500. This hand-made decanter; an Art-Deco style bespoke bottle, engraved with the Savoy logo and a commemoration of the 125th anniversary, is housed in an elegant and stylish case, which is finished in a black gloss lacquer to an exceptional standard. What makes this cabinet so special is that it also includes a fragment of wood taken from the original bar top of the world-famous American Bar in the Savoy Hotel, frequented in its hey-day by luminaries such as Marlene Dietrich and Frank Sinatra."

The Diamond Jubilee Presentation Chests

"One of the greatest accolades that our team received was the commission to manufacture a bespoke presentation chest for distinguished whisky brand, John Walker and Sons, to celebrate the Diamond Jubilee of Queen Elizabeth II. As a Royal Warrant Holder it was an absolute privilege and honour to create something particularly special, to mark this very significant occasion for Her Majesty The Queen.

John Walker and Son had created a very special rare malt and grain Scotch Whisky, which had been maturing since 1952 – the same year that Her Majesty ascended to the throne. Our role was to create 61 chests to safeguard the whisky, which was housed in diamond shaped Baccarat crystal decanters, resting in a separate crystal base. The decanter is topped with a Britannia silver collar set with a half-carat diamond and individually numbered silver seal.

One cabinet was to be gifted to Queen Elizabeth II herself and the rest would be sold at £120,000 each, proceeds all going to the Queen Elizabeth Scholarship Trust. The process took 11 months and involved sourcing timber from The Queen's private estate in Balmoral and Sandringham and further complemented by two Commonwealth timbers, Wenge and Australian black bean. The Chest included concealed compartments and intricate mechanisms, which when triggered, reveal some of the contents.

This entire process involved an eclectic mix of some of the country's finest craftsmen, from the master blenders and master coopers at the distillery to the silversmiths, glass engravers, calligraphers and ourselves the cabinetmakers; we were thrilled to be involved in this significant project that generated worldwide interest and raised money for such a worthwhile cause." F&C

Creative Welsh Woodturning Ltd.

Woodturning – Woodworking – Woodcarving – Tools & Accessories

Shipped World Wide

PARCEL FORCE WORLDWIDE

www.turnerstoolbox.com

Everything for th e beginner to the more advanced Craftsperson Woodturning /Woodworking & Carving tools & accessories : All at the click of a button & delivered straight to your door.

Order online 24hours a day 7days a week every day of the yea r

Or you can call or e -mail for our new catalogue a comprehensive range e of tools & accessories

Including :

- Abrasives
- Adhesives
- Project & Info Books & DVD's
- Clamps & Holding Devices
- Dimensioning & Marking out Tools
- Finishing Products
- Lathes & Accessories
- Pen Making Supplies
- Drill & Hole Cutting
- Forstner Bits
- woodturning chucks
- Patriot & Evolution Face Plate & Holding Devices
- Stebcentre
- Revolving Centres
- Tormek Water Cooled Sharpening Systems
- Pro Edge Sharpening System
- Shield Technology guarding against rust
- And much more

Veritas Journeyman's Brass Mallet

log onto www.turnerstoolbox.com where you will find, in detail, what you need and more for your woodturning , woodcarving & woodworking Tools & Accessories including our monthly special offers

Tools & accessories to cater for the smaller proj ects such as pen turning at the lathe to the larger w oodworking projects browse , select & order from our compr ehensive range of high quality woodturning – woodcarving & woodworking Tools & Accessories manufactured to the highest standards of craftsmanship by world known names

rotur Sawtooth Forstner Bits

Robert Sorby Patriot Woodturning Chuck & it's many accessories

Arbortech Mini Grinder ready use straight from the box

Microplane Rotary Shaper

Colt HSS -M2 150mm Pen Drill Bits

www.turnerstoolbox.com

- Tel: 01873 831 589
- Mobile: 07931 405 131
- Fax: 01873 831 589
- E mail: info@ turnerstoolbox.com

FLEXCUT
VERITAS
PROXXON
CREUSEN
J-FLEX
TITEBOND
GORILLA GLUES

Newly Added
COLT
MAXICUT®
ROTA STOP
FORSTNER BITS
ABRANET
ABRASIVES

THE GUILD OF MASTER CRAFTSMEN

Laminated Roubo bench

Splash out on materials for new projects or replace a faithful, but tired, old bench? With a bit of nifty recycling, Matt Morse finds a clever way of doing both

Over the years my off-the-shelf bench gradually had more and more bits screwed and bolted to it to try to make it stiffer and less prone to racking. In the end it also had boxes of tools and nails on the undershelf to weight it down but I still ended up dragging it back to the start line after any hard planing. The cost of a replacement was the issue – not the cost in itself but more that I'd rather spend the money on materials for future projects than on a bench. The solution came in the form of a skip full of joists after part of my house was demolished. They were brought into the workshop and hoarded for three months to dry out a bit and acclimatise.

A slab-top laminated Roubo was the only choice to build since I'd seen it in Chris Schwarz's workbench book. I could have created the frame to top joints by leaving the through mortises in the lamination but somewhere in the back of my mind I had the idea that this was a trial run for a really nice bench in hardwood later with a proper slab top if the right timber ever finds me.

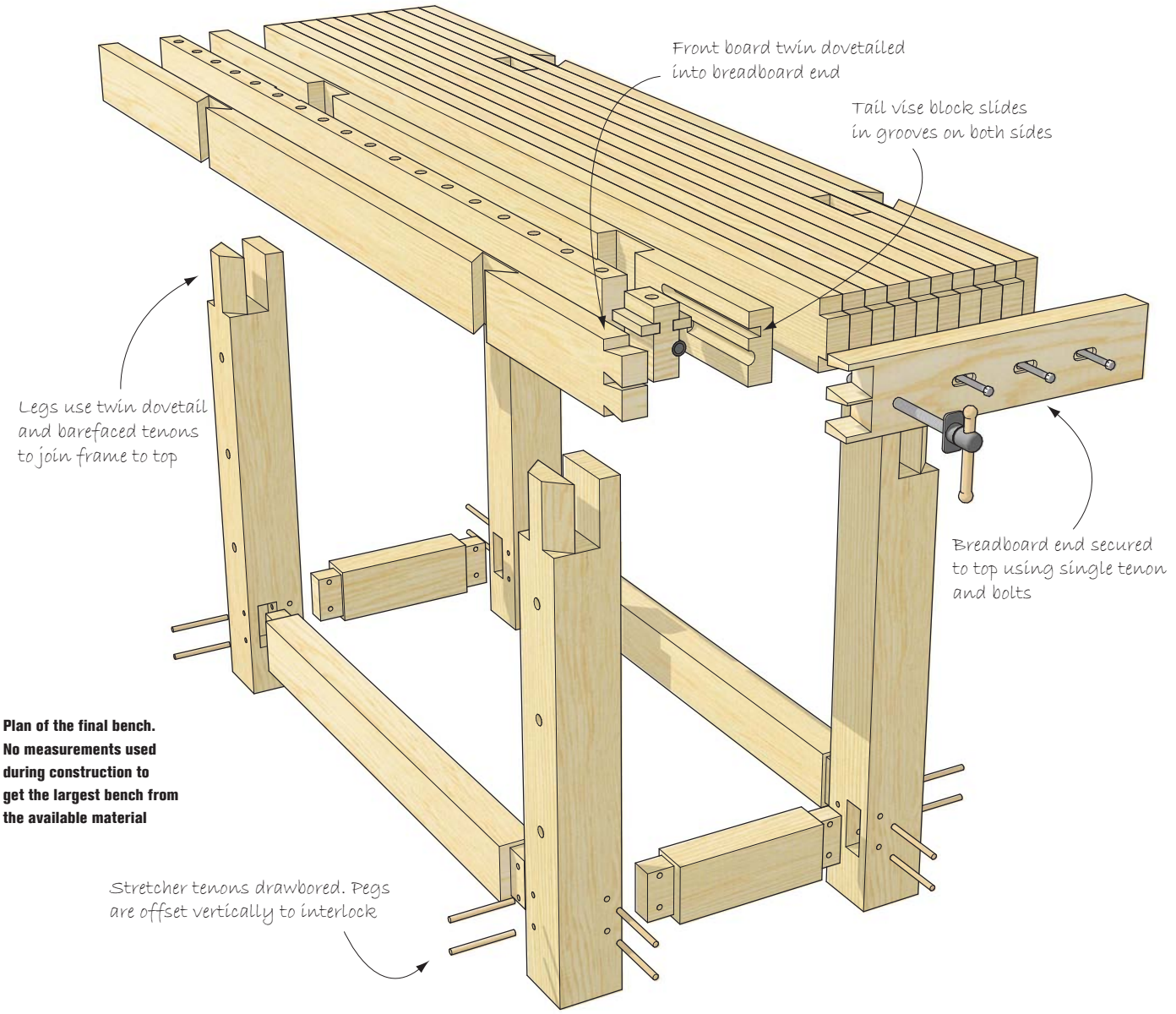
The best sides of the boards were easy to find. These were the ones without thousands of nail holes. I thought about patching the other defects, but then realised I'd rather be making furniture than patching knots on a bench. I did take the time, though, to align the board grain direction from right to left in the final benchtop for flattening in the future.

I used dominos to keep the boards aligned and glued up three or four at a time. I laminated the slab up to the width of my planer thicknesser – 410mm – and was able to get this flat and of even thickness with one pass over the machinery and one visit to the chiropractor.

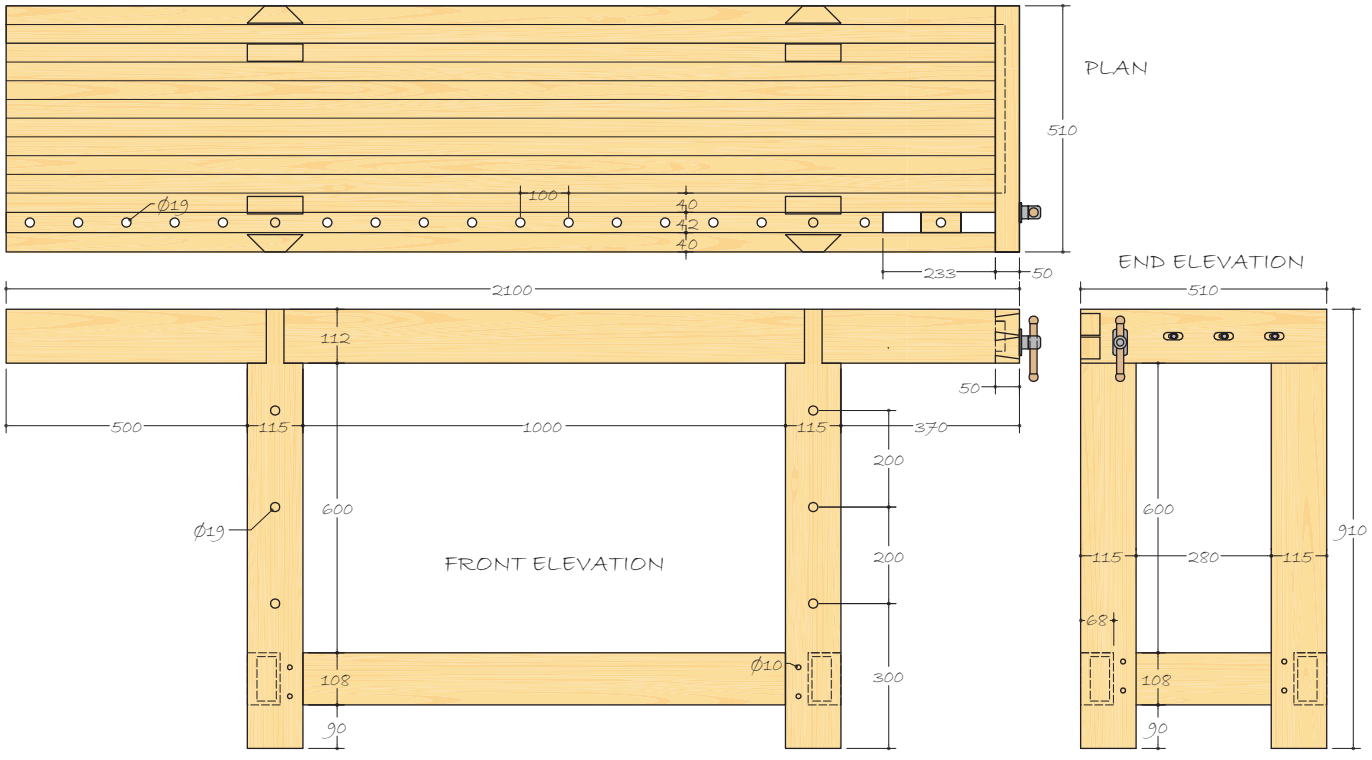
Laminating the main slab for the bench top

Keeping the slab under 410mm wide allowed rapid planing of the top

PHOTOGRAPHS BY MATTHEW MORSE



Plan of the final bench. No measurements used during construction to get the largest bench from the available material



Creating the dog strip

The next stage was to create the dog strip and in a gung-ho moment went straight to the drill press and put a line of 20mm holes 75mm on centre for the whole length of the bench. Then I realised the legs would have blind dog holes in them – I'm sure there's an expensive solution for that somewhere.

I had a spare vice screw from the old bench and wanted to use it for a wagon vice on the new bench. I took the threaded nut and cross drilled and threaded it so I could attach it to a vice block. I then machined grooves in the front strip and the strip between the dog strip and the main slab to take the block. Shellac and wax on all the moving part surfaces before gluing stopped any squeeze out being a problem when gluing up to the main slab.

Wagon vice moving block

Cross drilling the salvaged vice nut

Marking the dovetails for the end cap

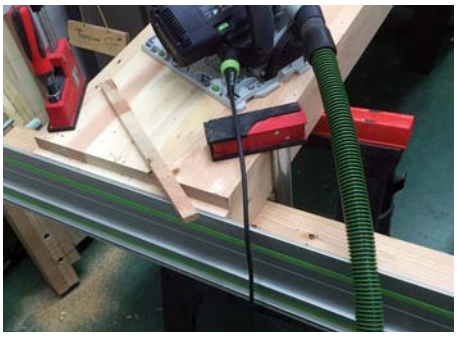
The wagon vice needed an end cap that would allow the main slab to expand and contract and also resist the movement of the vice. The end cap was dovetailed to the front strip and a large groove was cut to make the rest of the end cap into a giant breadboard end for the slab. The rest of the end cap was secured to the slab with 100mm long, 10mm coach screws through slotted holes.

The wagon vice sub assembly was glued up with the dovetail first and then the dog strip and backer strip. The vice traveller block had to go into the assembly at this point. Unlike some wagon vices this isn't bolted in from underneath.

The main slab was cross cut at one end to give a neat end for a tenon cut with a track saw. The track saw was then used guided across the end and the side to create the tenon. After fine tuning, the slab and L-shaped vice assembly of three strips was glued and the end cap screwed to the main slab. The end cap joint was left dry to allow expansion and contraction.

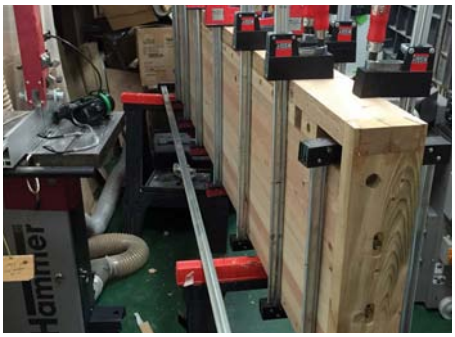
Trimming the slab to length

Shoulder cut with tracksaw



Cheek cut with tracksaw

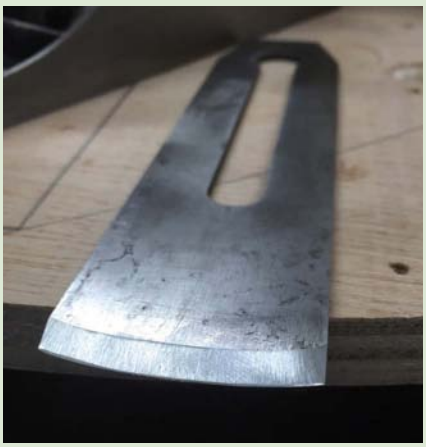
Fettling the fit of the breadboard endcap and tongue



Laminating the final section to the main slab top

On the level

After the end cap and wagon vice assembly was fitted it had to be brought down to the same level as the rest of the top and given an initial flattening before the leg joinery. I used a Sergeant No.3 set up as a scrub plane to waste most of this away followed by a jack and jointer planes. With an 8in radius on the scrub plane it was very quick.



8in radius curve ground on blade for No.3

Short and light No.3 as a scrub

Legs and stretchers

The old joists from the skip had provided the material for the slab top but I was still short of four legs and stretchers. Searching the skip came up with a lot of 2 x 6 and 2 x 8 offcuts and these were laminated into 5 x 5 legs and 5 x 3 stretchers. I made sure to cut these well oversize and make the depth of the shoulder between the two tenons dictate the height of the top. I wanted a tight joint and enough excess to be able to beat the joint apart from the topside without damage to the top.

Roubo has a fairly steep angle on the sliding dovetails at the top of the legs. I was going to use the bandsaw to cut these and to accommodate the tilting table I made these 45°. I could then cut from either face of the leg and be sure to get a consistent result. It also meant the marking out was simpler as the same gauge setting could be used from each face. With the cheeks cut I cut the dovetail shoulders with a hand saw and the waste between the dovetail and tenon with a chisel, undercutting a little in the centre.

All four legs together marked with the marriage mark

Legs after cutting the joints on the bandsaw

laying out and marking the leg mortises on the top

Trimming the bench's other end before installing the legs

First cut for the sliding dovetail

With the slab upside down on sawhorses the line of the legs was established with a knife line and square from the front edge. The legs were spaced to put a dog hole squarely in the middle of each. With the weight of the legs they didn't need to be held in place to trace a knife line around each. The bevel of the knife was held against the leg to give a very shallow line. The legs were then removed and the lines used to set gauges. The gauges were then used to deepen the lines and transfer the lines to the other side of the slab. Squares were used to transfer the sides of the leg and the sliding dovetail. After the layout was complete I chamfered the tops of all the tenons and sliding dovetails to prevent blowing out the top on dry assembly.

With the slab on edge the sides of the sliding dovetail were established with a saw. The knife line was deepened to a bit of a 'knife wall' popularised by Paul Sellers. One too-deep knife wall made the saw cut off line as the 45° cut meant the deeper the knife wall, the further from the line it's possible for the saw to be.

Legs and stretchers

Breaking out the waste from the sliding dovetail socket with a chisel

Roughing out the through mortise with a Festool Domino

Test fitting the first leg

Once the sides of the sliding dovetail were established it was easy to whack out the waste between as the strength of the material was gone with the saw cuts, creeping back to the line to keep it neat and using the gauge line for the final paring cut. Cutting into laminated material means that normal wood behaviour of a split running back, possibly past the gauge line, doesn't necessarily apply.

The through mortises were tried first with a Forstner bit in a cordless drill. This worked fine but there was a lot of subsequent chisel work. For the last three mortises I used a Festool Domino with a 14mm bit. With a little marking out on centre lines this gave a mortise within a hair of the gauge line and hardly any paring of the sides of the mortise.

The scale of the joints between the legs and top mean that sometimes unusual tools can be used. To clean up the corners of all the mortises I used a small Japanese saw with a front raker tooth. This efficiently got all the fuzz out of the corners.

