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Veneer detail on Richard Crossley's 'Isaac' cabinet

Watercolour sketch of Thomas Eddolls' 'Raise' chest of drawers

Top detail of Jennifer Seastone's 'Even-Ash' side table

Close-up of carcass on Taidgh Browne's 'Dynamic Seasons' chest, which highlights the shadows created

Welcome



Life is notoriously filled with highs and lows and navigating bumps in the road is never an easy task, but delivering the following news is undoubtedly one of the hardest things I've ever had to do.

The end of an era

So, it's with an incredibly heavy heart that I must announce the magazine's forthcoming closure, and the November issue will be the last one to be produced. It's hard to put into words how devastated I am by this decision, not to mention how receiving the news has affected me, along with the nagging sense of responsibility that the magazine has failed under my editorship. Being the first ever female editor was pressure enough, but to have the added burden of over 100 years of woodworking heritage coming to an end is even more difficult to comprehend.

Delivering the news to contributors wasn't an easy task, but I've been overwhelmed by the support and well wishes of the many people I've worked with since starting this journey back in 2015, and many of whom I'd worked with in my previously role. The overwhelming response, however, was one of sadness and learning that after so many years, *The Woodworker* has finally come to the end of the road. For me, it's especially gut-wrenching as I still receive correspondence every month from readers telling me how much they enjoy the magazine and look forward to receiving it. Despite dwindling budgets and having to rely on using archive material from previous years to fill the pages, people still found value and enjoyment in the content. I suppose it'd be easier to accept if