Dry fit

The dry fit required the use of as big a hammer as I could find. The 2.5lb dead blow hammer was very useful here. For reversing the dry fit I found the deadblow from below onto the oversized tenon got the joint open enough to get in a crowbar. The crowbar gave a lot more control to the movement than just whaling away with a huge hammer – fun though that was.

With all four legs dry fitted and in place I cut two 2 x 4 battens to help in marking the stretchers. The battens were clamped to the legs and the stretchers were clamped on top of the battens. The shoulder lines were then marked out directly. Any small error in the leg position is allowed for by cutting to fit in this way. Legs were then removed from the top – easier to say than to do – and mortised. I used a 40mm Forstner bit in the drill press with a fence to ensure all the mortises were identical. The corners were then chiselled square.

Marking the stretcher shoulders direct from the legs

Drilling the waste with a 40mm Forstner bit

The stretchers were cut to length and shown to the mortises. The tenon size was marked directly from each mortise and the marks transferred around to the shoulders. The cheeks and shoulders were then cut out by hand and tuned with a router plane to an easy sliding fit. The legs were then drilled for two drawbore pegs each taking care to avoid hitting the peg from the adjacent mortise.

The joints were then reassembled and the drill bit used to mark the centre of the holes on the tenon. The joint was disassembled and the mark transferred slightly closer to the tenon shoulder. How far the mark is transferred can vary and I make a test joint for any new size/timber combination and see what works. A full ¼in offset was too much but just under worked fine.

Failed trial drawbore joint with too much offset

Successful trial drawbore joint with curve to 1/2in ash peg

I then made up 20 or so 10mm drawbore pegs from straight grained ash. Several spares are needed as not all will make it and sometimes enthusiasm will break some. Making pegs with a dowel plate means an even bigger hammer. This time a 4lb lump hammer was the best tool for the job.
A larger hammer allows the same impact force to be applied with more control in the same way a sharper tool allows more control as there is less effort applied. The ends of the pegs were tapered on the disc sander and the holes in the tenons were chamfered slightly with a countersink. These all help the peg find its way through the tenon and out the other side. Drawbore pins can be used to test the fit and ease the path for the peg but I don't have any and have never found them necessary. The benefit of the drawbore technique, apart from its huge strength, is that it allows joint to be a little loose and a frame such as this to move a little to allow the top to go on. With all the joints and the sliding dovetail/mortise and tenon for the leg/top joint glued up with fairly slow setting glue I put the top onto the frame. The best hammer for getting the top onto the joint is the top itself. Picking up each end and dropping it on the floor very quickly and effectively drives the top onto the legs. There are videos on YouTube of this process and although fun it shouldn't be done in sandals. A light application of alcohol to the respective parts helps the process.

Once the top is on and the clock is still ticking on the glue, the drawbore pegs go in. The pegs are glued and then driven into the holes. The peg starts going straight in, then dives in towards the stretcher, then back the other way. It's important to keep hitting squarely and not snap the peg at this point. The best tool I found for this was the 4lb lump hammer with a good swing. Looking at people who swing hammers for a living – blacksmiths, those men with the huge mallets that install council paving slabs – they seem to have a technique of using the weight of the hammer to do the work with a swing that comes from the shoulder or elbow rather than just the wrist. When the drawbore pegs came through the other side the glue was left to set and then they were trimmed flush. The front face of the frame was then planed flush and a fairly heavy chamfer cut with a chisel, spokeshave and block plane on all the front arrises. This was to stop the sharp edges attacking me or my work in the future.

All joints glued and all pegs hammered home

The end result

The face vice for the bench is my old record 53 bought for £10 many years ago and probably far older than me. I cut the majority of the mortise for the rear jaw with the domino and finished up with an auger bit and chisel for the final depth. An old bit of teak (*Tectonia grandis*) – I think – made a nice chop for the vice and this also hid the saw marks in the front jaw. Lined with leather for grip and finished with a thumbnail ovolo on each end and an ⅛in bead top and bottom. I bought four new dogs for the new bench from Veritas. The prairie dogs make use of the blind holes over the legs. The solid brass dogs I've put in the wagon vice and the dog strip. To aid pushing these up I've put a heavy chamfer on the underside of the holes to make it easier to get a finger in. I saw this on the Instagram site of Ed Sutton and thought it was a really good idea.

With the bench all done I filled the worst of the defects on the top and gave the whole thing a quick coat of shellac to seal it without making it too slippery. First impressions are that it is rock solid and should last for years; at least until the perfect bench top slab finds me. *F&C*

ABOVE: Solid brass dogs – on left – and prairie dogs – on right
LEFT: Fitting the face vice
LEFT INSET: Cutting a chamfer on the front of the legs and stretchers with chisel, spokeshave and block plane

scott+sargeant

the machinery experts

special offers from CMT

Adjustable Groover Set 4-15

CMT part no:694.001.30
The CMT 694.001 set is a 3 part cutter for adjustable grooving using reversible disposable tungsten knives. These tools are the ideal for creating precision slots and grooves on material from 4mm up to 15mm deep. The set uses spur cutters on the side in order to give a sheer cut and minimise break out. *Special Offer is for 30mm bore only*

CMT Combi Rebate & Limiter

CMT part no:694.020.30
These cutter heads have been designed for using standard Euro limiter cutters and also integrate reversible tungsten knives on both edge and top to give a superb finish when rebating on top or bottom of the block. *Special Offer is for 30mm bore only*

CMT Variable Angle Cutter Head

CMT part no:694.018.30
These new adjustable chamfer cutter heads carry out precise cuts, accurate bevels and joints on wooden boards and solid timber. For use on your spindle moulder machines, *Special Offer is for 30mm bore only*

CMT Roundover Router Bit Set

CMT part no:838.501.11
CMT's Roundover Sets give you the maximum flexibility for all of your projects by putting the most requested diameters in one package. Available in 12,7mm and 6,35mm shanks. Roundover radii are 6,35mm,
9,5mm and 12,7mm. These versatile bits are always in demand - the simple clean lines of a smooth roundover

CMT 694.011 Mitre Glue Joint

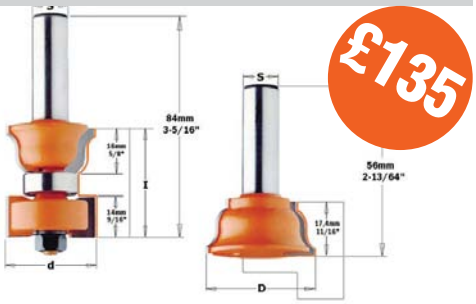
CMT part no:694.011.30

CMT's lock mitre glue joint cutter blocks are ideal for milling mitre joints in stock with maximum 26mm thickness. Create boxes, stretcher bars, frames and any assortment of right angle or parallel joint projects. Two easy steps to produce perfectly fitting 45° miter joints: first, position your work*piece horizontally, then vertically.* Also, create

Adjustable Shaker Router Bit Set

CMT part no:800.624.11
These new bit sets are excellent for producing adjustable tongue and groove joints with a bevel, in order to eliminate the panel rattle that may come up with the production of standards cabinets. Cut precise grooves into your plywood veneered panels and make perfect rattle-free fits. To *be used on table-mounted routers. Avoid using these bits in hand-held* power tools.

CMT 955.801 Window Sash Set



CMT part no:955.801.11
CMT designed this set so you can create window sashes that are as beautiful as they are functional. As an additional feature, the CMT window sash set will also mill perfectly joining 35 mm rail and stile parts for custom made doors.

CMT 800 Tongue and Groove

CMT part no:800.625.11
Exclusive CMT design which allows the perfect fix for undersized plywood panel.
The tongue cutter features opposing shear angles to obtain flawless finishing on a large variety of material such as plywood, softwood and hardwood. For use on a table-mounted router, not for handheld routers.

Flexible Template for Routing

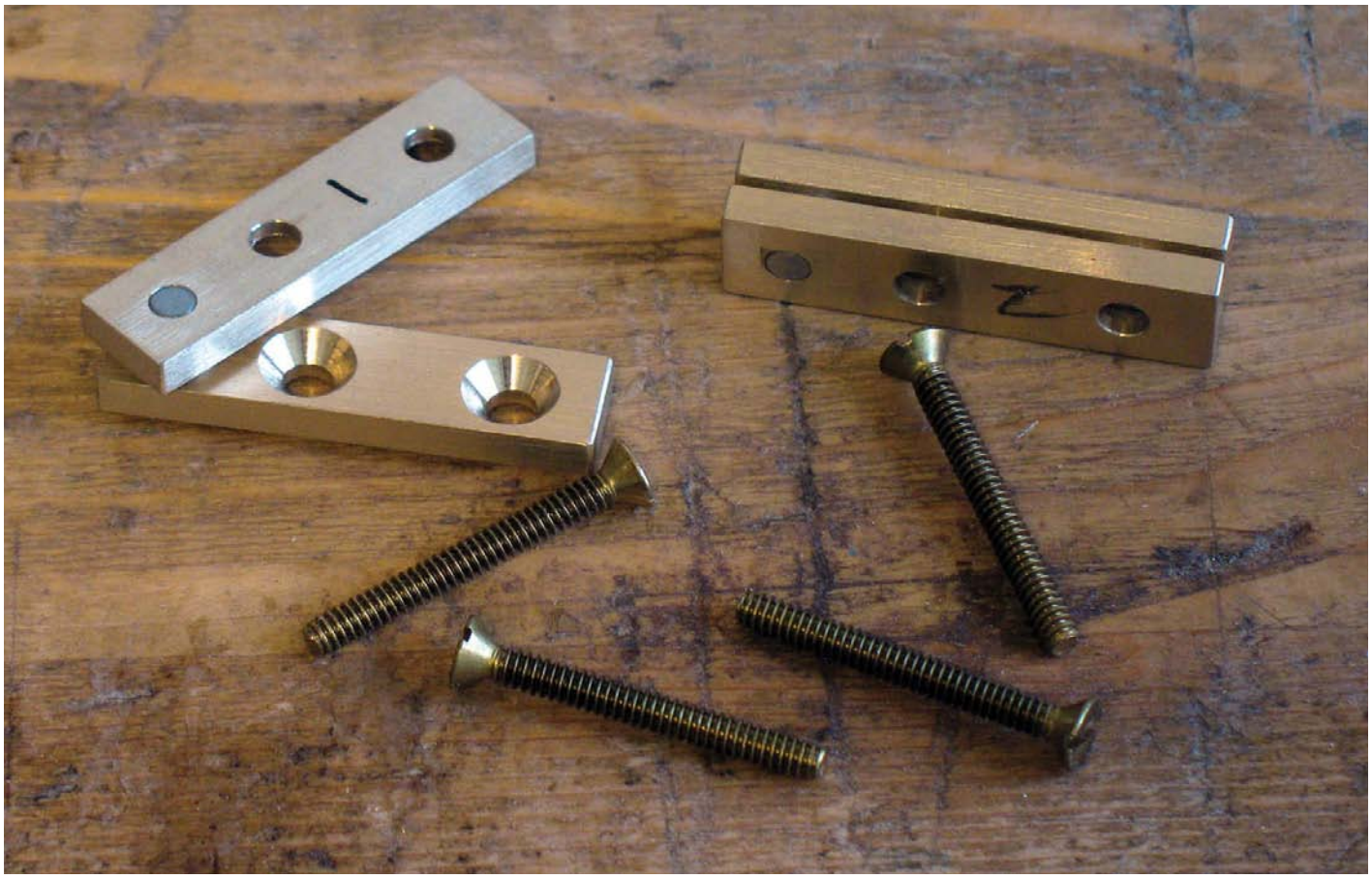
CMT part no:TMP-1000
The CMT flexible template is a guide strip for that can be curved and formed to use on spindle moulders & routers. It is easy to use - just screw it on to any kind of wooden panel, MDF or chipboard for creating you forms, arcs and curved elements. The flexible strip template is fixed plate with counter*sunk screws. The CMT flexible template is made of* a highly-resistant flexible plastic, which

Blatchford Rd, Horsham
RH13 5QR
01403 273000

scosarg.com

On a knife edge

When it's the little details that make all the difference, surely it pays to make your own hardware? Jacques Breau jigs up to make his own knife hinges

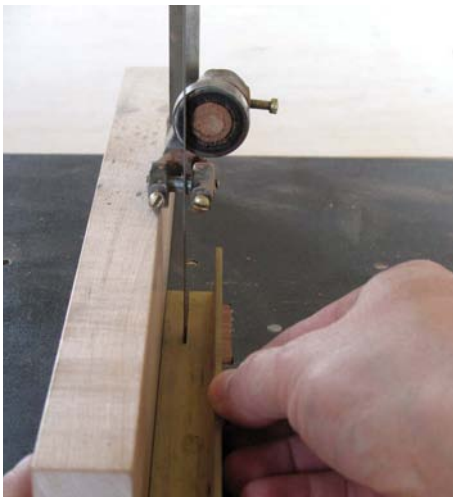


Knowing how to make knife hinges is an important skill to have in your arsenal. And with only a few, cheap, speciality tools you'll be able to make ones that meet the needs of any situation.

The basic idea of a knife hinge is to have two flat surfaces pivoting around an axis. One of the flat surfaces will have a press fit for the axis and will become the permanent home for it. The other hinge leaf will have a slip fit and rotate around the pivot.

The raw materials for these hinges are brass and drill rod. Both of these materials are available in varying dimensions allowing you to build hinges that suit the project at hand. A good starting point is 3mm thick brass and 0.1250in drill rod.

Cutting brass on the bandsaw is noisy, but easy



For the best results, use a fence and a 6tpi blade

Clean both faces of the brass strips with sandpaper. Check often to make sure they remain parallel

PHOTOGRAPHS FROM JACQUES BREAU

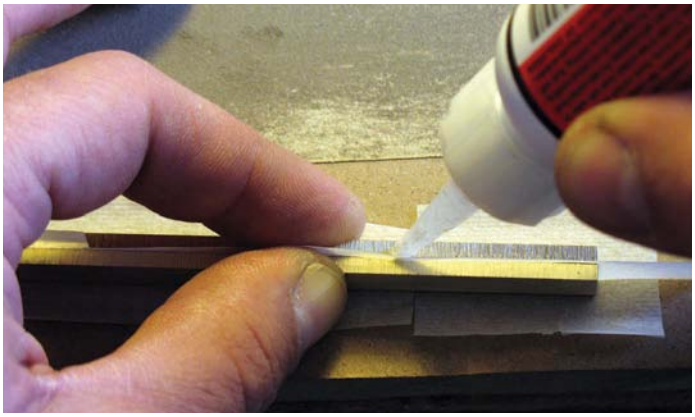
Getting started

To start, determine which dimension you would like to make your hinges. A typical size is 8mm wide and 32mm long. Once you know what size you want, rip your stock with either a hacksaw or your bandsaw. It is very easy to rip a length of stock on the bandsaw with a regular wood blade, although a 6tpi blade gives a better result. Rip a piece that is long enough for both leaves of all your hinges, plus enough for a saw kerf in between each piece.

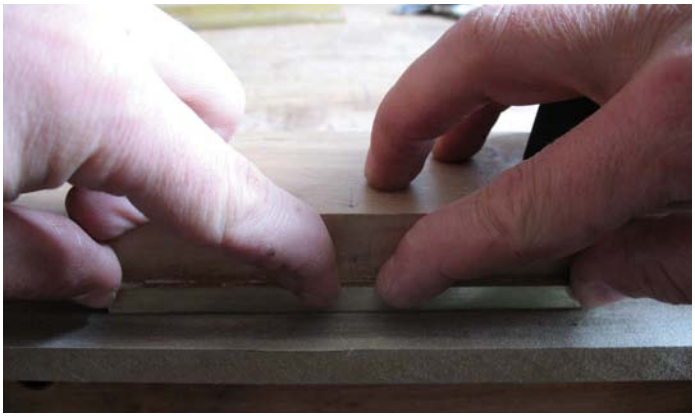
Once you have a long enough piece of brass, cut it in half on the table saw using a sled, or with a hacksaw. Carbide-tipped blades will easily cut non-ferrous metal. Clean up the faces of the brass stock with sand paper on a flat surface while doing your best to keep the faces parallel.

To ensure both halves of the same hinges will have identical holes, use a thin cigarette paper and CA glue to temporarily keep the halves together. This bond is strong enough to allow the drilling of holes and squaring up of the hinge, but will release when wedged apart with a chisel.

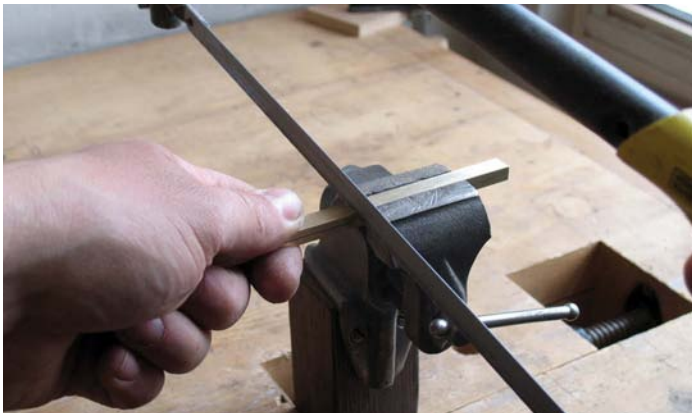
After the two pieces are glued together, use the sandpaper block to square up both edges of the stock. Once again, make sure to maintain square and parallel edges. Cut your hinges to length.



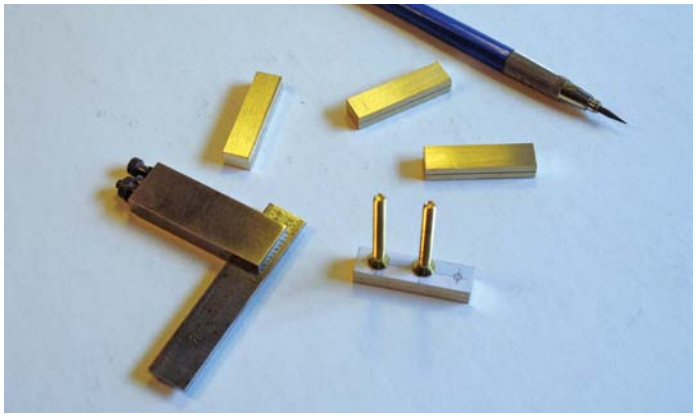
Cigarette paper wicks the CA glue between the brass giving a firm yet breakable bond



Use guides to maintain square and parallel edges. Accuracy here will pay off later



When using a hacksaw to separate the lengths of hinges, hold on. After the cut, true up the ends to make sure all the sets are the same length



Generate layout lines on only one set of hinge leaves to reduce the chance of errors and maintain consistency

Drilling the sets

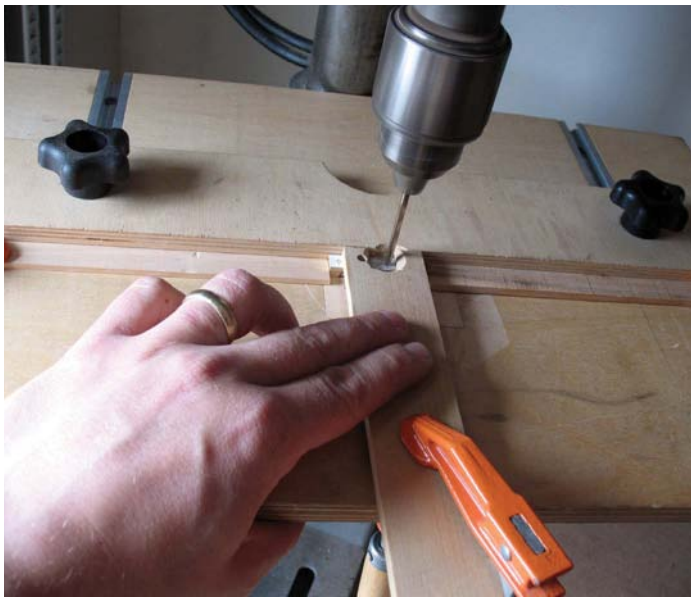
Once you are satisfied that you have hinge sets that are parallel and of consistent dimensions, get ready to drill some holes. The first holes to be drilled are for the screws. You will drill and countersink these holes using the same setup on the drill press.

A No.2 brass screw is plenty for smaller hinges, although I have gone as large as No.6 for bigger hinges. Find a drill bit that will leave enough clearance for the shaft of the screw. Using an auxiliary fence on your drill press table, centre the bit on the hinge leaf. It is imperative that the hole is as centred as possible since you will be flipping the leaves over to countersink the screw holes. Set up stops to position the hinges for drilling the screw holes.

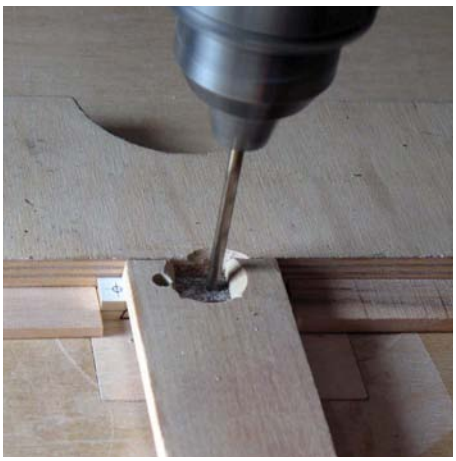
Set your drill press to a high speed, 3,000 rpm, use a sharp drill bit and clamp down the brass. If you don't clamp the brass, the risk of the hinge getting 'picked up' by the drill bit when exiting the cut is high.

Once the holes are drilled for the screws, we can countersink them. Using the same stops and fence settings swap the drill bit for an 82° countersink bit. With the screws on hand, check the depth of the countersink.

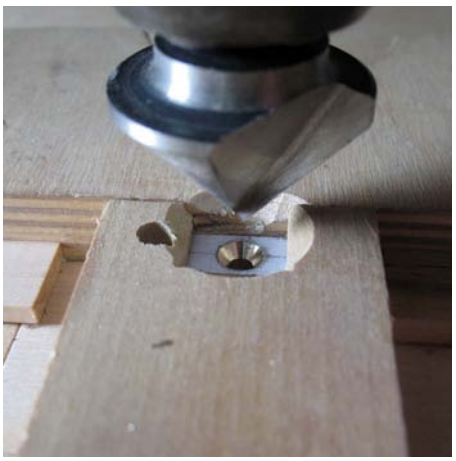
Once your screw holes are countersunk, change your stops and bit to drill the pivot hole. Don't move the fence that is already perfectly centred. Chuck your No.31drill bit in your press and drill through your hinge.



Carefully set up your drill press taking into account the different lengths of bits that are to be used. You do not want to have to move the table once you have started



With the brass firmly clamped to the table, drill your screw holes



Ensure that your hold down has sufficient clearance for the countersink

Use the depth stop on your drill press to guarantee consistent countersinks

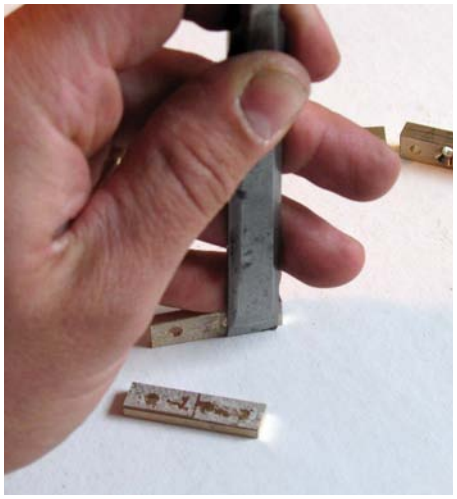
Finishing off

Once all the holes are drilled, label the sets and separate them. A chisel will do the trick. Go back to the same setup on the drill press and ream one half of each hinge to 0.1247in, and the others to 0.1260in.

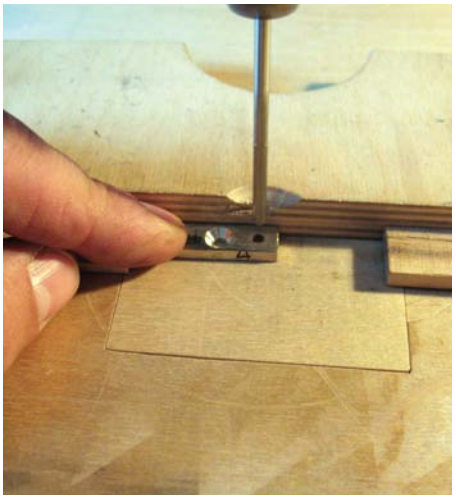
If you can't get your hands on small steel washers, you can fabricate some out of 1mm brass. Simply drill a hole through the brass with a 3.2mm drill bit and then using a small block of wood with a hole 1.5mm away from the edge and your drill bit as a pivot, rotate the brass against a sander until you are left with a washer.

The hinge ends can be rounded using the same technique, or they can be left square, or made to reflect the specific shape of the cabinet side.

Use a hacksaw to cut pins to length, determined by the thickness of the complete hinge plus the washer. Chamfer the ends of the pins and, using a guide hole, gently hammer the pins into the press fit hinge halves. F&C



Separate the hinge leaves. Label each pair and designate one leaf as the press fit, and the other as the slip fit



Using the same fence setting at the drill press, ream the press and slip fits into the proper leaves

Definitely hold on to the drill rod when cutting the often short-and-hard-to-find-once-on-the-floor pins

Gently persuade the pin into the press fit leaf. It's critical that the pin goes in square

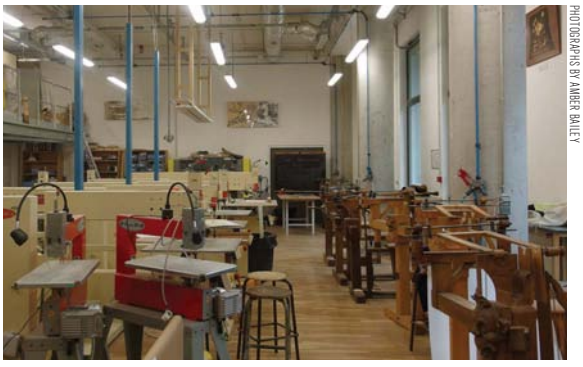
Reassemble the hinge leaves and you are ready to hang a door

Our correspondent...

Making a packet out of marquetry

This month in Our Correspondent, Amber Bailey looks at making a marquetry packet for this delicate work

Several months into my course, I have already garnered a notebook full of useful tips and tricks used in the production of French marquetry. Like anyone desperate to learn the most efficient techniques for quality results, now I have been taught how to prepare a traditional French marquetry packet, there is simply no going back. In traditional sawn marquetry the veneers require support against potential damage from the saw blade, be it cut with a marquetry donkey or piercing saw. The veneers are sandwiched in a packet to create a solid block of material, this allows for several sheets to be cut simultaneously.



PHOTOGRAPHS BY AMBER BAILEY

The marquetry workshop at the Ecolé Boulle displays a contrast in contemporary and traditional equipment for cutting packets

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're happy to include a range of articles that will take us on a workshop tour of the globe.

Our reporter this month is Amber Bailey. A graduate from The National School of Furniture in Buckinghamshire and the workshops of Yannick Chastang, Amber is currently pursuing her passion for French marquetry at Ecole Boulle in Paris. Amber is no stranger to *F&C* and has penned a number of articles for us in the past. If by chance this manages to whet your appetite for French marquetry be sure to check out marquetrycentre.com for a range of courses in the UK.

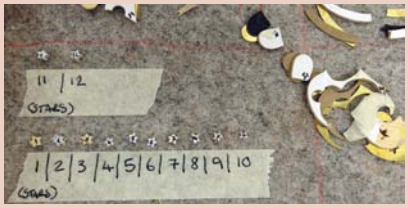
Preparing a boulle packet

Traditionally, a boulle packet would consist of metal and tortoiseshell to create a contrast in materials, however, the same technique works for the use of wood veneers.

A boulle packet consists of outer waste veneers that have the grain running along the length, with a third waste veneer in between going across the grain for added strength. Just inside the back of the packet is a sheet of papier suiffé. The actual veneers are placed above the centre waste veneer following the same grain direction as the outer veneers. There is no limit to the number of veneers in a packet, but consider how thick it will be for cutting. The veneers are positioned face side up and each sealed with a layer of kraft paper – essentially a large sheet of veneer tape. The entire packet is secured with masking tape and pinned in each corner.

It is always a good idea to make a note of the grain direction and the veneer species on the outside of the packet.

Order

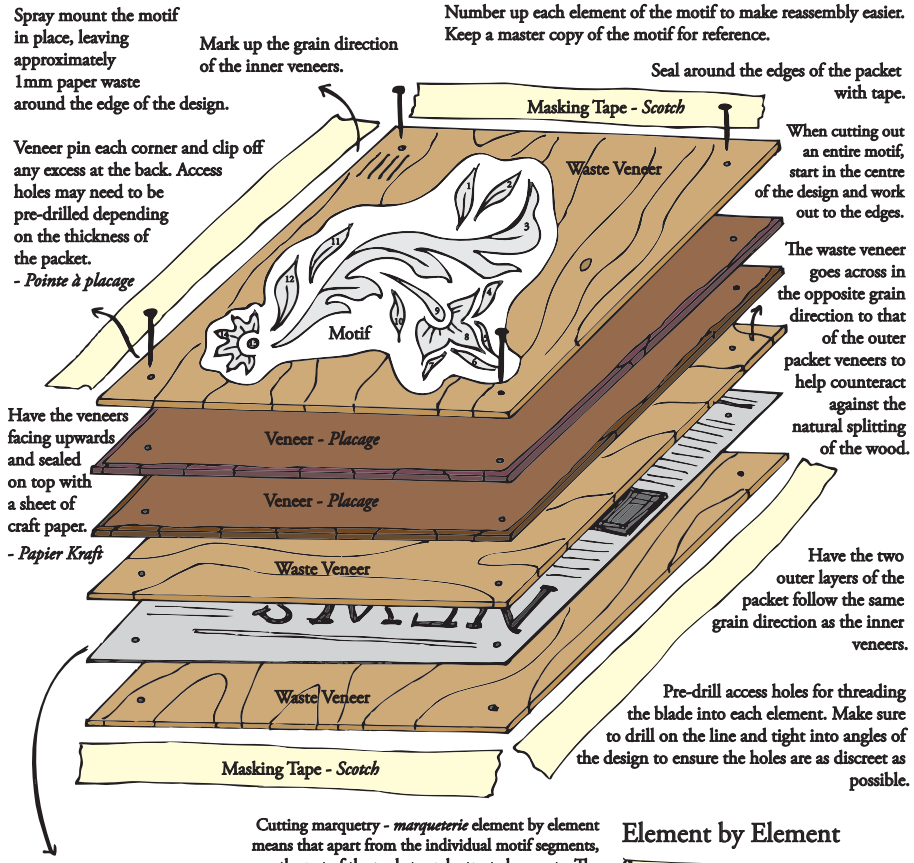


Even after the pieces have been cut…

… make sure you can easily identify the order in which they should be placed

On every packet number up each element of the motif to make reassembly easier. Keep a master copy of the motif for reference. To secure the motif to the packet, adhere with spray mount.

Preparing a Packet - *Préparation d'un paquet*



Two sheets of newspaper coated with a fine layer of animal fat to help lubricate the blade - *lame*; cut 10mm smaller in size than the rest of the packet to avoid any overhang. - *Papier suiffé*

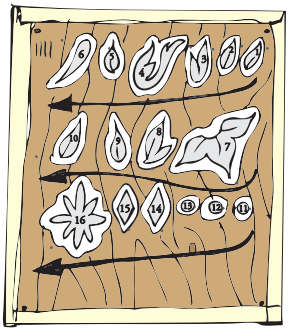
Cutting marquetry - *marqueterie* element by element means that apart from the individual motif segments, the rest of the packet can be treated as waste. The majority of elements will not require drilling for blade access.

The motif segments are spray mounted to the top of the packet but positioned in a numbered order starting in the top right hand corner moving across to the left then down in a series of rows.

To collect all the individual cut out pieces of veneer, position them on a tray inlaid with felt. The fabric will help resist the veneer from slipping out of position. It may be advisable to mark up on the tray where each of the elements should be placed.

The packet is cut starting in the top right hand corner and as a general rule pieces are cut either in a clockwise rotation or so that the most fragile lines in an element are sawn first.

Element by Element



Making papier suiffé

One of the major issues when working with delicate materials and fine blades is friction, this can cause the blade to either snap or catch on the wood fibres. An easy way to prevent this issue is to lubricate the blade. A standard technique to alleviate this is to rub the blade teeth with wax but this can become clumpy at first or wear off after the first few strokes. Within traditional French marquetry, the lubricant is not applied directly onto the blade, but rather incorporated within the packet. Between the back veneer and the inner scrap veneer is placed a layer of papier suiffé.

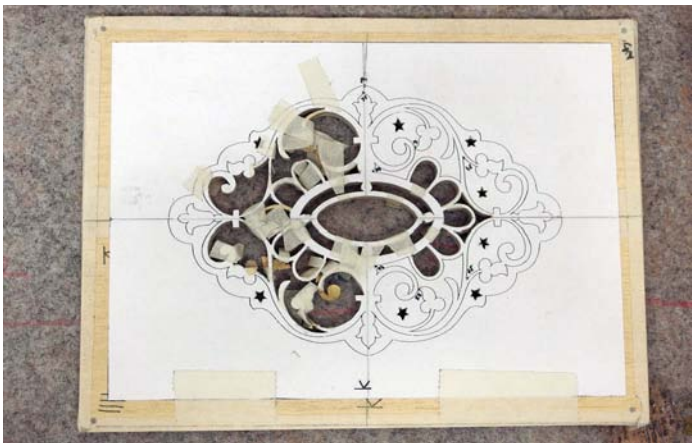
Papier suiffé is essentially several sheets of newspaper rubbed with animal fat, creating slightly greasy paper that wipes over the blade as you cut. The animal fat used is standard fat available from your local butcher – i.e. pig – softened in a bain-marie so that it may be applied easily and in a very thin layer.

The fat still in solid form

Working with metal

Traditional metals used in boulle work would be brass, pewter and copper. When compiling the order of packet materials, the sturdiest material should be underneath therefore metal goes below veneer. The metal is placed face side up.

To help with adhesion at a later stage, the back of the metal needs to be 'toothed'. This is achieved by rubbing a coarse abrasive across the surface in a circular motion. Tape around the edges of the metal separately before taping up the entire packet.



As the cutting of the packet progresses, it can help to temporarily secure any fragile sections with tape

When the packet is disassembled, it reveals identical motifs on different materials

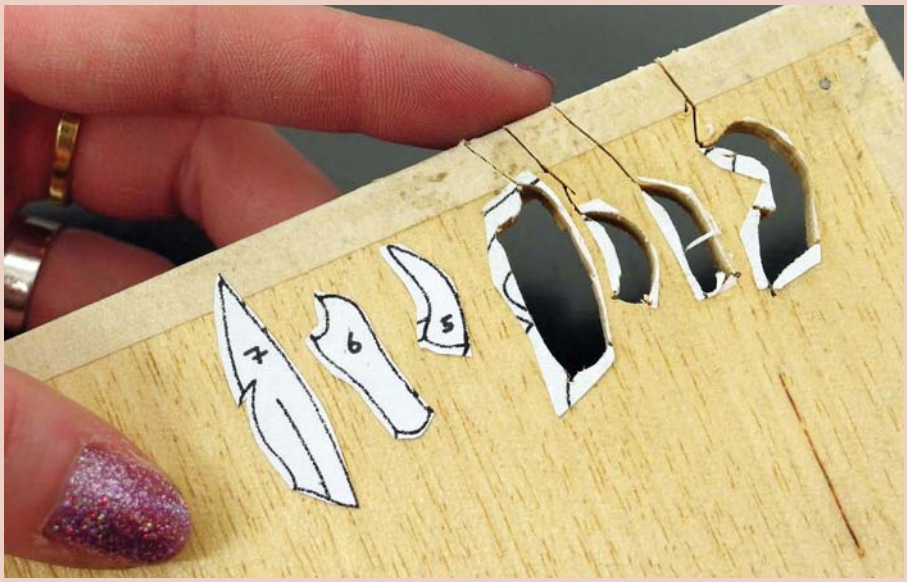
Element by element

Element by element marquetry is a technique that involves cutting out the marquetry pieces separately rather than all in one go. This means you are producing a single design and will require numerous packets to be made for all the different veneer species.

The making of an element-by-element packet involves the same processes as for a boulle marquetry packet except using a single veneer rather than several.

The motif segments are spray mounted to the top of the packet but positioned in a numbered order starting in the top right-hand corner moving across to the left then down in a series of rows.

The packet is cut starting in the top right-hand corner and as a general rule pieces are cut either in a clockwise rotation or so that the most fragile lines in an element are sawn first.



Apart from the individual motif segments, the rest of the packet can be treated as waste. It is down to personal preference whether to drill blade access holes for each segment or cut directly into the packet

Preparing a MOP packet

The surface area when working with mother-of-pearl (MOP) tends to be quite small so needs to be supported by a larger packet for ease of holding. Unlike the making of a standard packet, the MOP is glued on top rather than within the veneers. With the non-uniformity of MOP, having a full view of the material allows for decisive motif positioning.

The packet is built up of the two outer veneers with papier suiffé placed in between, all of which is pinned and taped as per usual. The MOP is glued on top of the packet with fish glue, plain paper layered underneath. More than one piece of pearl can be piled on top of one another. The glue needs to be left to dry for 12–24 hours. F&C

It may seem wasteful to create a large packet for cutting mother-of-pearl, however, the larger the waste material, the easier and safer it is to manipulate

TA450 TILT ARBOR SAWBENCH

Solid, powerful and efficient: our flagship Table Saw includes a range of features designed to improve safe working, longevity and performance.

- ▷ 3ph 5.5Kw High-Efficiency Braked Motor.
- ▷ 1125x1000mm Cast-iron table with anti-friction planed finish.
- ▷ 0 - 155mm Rise & Fall / 90 - 45 degree Tilt.
- ▷ Heavy duty cast-iron trunnion assembly with integrated rear extraction port.
- ▷ Polycarbonate overhead sawguard with 100mm dia extraction outlet.
- ▷ Spindle-lock for changing sawblade.
- ▷ Cast-iron fence bracket with integral micro adjustment. The aluminium section allows for two working positions (ripping and angled ripping) and for movement fore and aft in relation to the sawblade. The assembly runs on a nylon roller, gliding easily across the beds, and is supported by a 40mm dia, 915mm capacity, solid steel bar.
- ▷ Padlockable isolator; Lock-off Emergency Footstop; E-stop Button; Overload protection.

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

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

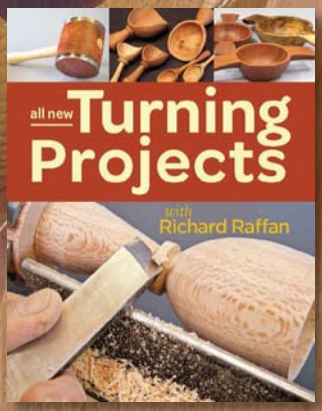
E: sedgwickmachinery@btinternet.com Tel. 0113 257 0637 Fax. 0113 239 3412

NEW WOODWORKING BOOKS

Quick Find Code: 25390

The Woodburner Handbook

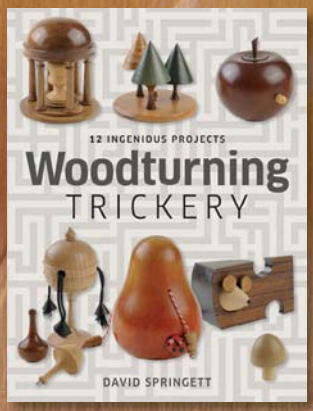
£7.99



Quick Find Code: 25948

All New Turning Projects with Richard Raffan

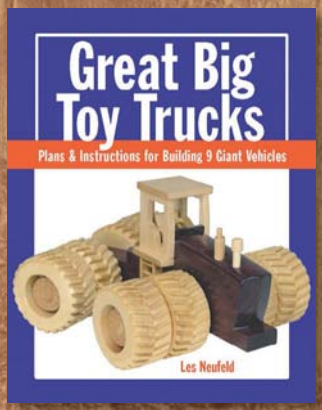
£17.99



Quick Find Code: 24279

Woodturning Trickery

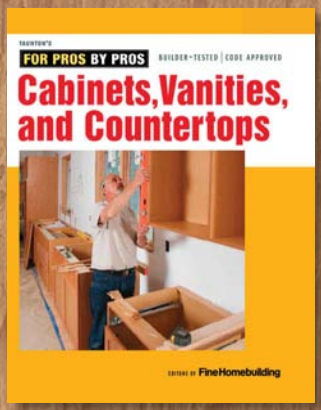
£16.99



Quick Find Code: 25846

Great Big Toy Trucks

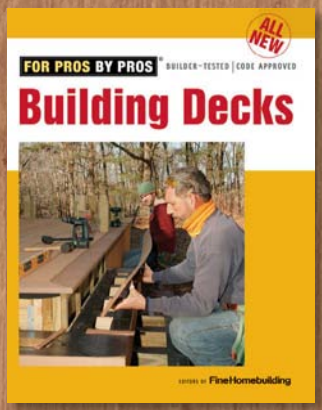
£17.99



Quick Find Code: 26229

Cabinets, Vanities and Countertops

£16.99



Quick Find Code: 26228

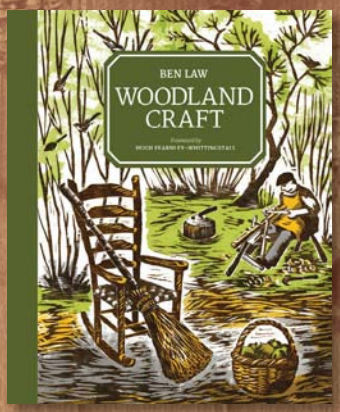
All New Building Decks

£17.99

Quick Find Code: 25951

The New Small House

£17.99



Quick Find Code: 21569

Woodland Craft

£25.00

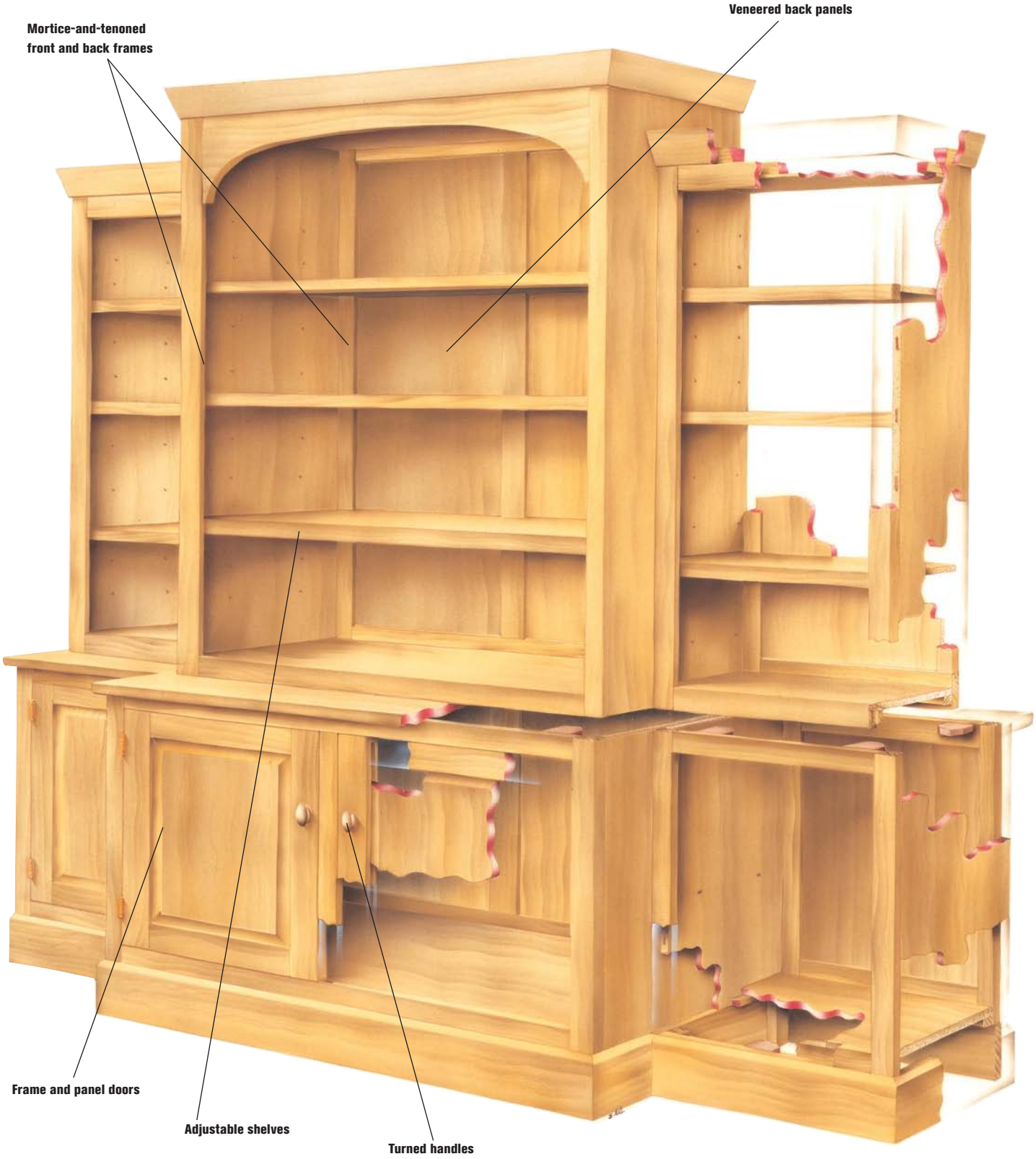
Breakfront bookcase

Mark Ripley makes this simple, but imposing, piece in fine quarter-sawn oak, that would suit many homes

A classic breakfront bookcase in the style of Robert Adam

This piece was commissioned to occupy a space in a big reception room. The open-minded approach of the client and my long-standing desire to make a big breakfront bookcase combined to generate this design.

The breakfront bookcase was first developed from the library bookcases found in grand country houses, some examples being 12ft (3.6m) long. George Hepplewhite & Co. mentioned the style in 1794 in the third edition of *The Cabinet-Maker and Upholsterer's Guide.*



He said the design was 'largely after the manner of Robert Adam', the legendary architect and furniture-designer who lived from 1728–92. Chippendale executed many of Adam's designs.

A pair of smaller pieces I had made for an adjacent room a few months earlier served as the basis for the detailing – when making a series of pieces for a house, even in different rooms, I like to create a strong visual link between them. European oak (*Quercus robur*) was specified and I bought it from a source I had used before.

Construction

The piece is made from six cabinets on a plinth, screwed together with brass screws. If it were ever necessary to move the bookcase, it would need to come apart. Rather than risking damage, I have made the means of assembly subtle, yet easy for someone else to find. Each cabinet is formed from a front frame, panelled back frame and ends. The bottoms are fitted to rabbets after assembly. Likewise the tops of the upper sections are fitted to rabbets.

Veneered MDF boards

Good quality veneered MDF boards are a cost-effective alternative to solid wood for interior dividers, shelves and back panels and I specified them in this instance. I also suggested them for the vertical end panels in this piece.

There is a happy correlation between European oak and crown-cut American oak (*Quercus alba*) veneered boards – once finished they are indistinguishable.

One positive side effect of this construction is weight. Although this piece comes apart for transportation, the top middle section is still pretty heavy. Had I made it in solid oak throughout it would have been more difficult to manage.

I made the plinth so that it too would break down into three sections, but on delivery it went into the room in one piece. All the corners are mitred and the backs are butt jointed.

European oak comes straight-edged, something of a luxury for those like me used to waney-edged English oak. Initially I thought the colour was a bit dull but, by the time we took the pictures four weeks after delivery, it had coloured up a bit and I was happier with the result. Machining was a delight thanks to the easy-to-handle sizes of the boards, combined with good drying.

Plane and stack the various sections for the front frames, back frames, door frames, plinths and cornices, shelf-lippings, door and top panels. Apart from the base top, which is finished at around 1in (25mm), everything is finished at ⅞in (22mm). Reduce the door panels to 23/32in (18mm) before butt jointing and sanding. Dimension and label all the MDF panels so that the grain runs through from top to bottom in the vertical panels.

Base top

This is made in solid oak. As most of it will never be seen, selection for the central area is not critical. Glue it up in two operations so that it can be machine thicknessed. Finally, plane the central butt joint by hand and sand on both sides.

Front frames and back panels

First, make the front frames and panelled back frames. All have straightforward mortice-and-tenon joints. At 10in (approx. 250mm) wide, the top arch in the centre is at the upper limit for a glued joint without allowing for movement across the grain. PVA adhesive allows for some flexibility, and the wood was very dry so I felt confident in using biscuits.

Set the veneered backs into routed grooves. Once the front and back frames and vertical panels have been accurately dimensioned, prepare biscuit joints for the fronts and corresponding screwed back joints. Before assembly, mask the joints off and seal all the internal surfaces with two coats of thinned polyurethane, then cut back ready for oiling. Given the large areas involved in this project, a palm sander fitted with 320grit silicon carbide paper is a great time-saver.

Cabinet assemblies

Use biscuits to fit the front frames to the sides. Set the sides in from the front frames by a small margin so that you can carefully plane the edges of the solid wood frames flush with the top sections. These are screwed from inside the cabinets with No. 6 brass screws.

Plinth

Given the size of the project – and the need for the corners of the cabinets to meet the mitres all the way round the breakfront plinth – you need a high degree of accuracy. A mason's mitre in the reverse angle helps to simplify things and makes it easier to reduce the piece to manageable sizes for transportation. I like to think ahead in such situations, considering what will make the piece easier to move, use or, if necessary, repair, in the future. These are the small things that could make the difference between a piece lasting for one generation,

Plinth detail

or several generations. The backs of the plinth carcasses have butt biscuit joints, while all the outside corners are mitred. 45° clamping blocks are glued to the outside ends of the joints and allowed to dry. The joints can then be clamped up dry and planed to a perfect fit, before cutting the biscuit slots and gluing up. After sawing off the clamping blocks and cleaning up the assembly, a chamfer is routed along the front top edge.

Cornices

The compound mitres in the cornices are individually marked out, and sawn slightly off the line on the bandsaw after the bevels are planed top and bottom. Because of the forward tilt of the cornice, the angles are some way off 45° to the faces of the components and are complex to set up on a bench saw.

Bandsawing to a marked line, and planing in by hand, is quick enough since there are so few of them. Once again clamping blocks are fitted to aid assembly. The cornices are fitted with bevelled blocks screwed to the tops of the carcasses.

Setting up

Set up the three base sections upside down and screw them together from the insides of the end cabinets. Plane any minor discrepancies flat before fitting the plinth with small screw blocks. Once turned over, the assembly can be planed flush on the top surface and set up perfectly level.

There is an overhand on the end

View from the ground, showing cornices and curved arch on main carcass

Interior of main cabinet with doors open

Use slotted screw blocks to fit the solid wood top. Apply two coats of sanding sealer before fitting the top cabinets. The centre top section is next, followed by the ends. Again these are screwed together from inside the end cabinets. Having carefully aligned the top assembly, screw through the underside of the top.

Shelves

The shelves are lipped along their front edges with heavy solid oak strips. Apply a bead moulding to the top shelves. Turn 5⁄16in (8mm) diameter oak dowels and glue into holes bored into the cabinet sides.

You can make a template to do this. The shelf positions are graduated, getting closer together towards the top, creating a more visually satisfying arrangement than equal increments. How the shelves are spaced, however, is determined to a large extent by the intended use.

Doors

These doors are quite big in cabinetmaking terms and are proportioned appropriately. I cut the raised panel mouldings on the bench saw. To do this, remove the crown guard and replace with a long L-section shop-made guard clamped along the length of the table, making physical contact with the blade impossible. Finish the cut with a skew-angle block plane and seal prior to assembly.

Undercut a rebate with the router to fit an 5⁄16in (8mm) wide by ½in (12.5mm) deep groove in the door frames. The only fittings I bought were 2½in (65mm) butt hinges and double-ball catches, both in solid brass.

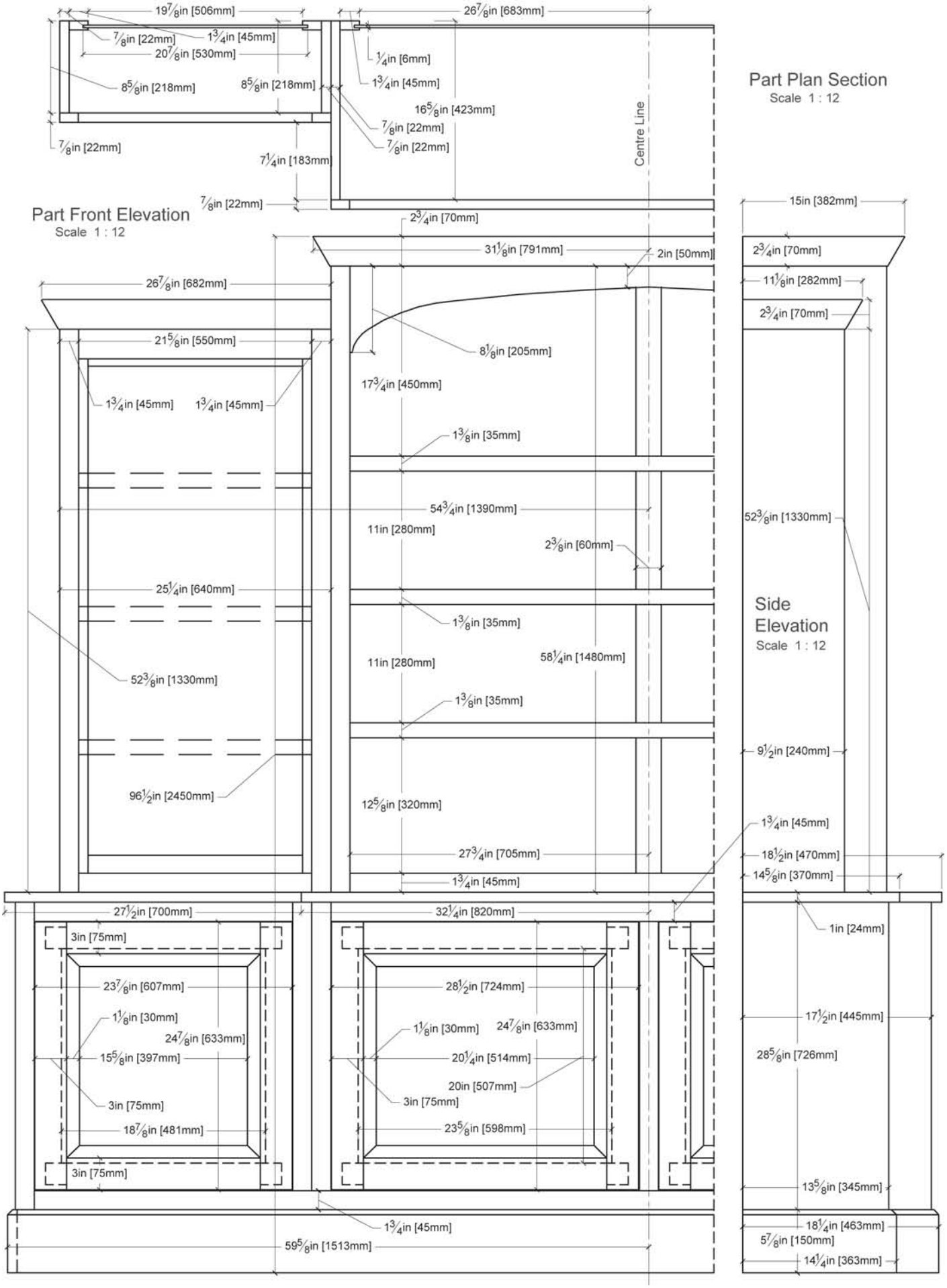
Finishing

Give all the shelves, doors and exterior surfaces two coats of thinned polyurethane and cut back in preparation for building the finish with Danish oil. Having allowed a few days for the final oil coat to harden, burnish and wax the whole piece. F&C

Cabinets are screwed together, note the wooden dowels to support the shelves

Traditional fielded panels on the doors

Fielded doors are flat on the interior side


Part Front Elevation
Scale 1 : 12
Part Plan Section
Scale 1 : 12
Side Elevation
Scale 1 : 12
Centre Line
19 7/8in [506mm]
26 7/8in [683mm]
7/8in [22mm]
1 3/4in [45mm]
20 7/8in [530mm]
1/4in [6mm]
8 5/8in [218mm]
8 5/8in [218mm]
1 3/4in [45mm]
16 5/8in [423mm]
7/8in [22mm]
7/8in [22mm]
7/8in [22mm]
7 1/4in [183mm]
7/8in [22mm]
2 3/4in [70mm]
31 1/8in [791mm]
2in [50mm]
26 7/8in [682mm]
21 5/8in [550mm]
8 1/8in [205mm]
17 3/4in [450mm]
1 3/4in [45mm]
1 3/4in [45mm]
1 3/8in [35mm]
54 3/4in [1390mm]
11in [280mm]
2 3/8in [60mm]
25 1/4in [640mm]
1 3/8in [35mm]
52 3/8in [1330mm]
11in [280mm]
58 1/4in [1480mm]
1 3/8in [35mm]
96 1/2in [2450mm]
12 5/8in [320mm]
27 3/4in [705mm]
1 3/4in [45mm]
27 1/2in [700mm]
32 1/4in [820mm]
3in [75mm]
23 7/8in [607mm]
28 1/2in [724mm]
1 1/8in [30mm]
24 7/8in [633mm]
1 1/8in [30mm]
24 7/8in [633mm]
15 5/8in [397mm]
20 1/4in [514mm]
20in [507mm]
3in [75mm]
3in [75mm]
18 7/8in [481mm]
23 5/8in [598mm]
3in [75mm]
1 3/4in [45mm]
59 5/8in [1513mm]
15in [382mm]
2 3/4in [70mm]
11 1/8in [282mm]
2 3/4in [70mm]
52 3/8in [1330mm]
1 3/4in [45mm]
9 1/2in [240mm]
18 1/2in [470mm]
14 5/8in [370mm]
1in [24mm]
17 1/2in [445mm]
28 5/8in [726mm]
13 5/8in [345mm]
18 1/4in [463mm]
5 7/8in [150mm]
14 1/4in [363mm]

Invis – a solution where nothing else would work!

Joe Della-Porta puts the Invis system to the test, with help from the Lamello tech team

We were given a brief 'to design & make a Shoji screen in padauk (*Andaman padauk*) to be a sliding room divider'. While that sounds straightforward, as we started to work through the design some technical challenges started to pop up.

The problems

1. The screen required two show faces, unlike a typical wardrobe screen.
2. It needed to be able to come apart easily in the event of the Japanese paper having to be replaced.
3. There were to be no visible fixings on either face of the screen.
4. To minimise loading on the frame and its supporting structure it needed to be as light as possible.

The solutions

This screen measures 2,640 x 2,460mm, so the first challenge was to work out a method of construction that would enable us to transport it safely in pieces and then assemble it on site.

After much consideration, we decided to make two identical frames 25mm thick and join them together using the Invis connection system from Lamello. With a pulling power of 150lb per fixing, we figured there'd be little chance of it ever coming apart unexpectedly!

Ordinarily this wouldn't present much of a problem for the Invis as it has been designed primarily for cabinet construction. The system is comprised of a 30mm long female piece typically set into the edge of a board and a 14mm long male piece set into the face of a corresponding board 15mm or thicker. We contacted Lamello for advice on joining two 25mm thick frames and were initially warned against the idea as the system requires at least 35mm thickness on one face. By chance, however, one of Lamello's technical team happened to be in the UK at the time and, obviously up for a challenge, he agreed to drop by the workshop on his way back to the airport for his return flight to Switzerland.

His 'Eureka' moment occurred en-route; offset the female and male components in appropriately shallow or deep holes on both frames to accommodate the overall depth of the fixing. It worked like a dream and with the added strength and alignment of Festool Dominos we were able to construct a rigid but knock-down frame in situ.

The female component fitted 7.5mm deeper than the standard setting

The male component fitted at the correct length, 7.5mm higher than the standard setting

Aligning the two components together

The lateral rail joints were drilled as standard and supported with Dominos

Outcome

The Invis system pulled the frames together with ease. In fact, it was a far safer method of assembly than using sash clamps and also turned out to be a lot quicker. The screens have been assembled for seven months now. There is some natural movement in the wood, but most impressive is that where the Invis connectors are, the joints are as tight as ever!

Conclusion

The Invis system is truly remarkable. It made possible a task that would otherwise not have been so and did it with accuracy and ease. The strength of the system, even with offset bores, is incredible. I would highly recommend it for reversible fixings and especially to avoid handling clamps on a delicate structure. I was able to do on my own what would usually be a two-man job.
Contact: www.della-porta.co.uk

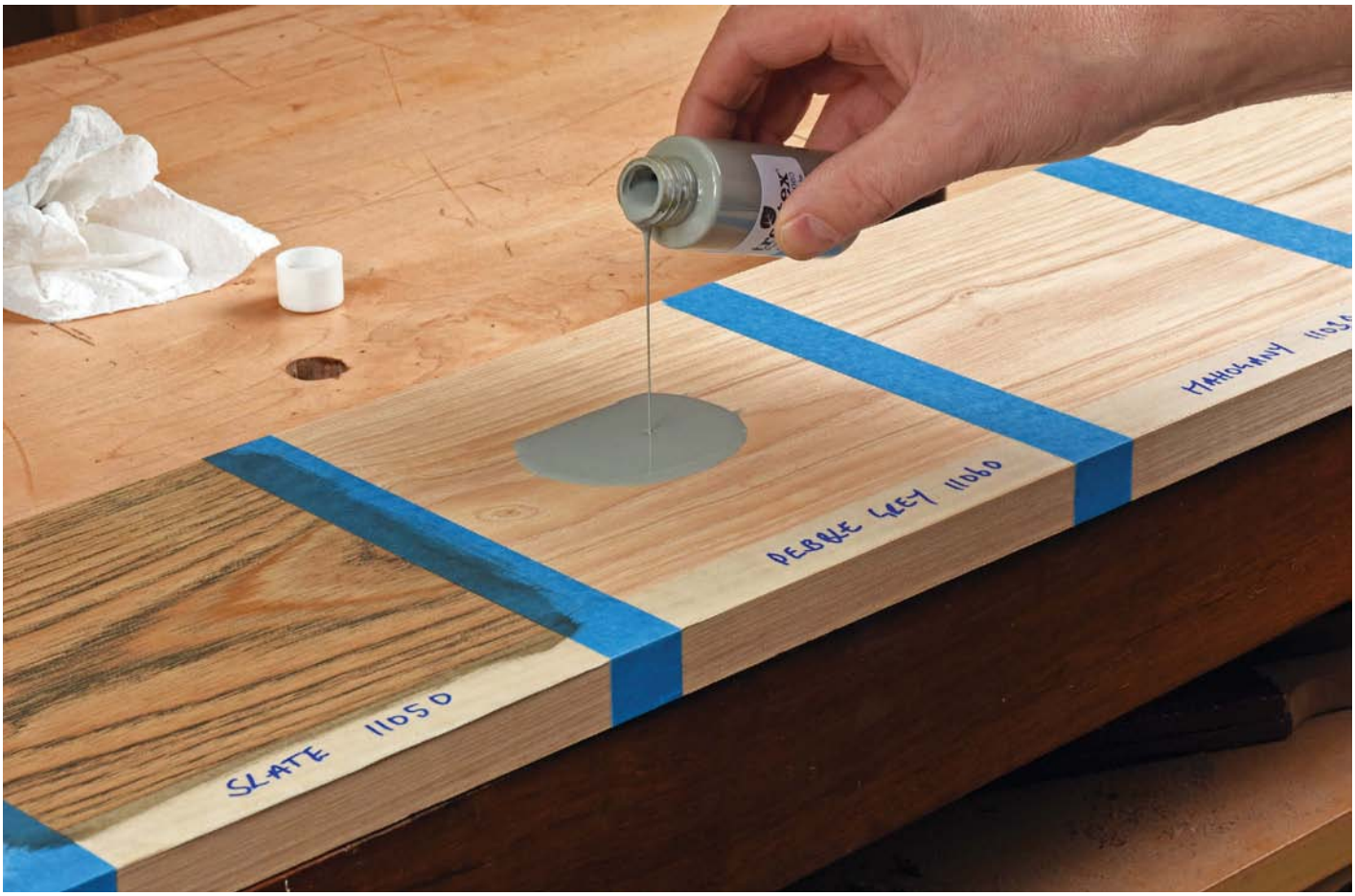
Lamello Invis system

The Invis Mx2 Starter Kit, which includes 20 connectors, a Rasto drill jig, 12mm drill, Mx2 insertion tool and storage case, Minimag Mx magnetic driver and two driver bits, is available in the UK from Axminster Tools.
Contact: www.lamello.com
Web: www.axminster.co.uk
Price: £314.95 including VAT

The final screen, using the Invis system

Just add colour

Derek Jones tries out a range of Treatex hardwax base colours



PHOTOGRAPHS BY GMC/DEREK JONES

Second to sharpening, finishing is perhaps the most frequently discussed topic in the workshop. Love it or loathe it you can't avoid it. I came to terms with this a long time ago and decided that if I was going to learn the skills necessary to make bespoke furniture I might as well learn a complementary set of skills that would enable me to finish it. I don't like to think of myself as a one trick pony so I'm willing to try most things in order to hone my finishing skills. I know it's not everyone's idea of fun but I do feel sorry sometimes for those who prefer to farm out the final, and in some cases most important, stage of a project. Each to their own I guess.

Products that claim to colour and finish at the same time have been around for a long time and for the most part fall into the category of a crude attempt at a fine finish. Colour, sheen and protection are separate but equally important factors to consider when choosing a finish. In my experience a product that does all three well in one coating is yet to be discovered. For those that do exist their usefulness is not exclusive but more suited to exterior work. Oil-based products have been at the forefront of this technology for some reason and it seems that trend is set to continue.

A two-part system

We acquired a sample set of coloured oils from Treatex to try out in the workshop and what follows are the results of some trials carried out on two species of timber; sapele (*Entandrophragma cylindricum*) and American ash (*Fraxinus americana*). Both are fairly dull on their own but have very different characteristics that make them a reasonable benchmark for predicting results on other species used in furniture making. I decided to split the samples into two categories so we didn't end up comparing chalk and cheese products; base tones and exterior grade. It's important to stress that we were assessing these oils for their usefulness on interior furniture and fittings although this may not be their intended use. The Treatex website is rich in technical content and I recommend anyone contemplating working with these products to become familiar with their uses. On their own the colour tones offer little in the way of protection and are intended to be a base layer on which a top coat is applied. It's an approach that has much in common with other types of finish.

Base tones

The base tones – Spruce 11070, Pebble Grey 11060, Slate 11050, Mahogany 11030 and Ebony 11090 – are designed to be used as a base coat only and are not considered durable unless a protective layer is applied on top. On the ash these behave a bit like a liming paste or colour wash so they may well appeal to those involved with more decorative finishes. They do impart a slight tone to the timber similar to that of a conventional oil or water stain but this layer is confined to the surface and does not permeate the surface at all. The oils are heavy with pigment and pour like a thin paint. They require stirring before use and frequently during use. Masking tape does not prevent the oil from wicking up the grain. These base coats dry relatively quickly and at round 20°C in our workshop a second coat could be applied after two hours. The light timber tones behaved similarly to the dark ones and are more suited to light timbers. The liming effect can be improved by scrubbing the surface of the timber with a wire brush to remove some of the pithy dust.

Slate, Pebble Grey and Spruce base tones

Ebony and Mahogany base tones

The base tones are a wipe-on wipe-off product

Scrub the grain on coarse timbers for a more dramatic effect

Top coats

The top coats – Hardwax Clear Matt 007 and Hardwax Clear Satin 008 – behave very much as you would expect and the finishes are as stated. The difference in sheen between the two is subtle but still noticeable. Like all oils they have a slight yellowing effect on very pale timbers. Treatex produce a natural toner with a small amount of white pigment that can be used a pre-coat to help reduce the yellowing. Used under a matt top coat it's about as natural a finish as you will find but with a good level of protection.

Hardwax Clear Matt and Clear Satin oils

Exterior use

My first impression of the two exterior oils – Cedar and Bangkirai – are that they offer very little in the way of colour change or effect, at least nothing that you couldn't achieve with a different product. This is not surprising really as they are formulated for very specific purposes; the Bangkirai oil is a hard wearing treatment for decking and exterior furniture and the Cedar oil for exterior cladding and the like. Their ease of application makes them a good candidate for boot room furniture perhaps and other hardwearing areas.

Cedar and Bangkirai exterior oils

The manufacturers claim the Bangkarai has a good resistance to the effects of UV if that's a priority. It's not a sun screen however, and won't prevent your timber from changing colour but it will not degrade as quickly as some other finishes.

What little odour the Treatex oils have is not unpleasant, which makes them comfortable to use indoors and more importantly on site where the surrounding areas might be occupied. It's not a deal breaker by any stretch but it might garner you a few brownie points from a potentially sensitive customer. Repeated coats of the base tones intensifies the colour on the darker shades slightly but does nothing to improve the liming unless you've missed something first time round. Be warned though, recoat too soon and you risk reconstituting the first coat and ending up with streaks.

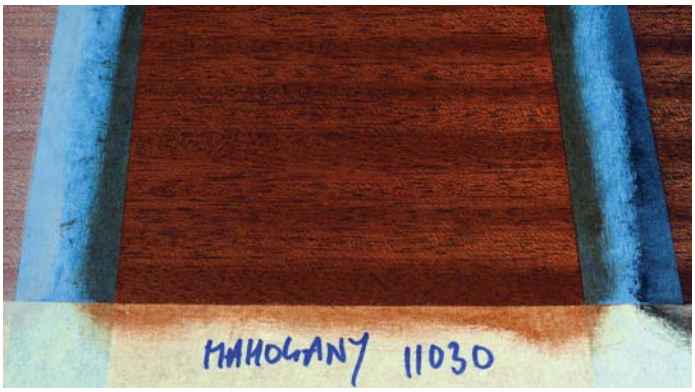
Exterior grade Bangkirai warms mahogany up quite nicely

The exterior oils are quite neutral on light timber

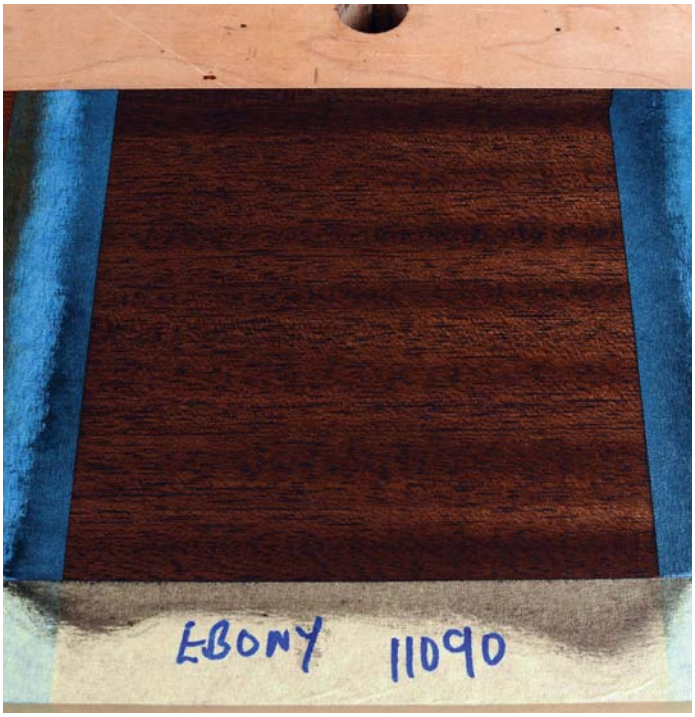
Conclusion

I often refer to wipe on oils as being the MDF equivalent of finishes. It's not as derisory as it sounds, everything has its place after all and what's not to like about a finish that even a monkey can apply. My feeling is that that's the beauty of all oil finishes and Treatex is no different. Wipe on, wipe off and wait a while.

For those of you that refuse to experiment with finishes – shame on you – you're missing out on a whole range of pleasant surprises. Take the Slate 11050 for example, it does a fantastic job at transforming virgin mahogany into a grubby period patina. And it doesn't say that on the tin. My advice is try a sample pot first before shelling out for a whole tin. Oils are an expensive finish when you consider that half of what you apply will be wiped off and thrown away. The upside is that the application is quick even if the drying feels like it takes forever and it's almost impossible to cock up. F&C



The Mahogany 11030 is not an unpleasant colour on sapele



On its own Ebony 11090 is not a treatment for ebonising

Slate 11050 produces a convincing aged look to virgin mahogany

Super powers

Charles Mak shares some power tool tricks that will empower your machines and enhance your shop efficiency

Over the years, I have used or developed many tricks or shortcuts on my shop machines for quicker, more accurate or more precise results. Here are four of my oft-used machine tricks that will likely make your machines work both harder and smarter, too.

Drilling stopped holes with precision

The depth gauge on my drill press isn't very useful to me for two reasons. First, the depth scale is metric and scond its zero mark is not set relative to the workpiece on the drill press table when non-through holes are bored. But I learned a simple solution from a machinist to overcome such deficiencies. Instead of the depth gauge, use a steel rule that can be set to a relative zero. The calibration takes three simple steps:

1. Attach a rule – imperial scale in my case – with a magnet over the depth gauge on the drill press.
2. Lower the bit until the cutting edge is flush with the surface of the stock.
3. Move the rule down to align its zero mark with the depth gauge pointer.

Once calibrated, raise the bit, position the workpiece and bore the blind hole until the pointer points to the desired depth on the rule.

With the rule in place, lower the drill until the bit touches the stock and align the zero mark on the rule with the depth pointer

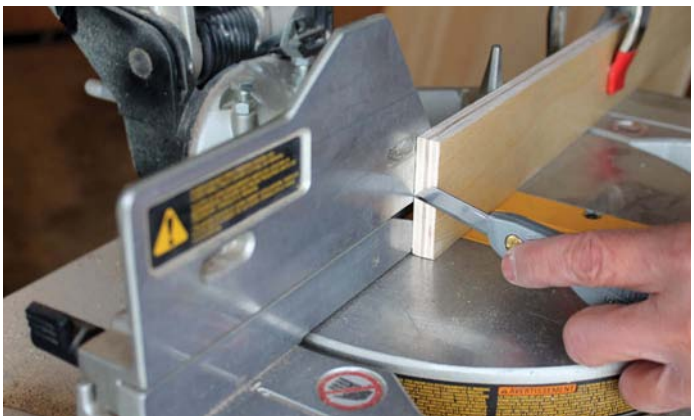
When setting the zero mark, make sure the cutting edge of the bit, not the spur, touches the surface of the stock

Making precise mitre saw cuts

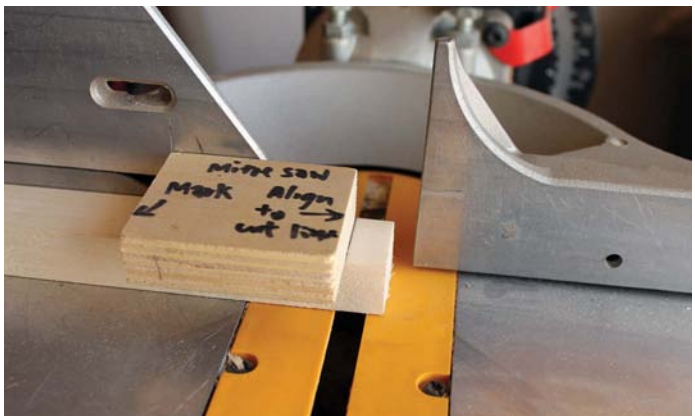
My mitre saw has no laser guide but I have been making laser-like precision cuts without the need for tedious trial-and-error test cuts. The trick lies in the use of a spacer, or a gauge block, and the method works for any length of stock as long as it is not shorter than the gauge block, which is about 60mm long.

To make the gauge block, cramp a long board – say, 50mm wide and 300mm long – on the right fence of the mitre saw, with about 60mm of the board on the left fence. Use a sharp knife and score a line on the left fence carefully following the block's left end. Then saw off the board and the shorter cut-off is your gauge block.

To saw precisely to a marked cutline of a workpiece, position the workpiece on the mitre saw so that one end of the gauge block aligns with the scored line on the fence and the other end aligns with the cutline. Remove the gauge block and you are ready to make the precision cut. If you lose the gauge board, slide a board up to the scored line on the fence and cut a new gauge block. If you ever move the fence, you can simply use the gauge block with the blade in the down position to reset the fence to its proper position.



After cramping the board to the saw, carefully score a line on the fence and cut out the gauge block

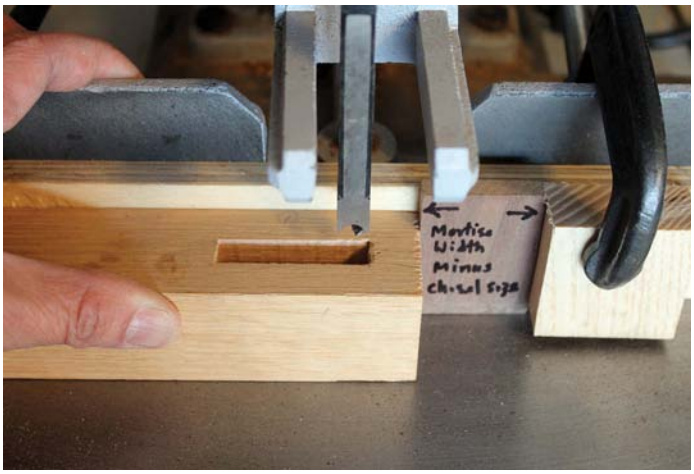


Align one end of the block with the cut line on the stock and the other end with the scored line

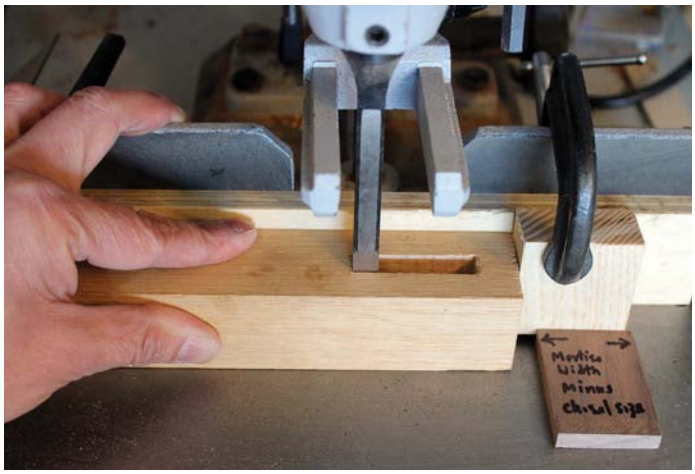
Cutting repetitive mortises

Mortises and tenons are the common joinery used in Mission-style or Arts and Crafts furniture. I came up with a simple way of cutting mortises on identical components using my mortising machine. Again, a gauge block is made and used with a stop block in this trick. The gauge block is a scrap piece cut to the same length as the mortise, less than the size of the hollow mortise chisel.

Here is how to use the gauge block. First, lay out the mortise on any one of the identical workpieces and place it on the mortising machine's table. Align the mortise chisel with one end of the mortise, put the gauge block next to the workpiece and cramp a stock block to complete the set-up. Cut the first mortise, remove the gauge block and continue the mortising, sliding the workpiece towards the stop block.



Make the first mortising using the gauge block and stop block together



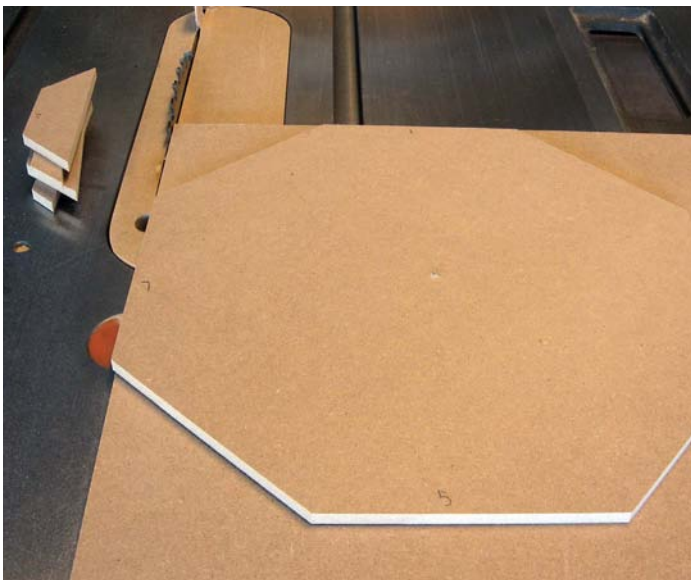
Remove the gauge block and continue the mortising, sliding the stock towards the stop block

Cutting circles

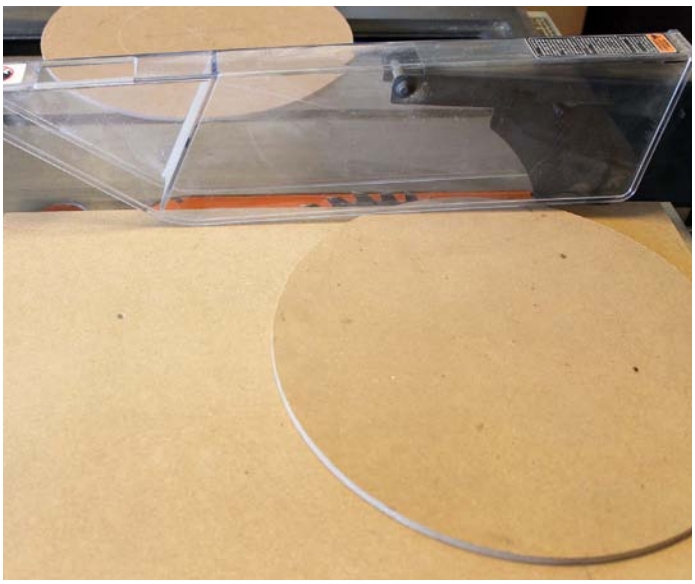
I have cut circles on the bandsaw or with a router and a circle jig with good results. But for ease of set-up and simplicity, I usually turn to my tablesaw when I need a circular board. Using a sliding jig, the tablesaw trick changes the shape of a workpiece progressively to a circle.

The sliding jig used on the mitre slot is like a panel-cutting jig but without a fence. To use the jig, start with a slightly oversize square board and drill a centre hole underneath. Then, mount a finish nail on the sliding jig at a distance equal to the desired radius from the blade. Place the board onto the pin and trim off the corners. Continue lopping off more corners to form an octagon, then a hexadecagon, and so on until it is almost round. In the final step, simply rotate the stock clockwise against the spinning blade to true it to a perfect circle. F&C

Attach a runner to the underside of a slightly oversize board and trim the jig flush with the blade



Rotate the stock to keep cutting off its corners. Note: Guard removed for clarity



In the final pass, rotate the stock clockwise to true the edge

Charles Mak is a woodworking author, tipster and teacher. He takes advantage of both power tools and hand tools in his projects.
Email: thecanadianwoodworker@gmail.com

The saw doctor will see you now

Mark Harrell considers the continuum of a toothline and why it's crucial to select the right plate gauge and PPI for the work you want to do

So far in this series of articles we've been looking primarily at the condition and accuracy of the teeth on your sawplate and this attention to detail can and should be applied to all your back saws. What we haven't yet considered is the suitability of each saw in relation to the job at hand and how it fits into your general arsenal of hand tools. Extrapolate this a little further and you can start to bring into question the type of work you expect to be doing in the future.

Take any tool in the workshop and ask it to perform effectively at the limits of its capability and you may find that you're asking just a little too much of it. Let's put it another way. Would you reach for a Stanley No. 1 Bedrock smoothing plane to put a glassy-smooth finish on an expanse of walnut for a dining table or the sides of a cabinet? Or use a No. 8 jointer plane to chamfer the corners of a bed rail? No, you'd select a No. 4 or 4½ smoother for the table and cabinet, and a block plane for the bed rail. Likewise, would you use a .015-gauge plate to dovetail 18mm stock with occasional forays into 30mm? While you might just get away with it at the lower end of the scale at the top end you're going to be disappointed and here's why; the delicate plate just won't handle that robust of a cut without heating up, expanding and curling a nice s-roll into the toothline.

Similarly, would you use something like a 460mm long Bad Axe Roubo Beastmaster to craft the tenons of a bench you're assembling with a 95mm thick benchtop, with no intent of making cuts that large ever again? No, of course not – you'd want a more modest saw in the 410mm range that you can use for your more modestly sized projects down the road.

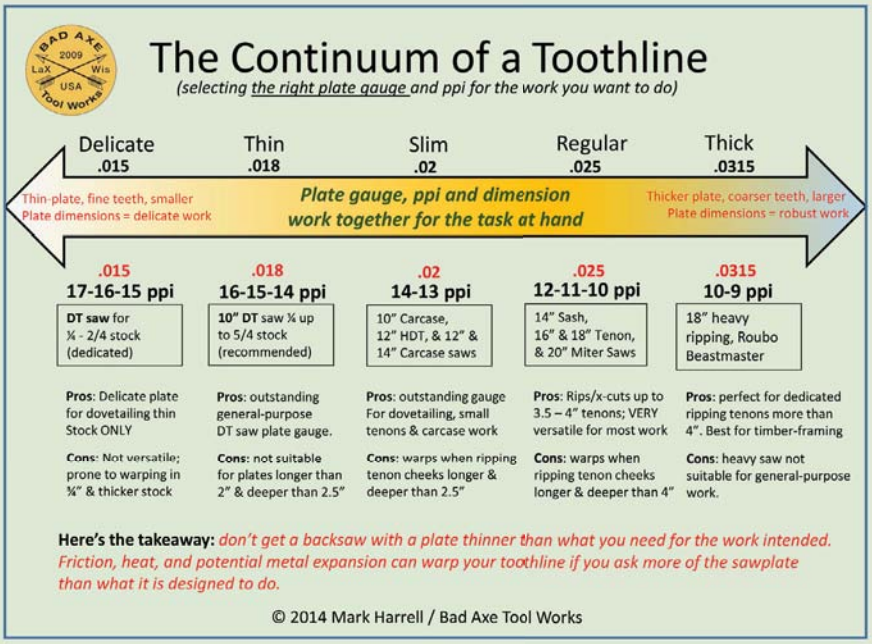
In our quest for cutting ever closer to the line and, dare I say it, cutting joints that come together straight off the saw, it's easy to get distracted from what's actually happening at the sharp end. Woodworkers the world over, be they hobbyist or professional, frequently make the same mistake that is 'finer equals better'.

So before you disappear down that same rabbit-hole and start to question your sawing skills, here's a simple guide designed to keep you on the straight but not necessarily narrow. There is a continuum of plate gauge selection that marries up with pitch (ppi), length and usable depth of plate, and the degree of set. These combined variables will deliver the kind of cut and action one seeks for a range of wood thicknesses, and the length and depth of cut one seeks to make in that range.

What is the gauge?

The gauge of a sawplate relates to the thickness of the material in which the teeth are cut. Typically this will be presented in a three-number sequence such as 015, 018, 020, for example. It's shorthand for 0.015in etc. and can sometimes be recorded as .015.

018 gauge dovetail saw typically for use on stock up to 30mm



Heat

A 018 gauge 300mm long Bad Axe Stiletto dovetail saw can work at full capacity on stock up to 40mm thick

024 is a typical gauge for 410mm long and over tenon saws

The finer gauge plate on the left has started to distort in the cut and run off

Any sawplate will heat up deep into a cut due to the friction incurred against the metal plate rubbing against the inside walls of a kerf. Just as humidity affects timber, heat brings about a similar change in metal. It expands and affects the toothline, warping it out of true and affecting the quality of your cut. That is, unless you have selected an appropriate gauge of metal, which on one hand won't heat and warp, nor be too heavy for the job at hand – but just the right thickness, with just enough of a heat sink to offset warping.

Think of it this way: the thinner and smaller the plate, the finer the pitch (more PPI or TPI if you prefer) so you'd only make fine, delicate cuts in fine, delicate stock. At the opposite end of the spectrum: the thicker and larger the plate, the coarser the pitch (less PPI or TPI), so you'd use a large saw for big cuts in robust timbers.

The takeaway here, and you might need a crystal ball for this, is to identify your personal woodworking style and match that up with the kind of projects you want to undertake. Envision the kind of cuts these projects and their associated stock will require. Then you're on the road to building a nest of saws that work for you for most applications. As many experts will attest, you really only need about three backsaws, and at least two handsaws, possibly three. So as fun as the act of tool acquisition may be, it's better on the pocket (and quite possibly your marriage) to identify the saws you need, versus the saws you want.

Here are some concrete examples

Scenario 1: the bench-building luthier

You're crafting a Roubo-style bench about 1.8m long with a 90mm-thick top. This is probably the only time you'll come anywhere near this scale of mortise and tenon joinery, since your forte as a luthier is to craft delicate pieces of wood together into a guitar. You therefore will want this one larger saw with a .025-gauge plate filed 12 ppi hybrid-cut for the bench-build, and fortunately, it will remain your go-to saw whenever it's time to cut the scarf joint at the neck with your next guitar build. Your dovetail saw with the .018-gauge plate filed 15 ppi rip, and your carcass saw with the .02-gauge plate filed 13 ppi hybrid or 14 ppi x-cut fleshes out the balance of your woodworking requirements.

A 020 gauge small tenon, dovetail hybrid saw is well within its working parameters on timber up to 50mm thick

More steel in both directions means deeper and longer cuts

Scenario 2: the bench-building timber-framer (with larger furniture pieces in mind)

You're crafting a Roubo-style bench about 2.4m long with a 120mm-thick benchtop, and you just love fitting big timbers together because you want to timber-frame your next workshop. Here's where a 460mm Roubo Beastmaster with its .0315-gauge plate filed 9 ppi rip comes into play, because this won't be the first timber-framing scale project on your horizon. You also tend to craft larger furniture pieces, so the balance of your arsenal consists of a 300mm long hybrid dovetail/small tenon saw filed 14 ppi hybrid-cut, and a 410mm long tenon filed 12 ppi hybrid-cut.

Conclusion

At the end of the day, you'll want to build your nest of saws in accordance with your woodworking style, and not through some formulaic, 'Moses-on-High, yea verily, this is what you MUST have' approach that too many online pundits would have you believe. Now chances are at some point you're going to get a DT saw, and you should. But again, you're best off with a .018-gauge plate, because it will dovetail 6mm thick stock just as handily as 30mm thick stock. Go for the .015-gauge plate long after you've mastered the craft and you WANT (not need) a dedicated thin-stock saw. Down the road (or slippery slope, some say), you may WANT more saws to fill the void – such as a 350mm long sash for those in-between cuts, and the 460mm long Roubo Beastmaster . . . well, BECAUSE. And – it's a great salve for the wounded ego of your average middle-aged man losing his hair. Sort of like the Viagra choice of saws. *F&C*

The 015 gauge 300mm-long Bad Axe Stiletto dovetail saw has relaxed tooth geometry at the toe to assist with the start of the cut

TOMACO

THE TOOL MARKETING COMPANY

DISTRIBUTORS OF QUALITY PRODUCTS

SHARP EDGE

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

narex®

Quality range of woodworking hand tools made in Europe.

COLT® PROFESSIONAL TOOLS

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

MORAKNIV®

Range of knives for trade and carving. Swedish quality, swedish steel. Made exclusively in Mora Sweden.

VETO PRO PAC® TOOL BAGS THAT WORK

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

CMT ORANGE TOOLS™

Router cutters, spindle moulding cutters and saw blades from Italy.

FOR YOUR NEAREST STOCKIST VISIT

www.tomaco.co.uk


DOWNLOAD
FURNITURE & CABINETMAKING
TODAY
FOR JUST £1.99
AND GET 1 FREE ISSUE
Subscribe and get individual issues wherever you are
+ save money!
6-month subscription £14.99
12-month subscription £27.99
Single issues £2.99
pocketmags.com
nook by Barnes & Noble
kobo
Furniture & cabinetmaking
Wedged tenons
Chris Schwarz argues the case
Project: Scandinavian workbench simplified
BlackBerry
SAMSUNG
Top drawe
Takes Somerset Guild
Finishing tech
How to keep your pale timbers looking natural for longer
Tool tech
How to harden tool steel in your own workshop
Restored to glory
Stanley No.45 receives makeover
Joint success
Daniel Graham uses basic physics to create an impossible joint
Feature
The Arts & Crafts legacy exhibition
On test
Bad Axe 12in Stiletto dovetail saw
Show report
WIA 2015
Campaign trail
Build a traditional chest with a contemporary twist
Tongue & groove shoot-out
Hand vs machine
Virtuoso
9:41 AM
100%
Ganging up on dovetails
LEARN THE PROS AND CONS
Build a masterpiece tool chest
Edge jointing for coopered panels
Rough guide for a smooth finish with Osmo

Rosewood chiffonier side cabinet – part 4

First impressions count so this month it's time to smarten up our chiffonier's appearance with a few minor repairs and just a little understated bling

PHOTOGRAPHS BY GMC/DEREK JONES

It always makes me laugh when I see those makeover programmes that turn a complete wreck into a showroom stunner in the space of a few hours condensed into 30 minutes of TV. When it comes to closing the show they usually only take score of the material costs of the project and leave out the most important factor – labour. Time, as we all know, is money and all things considered, rarely will you be able to turn a sow's ear into a silk purse and make a profit at the same time. Restoration, almost by definition, is the science of make do and mend and the steps we take to restore items to their former glory veer between partial rehabilitation and complete correction.

This month we're going to take a pragmatic approach and seek to present our chiffonier in the best light possible given its troubled past and current state. Somewhere along the line as the current custodian we'll have to make a value call as to the ethics of our actions and feel comfortable that we are working with the best interests of the piece. Some of the work will undoubtedly be cosmetic which raises questions about aesthetics and value of a monetary kind.

Just as an aside, if you fancy diving headlong into a debate about quality in general and how to recognise it, grab a copy of *Zen and the Art of Motorcycle Maintenance* by Robert Pirsig. It has nothing to do with motorcycle maintenance and even less to do with restoration but it will encourage you to ask questions about things you've never thought relevant to furniture making. Our first conundrum is to deal with the unsightly holes in the front of the drawers that pass through to the locks. There are a couple of things bothering me here. The locks don't match each other suggesting that either one may not be original or, as I suspect, are later additions due to the fact that they have never been fitted with escutcheons. Admittedly it's not inconceivable that the maker made the drawers with locks and omitted the escutcheons but close inspection of the doors below suggests that these were very much a part of his repertoire. I decided, therefore, to add them and make the appearance more uniform and prevent any further damage to the drawer face.

Selecting a good match

Believe it or not these are all new escutcheons and as you can see they come in a variety of shapes and sizes. Don't be put off by the chunky appearance of the largest one as all this extra brass means it can be filed to match existing hardware if required.

Fortunately, we've found a good match for the ones already fitted to the doors – waisted at the pin and slightly flared at the bottom. Passing the key through the escutcheon in a test fit helps identify the best size.

A range of new escutcheons suitable for restoration

A close match to some original escutcheons

Test fit the escutcheon with the key to make sure it works

Friction fit

Use tape to transfer the shape of the new brassware

Use files or rasps to expand the hole

A good fit on the first drawer front but with a little hole to fill

A perfect fit on the second drawer

Unlike when fitting escutcheons into a fresh face there's no chopping or fret sawing come to think of it, when carrying out a retro fit.

In most cases you'll be enlarging an already established hole so only need to fine-tune the shape. I do this in two stages by masking off one section at a time with masking tape and marking round the new escutcheon with a sharp knife, just aiming to score the tape and not risk slipping on the finished surface of the veneer. A good selection of rasps and needle files will enable you to work up to a good friction fit quite easily. Remember to remove the lock beforehand though.

If you have problems with alignment on the pin you can adjust things a little by filing the inside of the escutcheon or, as a last resort, the key. One of our escutcheons didn't quite cover the original hole but the result was a great improvement and we can deal with that when we come to polishing. The second was a perfect fit.

Harvesting good veneer

Whenever you carry out a repair on an old piece it will pay dividends if you think ahead about how you intend to match any new material to the existing surface. Keeping a selection of old timber and veneer is one way but there's another trick you can apply. The front face of our chiffonier is looking shabby and we need it to look its best. The sides aren't a lot better but we can live with that. The blocks at the base that take the turned feet are veneered and bits are missing. Patching these up with new veneer will be difficult to match so I decided to harvest a section of original veneer from one of the blocks at the back of the chiffonier and use it to carry out a patch repair on the front.

Hide and seek

The only glue for a restoration of this kind is hide glue and you can use it safe in the knowledge that it won't react with the existing old glue. Look for any loose bits of moulding or veneer and prise open any loose joints and force as much glue in the gap as you can and tape them down. Where possible make any straight cuts with the direction of the grain. The old harvested veneer will be close to the same thickness as the existing and perhaps won't need too much fettling to achieve a good fit.

Take care of any loose veneer before carrying out any cleaning

A veneer saw is better than a knife for cutting thick veneer patch repairs

Cut with the grain to achieve a seamless joint

No need to completely disassemble. Just add hide glue and clamp

Solid blocks of new material will be easier to disguise than patch repairs of different coloured veneer

Panel game

Restoration isn't always about replacing like for like if there's not a lot to go on in the first place. The old panels were held in place with some nasty off-the-rack moulding bought from a DIY centre and really not worth saving. Unfortunately repeated attempts to hold the panels in place had made a bit of a mess of the inside of the doors so I took a bold step and decided to create a solid timber frame out of mahogany to mask the damage and then apply a cocked bead to hold the panels in place. It won't be original but it will be a traditional style solution and reversible. When it comes to polishing the panels I'll carry out most of the work with them removed from their frames and then fit the bead to match the shape of the panels. Hopefully I'll achieve something that looks as if it might have been done a long time ago or at least by a sympathetic craftsman. F&C

New cabinet work in an old style

The new Rio rosewood panels have plenty of character to match the existing veneer

Suppliers of authentic style brassware for restoration
www.martin.co.uk

Next month

In the final part of our restoration project we'll put the finishing touches to the chiffonier and look at ways to blend the repairs to match their surroundings

Thomas Flinn & Co.

Saw & Hand Tool Manufacturer
Sheffield, England

The UK's last remaining traditional saw manufacturers.

Now also manufacturing Clifton Planes including a NEW Block Plane!

Garlick · E.T. ROBERTS & LEE · PAX · CLIFTON

www.flinn-garlick-saws.co.uk
orderonline@flinn-garlick-saws.co.uk
Tel: 0114 2725387

POLYX®-OIL ORIGINAL

osmo

BEAUTIFUL FINISH, UNBEATABLE PROTECTION!

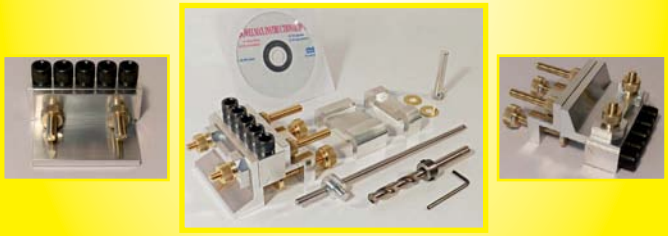
> The renowned original hardwax-oil
> Hardwearing, water and dirt resistant
> Microporous, does not peel or blister
> Re-finish without sanding
> Highlights the natural grain providing a rich and warm effect!

DOWELMAX

Dowelmax Doweling Jigs

The ultimate joint making system
chairs, tables, stools, desks, cabinets, dressers, beds, bookcases, benches, kitchens, bedrooms, studies etc etc etc ...
You can make them all with ***Dowelmax***
Fast, Accurate, Strong, Repeatable joints
time after time after time ...

Dowelmax Classic Metric 10mm £239
Optional 6mm and 8mm guide sets available for the above
"Has made my morticer, tenon jig and biscuit jointer redundant" KC
"Beautifully engineered, fantastic performance" SCF



Contact admin@dowelmax.co.uk
visit www.dowelmax.co.uk
Tel 01352 781168 or 07773718758
A Dowelmax is forever...not just for Christmas

SURREY TIMBERS Ltd

Your One-Stop Wood Shop

Hardwood Timber Merchant
stocking local & Imported Timber

Please come & select from our range:

OAK, YEW, WALNUT, SAPELE, APPLE, MAPLE SYCAMORE & More!

All welcome
• Woodturners • Joiners
• Cabinetmakers

Call in and see
our huge range at Loseley Park, Guildford, Surrey, GU3 1HS

07795 663792 **01483 457826**

www.surreytimbers.co.uk

CMT ORANGE TOOLS™

Router Bits and Sets

Saw Blades

Cutter Heads and Knives

For a catalogue or more information please visit www.cmttooling.co.uk or call 01202 611 123

Alternatively for your nearest stockist visit www.tomaco.co.uk

TOMACO
THE TOOL MARKETING COMPANY

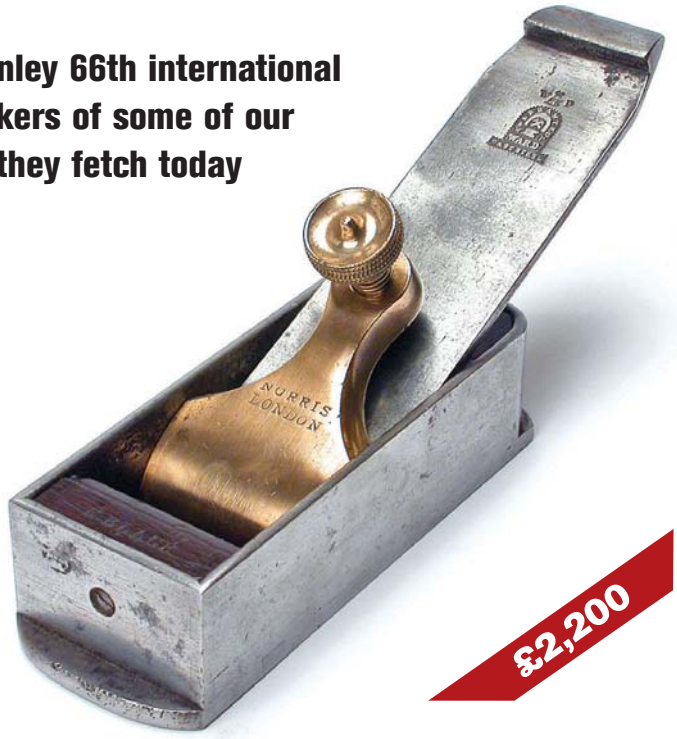
Plain dealing

John Adamson reports back from the David Stanley 66th international auction and wonders what the unassuming makers of some of our most essential tools would make of the prices they fetch today

Had the late Geoffrey Entwistle been at David Stanley's 66th international auction, held once again at the Hermitage Leisure Centre at Whitwick, Leicestershire, on 26 September 2015, he would have been astonished that six of the planes he had made in his tiny home workshop should have ended up among the top 25 highest-selling lots in the sale.

As always at these tool sales, there were handsome Norris planes fetching high prices. A Norris A31 gun-metal thumb plane with rosewood (*Dalbergia latifolia*) wedge and infill (lot 872) went to a commission bidder from Germany for a hammer price of £2,900 (not including 15% buyer's premium), while a scarce Norris mitre plane (lot 874) was knocked down for £2,200, going to an absentee bidder from Hong Kong.

Nevertheless, ranking 10th in the sale there was an unused 10½in skew-mouth mitre plane in gun-metal with dovetailed steel sole (lot 401) made by Entwistle, which brought £2,000 from a commission bidder from Ireland. Not far behind in price were five more of his gun-metal planes, catching the eye of discerning buyers and selling for between £1,000 and £1,500 each.

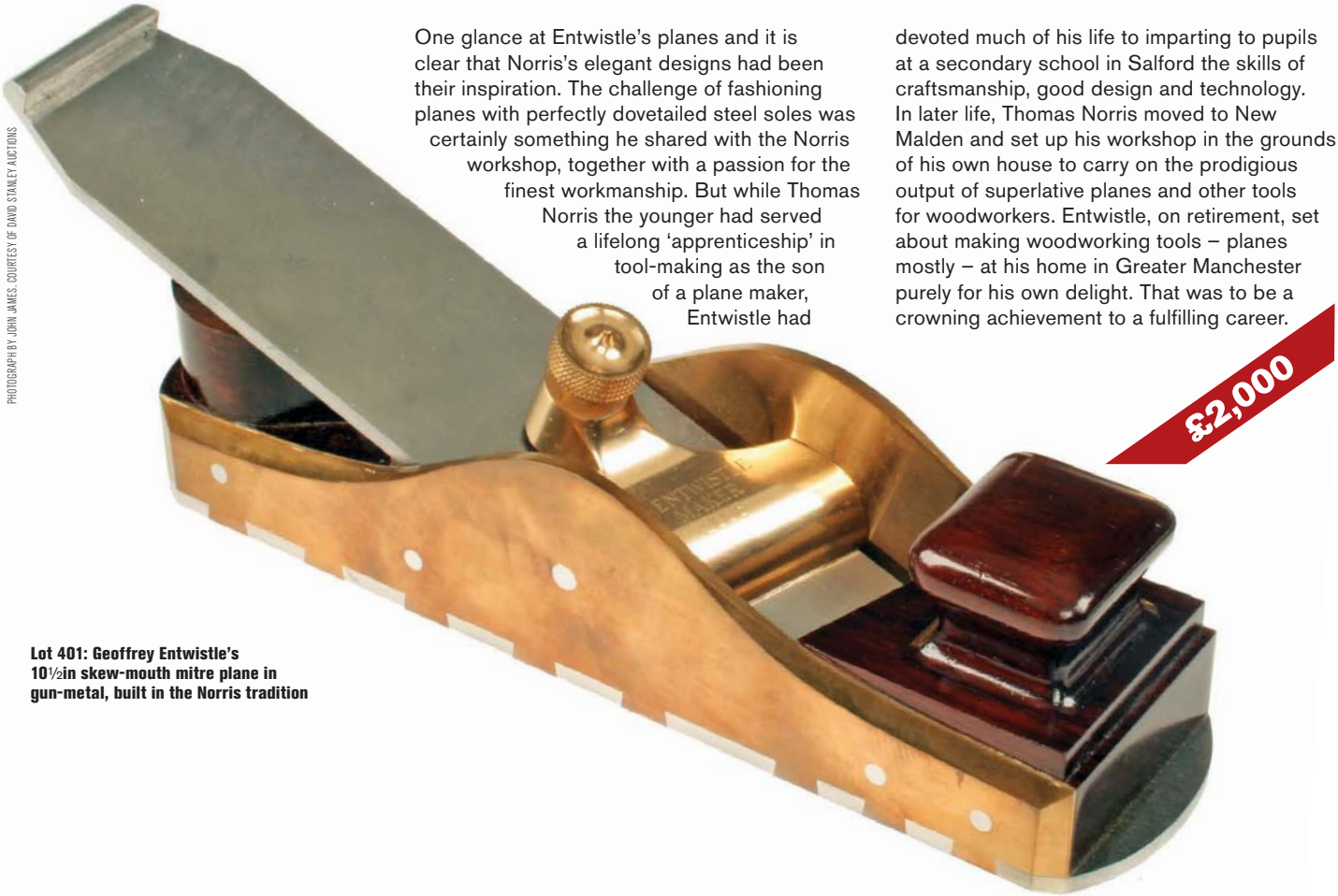


PHOTOGRAPH BY JAMES AUSTIN, COURTESY OF DAVID RUSSELL

Lot 874: An early 6½in dovetailed Norris mitre plane with rosewood infill and straight NORRIS LONDON mark on the lever cap

Entwistle

One glance at Entwistle's planes and it is clear that Norris's elegant designs had been their inspiration. The challenge of fashioning planes with perfectly dovetailed steel soles was certainly something he shared with the Norris workshop, together with a passion for the finest workmanship. But while Thomas Norris the younger had served a lifelong 'apprenticeship' in tool-making as the son of a plane maker, Entwistle had devoted much of his life to imparting to pupils at a secondary school in Salford the skills of craftsmanship, good design and technology. In later life, Thomas Norris moved to New Malden and set up his workshop in the grounds of his own house to carry on the prodigious output of superlative planes and other tools for woodworkers. Entwistle, on retirement, set about making woodworking tools – planes mostly – at his home in Greater Manchester purely for his own delight. That was to be a crowning achievement to a fulfilling career.



PHOTOGRAPH BY JOHN JAMES, COURTESY OF DAVID STANLEY AUCTIONS

Lot 401: Geoffrey Entwistle's 10½in skew-mouth mitre plane in gun-metal, built in the Norris tradition

David Russell

Another tool lover, who in his spare time enthusiastically gathered together one of the all-time great collections of tools, has found satisfaction in a rather different way. Having brought out his book *Antique Woodworking Tools* in 2010 to record his astounding accomplishment as a tool collector, David Russell has been quietly disposing of his tools ever since. He has witnessed many items going under the hammer at David Stanley Auctions happy in the knowledge that the tools he enjoyed collecting will thrill new owners, whether they want to hoard them or use them at the workbench.

There were a number of items from his collection at this auction, eight of them in the top 25 highest-selling lots. Outstanding among these were the early Norris mitre plane already mentioned and a pair of continental cherry-wood (*Prunus avium*) compasses – lot 774. Formerly in another great collection, that of Dermot and Cynthia Roche, they sold for £1,000 to an absentee bidder from France.

A couple of other items from the Russell collection, selling at a much more modest £250 and £230 respectively, were a beading fillister plane made by W. Greenslade of Bristol (lot 75) and a framed brace marked 'Holtzapffel' (lot 807). The stamp on the Greenslade plane mentioning that the makers were winners at the world's trades fairs in London, Dublin, Paris and Melbourne signals the maker's pursuit of excellence of workmanship. The brace, also beautifully wrought, has cast-brass upper and lower arms following John Cartwright's original design as first adopted by William Marples in the 1850s. Closely resembling braces that were part of the output of Robert Marples' Hermitage Works in Sheffield in the 1860s, it is conceivable that the brace was made by Marples and supplied to Holtzapffel as dealer. The engraving of the lone word 'Holtzapffel' above the pad remains a mystery, however, for since 1827 the firm was known as Holtzapffel & Co. and its tools were generally, but not always, marked thus. The uncertainty surrounding the item's manufacture meant the price at auction remained relatively low.

Lot 774: 18th- or 19th-century cherry-wood compasses with inset steel pencil-holder

Lot 75: This 9⅛in universal beading fillister plane in beech (*Fagus sylvatica*), boxwood (*Cornus florida*) and brass with steel-soled depth stops is capable of cutting many different shaped beads, according to the revolving brass disc. It bears the mark of the Bristol makers, W. Greenslade

Lot 807: A framed brace in ebony (*Diospyros spp.*) and brass, 1860s, engraved 'Holtzapffel' for the London tool-makers and dealers Holtzapffel & Co., but probably made by Robert Marples in Sheffield

PHOTOGRAPHS BY JAMES AUSTIN. COURTESY OF DAVID RUSSELL

International bids

In contrast two anonymous tools appealed to viewers owing to their lively depiction of animals. A French dowel saw (lot 113) in service-tree with a camel's head for its tote and ivory wear plate fetched £600, going to the absentee French buyer. The *sumitsubo*-style ink line (lot 169A), featuring a bowl carved with a tiger or panther and an elephant, and a handle fashioned into a hand grasping a frog, was knocked down at £90 to the same buyer. "We find the live internet bidding service greatly extends our reach, making our sales that much more international," concluded David Stanley after the sale. F&C

PHOTOGRAPH BY JOHN JAMES. COURTESY OF DAVID STANLEY AUCTION

Lot 169A: This ink line, used to snap a straight or curved line on wood with a fine silken line, probably comes from Myanmar

Lot 113: French dowel saw with 4in blade and camel's head tote

PHOTOGRAPH BY JOHN JAMES. COURTESY OF DAVID STANLEY AUCTION

Upcoming auctions

The next international David Stanley Auction is on 26 March 2016 at the Hermitage Leisure Centre, Whitwick, Leicestershire LE67 5EU. Their next general auction is on 29 January 2016, also at the Hermitage Leisure Centre. For more information visit: www.davidstanley.com

SAVE UP TO 30% WHEN YOU SUBSCRIBE

FREE EARLY DELIVERY +

projects techniques design inspiration profile workshop 20mins handtools furniture events news workshop F&CUK

+ **DIRECT TO YOUR DOOR**

You pay less than £3 an issue!

by Direct Debit

3 EASY WAYS TO SUBSCRIBE

Please quote order code A4668

☎ +44 (0) 1273 488005

www.thegmcgroup.com

FREEPOST RTHA -TGLU -CTSK, GMC Publications Ltd, 166 High Street, Lewes, BN7 1XU (please affix a stamp if posting from overseas)

YES! I would like to subscribe to Furniture & Cabinetmaking

Subscriber details

Title | Initial | Surname

Address

Postcode | Country

Telephone | Email

Subscription options (please tick the appropriate price)

Pay by cheque/card	12 issues **SAVE 10%**	24 issues **SAVE 20%**
UK	£45.90	£81.60
Europe	£57.38	£102.00
Rest of World	£64.26	£114.24
Pay by Direct Debit (UK only) **SAVE 30%**		
UK only	£17.85 every 6 issues	£35.70 every 12 issues

The Direct Debit Guarantee: This guarantee is offered by all Banks and Building Societies that take part in the Direct Debit Scheme. The efficiency and security of the Scheme is monitored and protected by your own Bank or Building Society. Please see your receipt for details. Guild of Master Craftsman Publications will ensure that you are kept up to date on other products which will be of interest to you. If you would prefer to not be informed of future offers, please tick this box ☐
Offer expires 31/05/2016 Plus free gift with some issues; sorry not available overseas

Payment methods (please tick and fill in chosen option)

☐ I enclose a cheque made payable to GMC Publications Ltd, or ☐ Please debit my credit/debit card

Card No.

Start date | Expires | Security code

Signature | Date

☐ Direct Debit

Instructions to your Banks or Building Society

Name of account holder

Bank or Building Society account no.

Bank or Building Society sort code

Name and full postal address of your Bank or Building Society

Name

Address

Postcode

Originator's identification number 6 5 9 9 5 7

Reference number (office use only)

Instruction to your Bank or Building Society:
Please pay GMC Publications Ltd Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit guarantee. I understand that this Instruction may remain with GMC Publications Ltd and, if so, details will be passed electronically to my Bank/Building Society.

Banks and building societies may not accept direct debits for some types of accounts.

Signature | Date

A4668

hand tools and wood chisels specialist

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

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

Tool Nut .co.uk

Elipse P3 Half Mask Respirators

for only **£19.50**

Henry Taylor Adze

straight **£49.00**

gouge **£64.00**

Henry Taylor Chisel Set

for only **£120.00**

COFFIN SHAPED MALLETS

Leadwood and Wild Mango
(super weighted head)

from only **£29.00**

Natural Leather Chisel Rolls

from only **£17.50**

TROUSER BRACES

only **£10.00** each

Henry Taylor 6-Piece Starters Carving Tool Set

for only **£79.99**

scrapers

sharpening stones and tools

measuring and marking

Order online today at
www.toolnut.co.uk
or call to order on 01424 224269

saws

punches

Wooden Trestles

x1 **£41.00** each
x2 **£38.00** each
x3-9 **£37.00** each

OVER 90 DIFFERENT CARVING TOOLS

OVER 25 DIFFERENT CHISELS

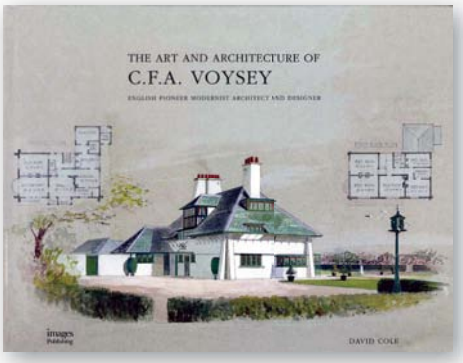
Order online today at www.toolnut.co.uk

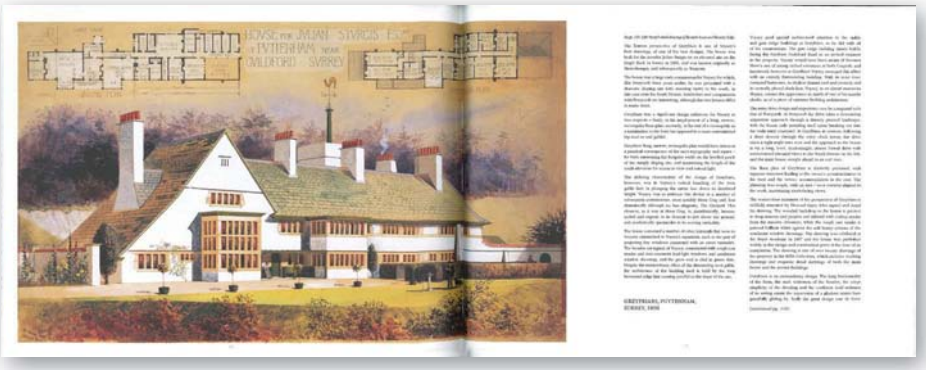
Workshop library

This month we review three books: *The Art and Architecture of C.F.A. Voysey, Complete Starter Guide to Whittling* and *Furniture Brasses*, as well as chair maker Tim Manney's blog

The Art and Architecture of C.F.A. Voysey

By David Cole





C.F.A. Voysey is regarded as a pioneer of the modern movement of architecture and design, although he himself refuted this label. This book focuses mainly on his architectural commissions in the UK, where he designed over 60 houses. Voysey preferred simple forms within his architecture, and to those living in the UK at least, many of the houses featured will be very familiar even if the name of their architect isn't.

More dining than coffee table, the book is in a large format (385 x 300mm), consisting of 206 pages of detail on a varied portfolio from urban and country houses and cottages to factories.

The large format of the book allows the real scale reproduction of Voysey's own watercolour illustrations of each commission, which have been taken from the collection of his drawings held by RIBA, apparently the first time these have been published in this way.

As the book's author David Cole is keen to point out, much of Voysey's portfolio of houses are still extant and most in the same configuration as his initial designs. This means there are plenty of good-quality photographs of the various houses and buildings, which are accompanied with interesting narrative on Voysey's approach and style organised over logical sections.

An interesting and wonderfully presented book of one of the most important figures within the modern movement of architecture that will clearly appeal to those with a strong interest in the subject area. However, it's the full-scale watercolours that really steal the show and make it a pleasure to browse through even if you are not a student of architecture.

Reviewed by Mark Langston

Published by Images Publishing
ISBN: 9781864706048
206 pages
£50.00

Complete Starter Guide to Whittling

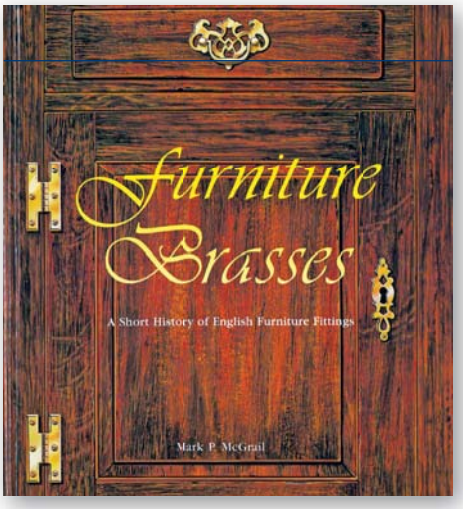
By the Editors of Woodcarving Illustrated

The simplicity and immediacy of whittling can be an ideal starting point for the budding woodworker. Armed with just a pocket knife and some foraged branches, a variety of fun and useful items can be made from a simple flower to a ball in cage. *The Complete Starter Guide to Whittling* makes heavy use of photographs and diagrams throughout, which help to explain the various projects clearly.

There are also informative sections about knife selection, sharpening and safety and a short guide to some common knife cuts. It is worth noting this is an American book so the section on choosing a whittling knife is weighted in favour of those that are readily available on that side of the Atlantic. However, the general tips are relevant to all and there is also guidance about re-grinding the blade for more refined whittling,

For a style of woodwork that can be as much about the process as the end product this book includes enough ideas to while away many hours by the campfire.
Reviewed by Susan Chillcott

Published by Fox Chapel
ISBN: 9781565238428
96 pages
£8.99



Furniture Brasses

By Mark P McGrail

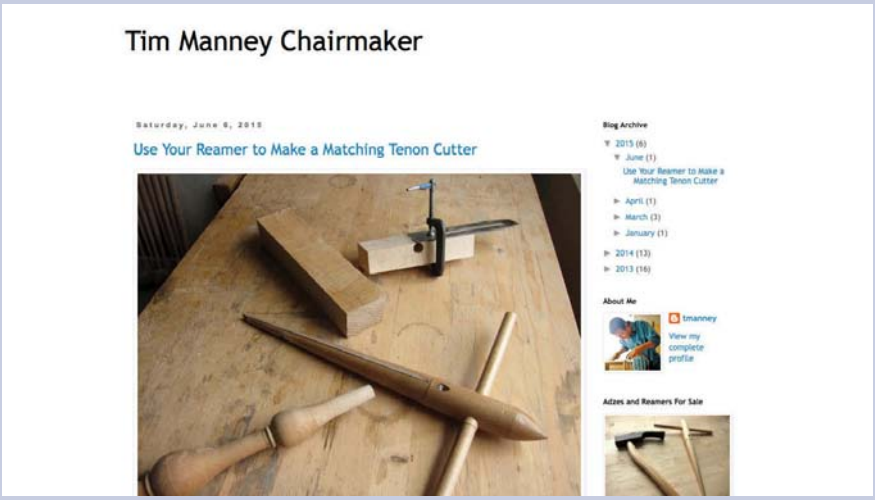
Hiving off areas of specialism in the history of furniture can be a tad self-indulgent unless you're attempting to put together an encyclopaedic study of a particular subject. Such events are rare and make good bedtime reading for academically motivated woodworkers. Here then is something more digestible. Hardware has been gracing our furniture for centuries, either for practical reasons or show. Style is a matter of taste but historical accuracy is fact; that's where this little book can help.

In just 43 pages the author spans five centuries with a series of micro studies placing the social influences of the time against a constantly evolving relationship with our interiors. It runs in chronological order with colour illustrations of furniture on every spread. Things are explained in just enough detail so you can appreciate the switch from oval back plates to a double rose drop and back again. *Furniture Brasses* is fast, factual and entertaining and I wish there were more like it.

Reviewed by Derek Jones
Published by Armac Manufacturing
ISBN: 9780953125302
43 pages
£3.85

Website of the month

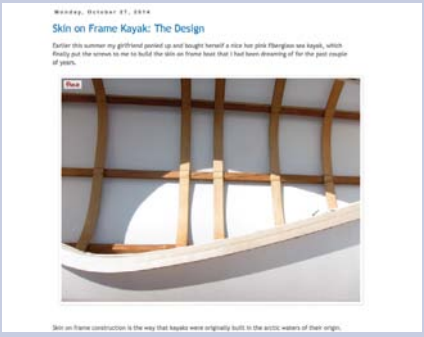
Tim Manney Chairmaker



This month we take a look at the blog of chairmaker Tim Manney. Tim is based in Portland, Maine, and has been writing his blog since 2013. His posts include detailed text and lots of clear, close-up photos of various woodworking processes. As well as chairs, Tim blogs about spoon making, experiments with blacksmithing and shares regular updates on a long-term project designing and building a kayak. As well as picking up some useful tips and inspiration, this blog is worth a look to get a fascinating insight into Tim's busy workshop.

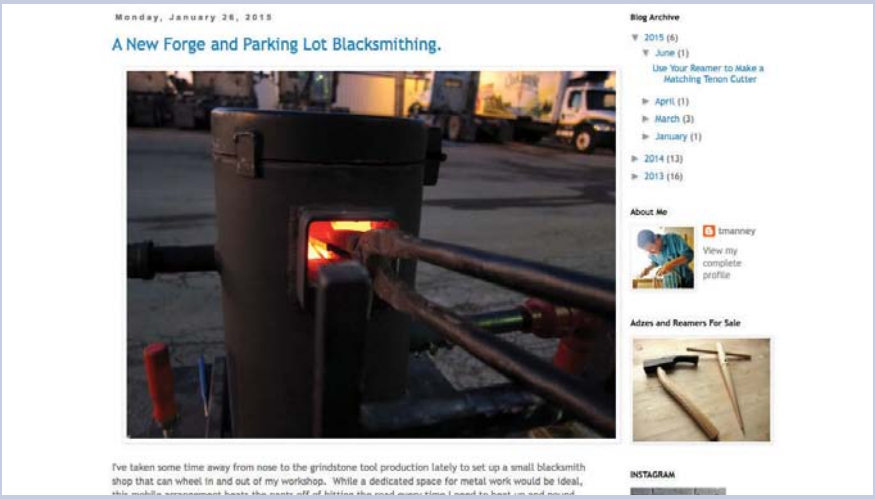
Tim also designs and produces chair-making tools, such as adzes and reamers, and there is a link on his blog with information about how to buy these.

If you're a fan of social media, you can also find Tim on Instagram where he shares more great photos as well as occasional giveaways of his tools.



Details

Contact: Tim Manney
Web: timmanneychairmaker.blogspot.com
Instagram: @tim.manney



NEXT MONTH in

Furniture &cabinetmaking

ISSUE 242
ON SALE
18 FEBRUARY

Workshop tech

Tail vice triumph

SMOKE AND MIRRORS

How to get your irons bedded flat

Restoration workshop
Polishing for an invisible mend

In the workshop with...
NEJ Stevenson

Deconstruct
Getting the best out of plain veneer

Tool tech
Clock sharpening

Missed an issue

YOU CAN STILL OBTAIN BACK ISSUES DIRECTLY FROM US!

A back issue of Furniture & Cabinetmaking magazine costs £5.25 in the UK and £5.75 overseas.

To check availability and to order:

CALL OUR SALES TEAM ON +44 (0) 1273 488 005 OR

VISIT OUR WEBSITE: WWW.THEGMCGROUP.COM

SPECIAL SUBSCRIPTION OFFER FOR USA READERS

SUBSCRIBE FOR 12 ISSUES

For less than $75*

SAVE UP TO 38%!

CALL 866-699-6779 (toll-free) OR visit: lightningpublications.com

Lightning PUBLICATIONS

Offer ends 05/31/2016

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

UNDER THE HAMMER:
Chippendale side chairs

This month we look at four Chippendale side chairs that were recently auctioned in New York

Set of three Chippendale walnut side chairs

$22,500 (£14,911)

PHOTOGRAPHS COURTESY OF BONHAMS

These Chippendale walnut (*Juglans spp.*) side chairs were all sold at the Fine Furniture, Silver Decorative Art and Clocks auction held at Bonhams' New York branch in October 2015. The set of three chairs can possibly be attributed to Samuel Mickle and Jonathan Shoemaker and date from the third quarter of the 18th century. Two of the chairs have a rose-coloured silk velvet upholstery, the third has a dark blue silk velvet upholstery. Their original owner was John Estaugh Hopkins (1738–1812). These three chairs are part of a larger set of chairs, two of which are currently in the collection of the American Museum in Bath. The museum has attributed their chairs to Jonathan Shoemaker and Samuel Mickle. While recent scholarship may disprove that attribution, Samuel Mickle (1746–1830) may have been distantly related to the Hopkins family as John Estaugh Hopkins' wife was Sarah Mickle. Jonathan Shoemaker was a cabinetmaker in Philadelphia and Mickle was his apprentice. The single carved walnut side chair also dates from the late 18th century. A brass plaque to the back of the rear seat rail is inscribed: 'This Chair belonged to Arthur Howell – born 8th mo. 20th 1748 and died 1st mo. 26th 1816'. Howell was a Quaker minister who lived in Philadelphia where he owned a leather store.

Carved Chippendale walnut side chair

$31,250 (£20,710)

FFX TOOL SHOW 2016

THE UK'S FAVOURITE TOOL SHOW IS BACK.

LOWEST UK PRICES - GUARANTEED!

50,000SQ FT OF THE BEST BRANDS UNDER ONE ROOF

Live demos from industry experts, unbeatable deals, competitions, masterclasses ***and more!***

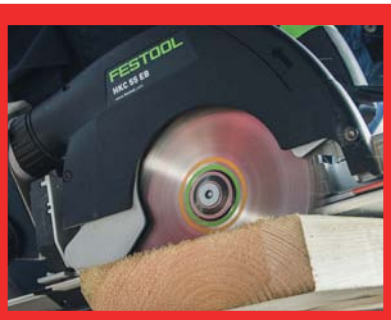
26th Feb | 27th Feb | 28th Feb

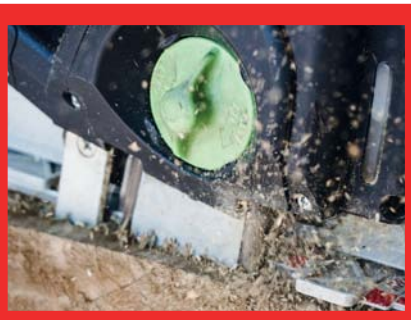
Kent Event Centre, Maidstone, Kent, ME14 3JF

REGISTER NOW

FREE TICKET AT FFX.CO.UK

REGISTER NOW




THE BEST BRANDS UNDER ONE ROOF

BOSCH Makita FESTOOL DEWALT scheppach trend Jern AND MORE!

PT107 10" x 7" Heavy Duty Planer Thicknesser

The PT107 is perfectly suited to the discerning woodworker who expects professional and reliable performance from a solid, durable and compact machine. Whilst compact enough for smaller workshops and ideal for serious home or trade users, this machine boasts some impressive industrial features and is exceptionally smooth and accurate in operation.
If you are in the market for a good planer thicknesser then check this out at one of our display stockists to fully appreciate the value on offer.

Only

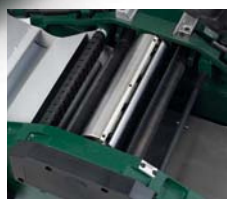
£999.99

Save £100

off Spring / Summer Catalogue price

5 YEAR GUARANTEE

Central Column
The thicknessing table is supported by a sturdy central column for superior stability and easy rise and fall adjustment.



Cutter Block
The three knife cutterblock ensures an excellent finish.

Sturdy Fence System
The fence can tilt up to 45° and is supported by a strong mounting system.

What They Say...

"The PT107 is extremely well built, with heavy cast iron tables polished to a fine finish.

This machine feels more like a proper industrial model in use. The sheer weight minimises any vibration."

The Woodworker

"**Top Quality** - This is a very well made machine with full adjustment of both infeed and outfeed tables. This is unusual in a home workshop machine and allows very fine adjustment to eliminate any gouging at the end (snipe)…Results are excellent, chip clearance is good and the changeover from planing to thicknessing is quick and easy."

DesmondW, Online Review

Price valid until 28.02.2016. E&OE.

See the value the **PT107 offers** for yourself at the following stockists:

ENGLAND

Aldermaston Tool Company Youngs Ind Est, Paices Hill, Aldermaston, Berkshire, RG7 4PW **0118 981 1470**

Grahams Machinery Deva House, Knutsford Way, Chester, Cheshire, CH1 4NX **01244 376 764**

Westcountry Machinery 4 wood Beacon Kilns, High Street Village, St Austell, Cornwall, PL26 7SR **01726 828 388**

Jaymac (Derby) Ltd 852 London Road, Derby, Derbyshire, DE24 8WA **01332 755 799**

Toolite Co Unit 3/2 The Mews Brook Street, Mitcheldean, Gloucestershire, GL17 0SL **01594 544521**

Tewkesbury Saw Co Ltd Newtown Trading Estate, Tewkesbury, Gloucestershire, GL20 8JG **01684 293 092**

John Davis Woodturning The Old Stables, Chilbolton Down Farm, Stockbridge, Hampshire, SO20 6BU **01264 811 070**

D.B. Keighley Machinery Ltd Vickers Place, Stanningley, Yorkshire, LS28 6LZ **01132 574 736**

J Carr & Son Ltd 9-10 Horncastle Road, Boston Lincolnshire, PE21 9BN **01205 351 555**

D&M Tools 73-81 Heath Road, Twickenham, Middlesex, TW1 4AW **0208 892 3813**

Norfolk Saw Services Dog Lane, Horsford, Norwich, Norfolk, NR10 3DH **01603 898 695**

Snainton Woodworking Supplies Barker Lane, Snainton, Scarborough, North Yorkshire, YO13 9BG **01723 859 545**

Oxon Fastenings Systems Academic House, Oakfield Ind Est, Stanton Harcourt Rd, Eynsham Oxfordshire, OX29 4AJ **01865 884 022**

Yandle & Sons Ltd Hurst Works, Martock, Somerset, TA12 6JU **01935 822 207**

Kraftkabin 248-254 London Road, Stoke on Trent, Staffordshire, ST4 5RH **01782 416 102**

DJ Evans (Bury) Ltd St Botolphs Lane, Bury St Edmunds, Suffolk, IP33 2AU **01284 754 132**

Elmers Hardware Ipswich 59-61 Edmonton Road, Kesgrave, Ipswich, Suffolk, IP5 1EQ **01473 623 381**

Scott and Sargeant Woodworking Machinery Ltd 1 Blatchford Rd, Horsham, West Sussex, RH13 5QR **01403 273000**

RS Paskin & Co Ltd Oldington Trading Estate, Stourport Road, Kidderminster, Worcestershire, DY11 7QP **01562 829 722**

WALES

Data Powertools Ltd 427 Cowbridge Rd West, Cardiff, CF5 5TF **0292 0595 710**

SCOTLAND

MacGregor Industrial Supplies 15-17 Henderson Road, Longman Industrial Estate, Inverness, Inverness-shire, IV1 1SN **01463 717 999**
Further branches available throughout the highlands. Please contact for more details.

Brodies Timber The Old Sawmill, Inver, Dunkeld, Perthshire, PH8 0JR **01350 727 723**

IRELAND

WH Raitt & Son Ltd Main Street, Stranorlar, County Donegal **00353 74 913 1028**

Joe McKenna Ltd 54-56 Parnell Street Limerick, County Limerick **00353 61 413 888**

JJ Ronayne Ltd Dublin Road,Thurles County Tipperary **00353 5042 1033**

RECORD POWER
ESTABLISHED 1909®

Over 100 years
Experience • Knowledge
Support • Expertise

RECORD POWER ESTABLISHED 1909
STARTRITE CORONET
BURGESS CamVac

Incorporating some of the most famous brands in woodworking, Record Power have been manufacturing fine tools & machinery for over 100 years. Built to last we provide support for thousands of machines well over 50 years old, which are still in daily use. Testimony to the sound engineering principles and service support that comes with a Record Power product.

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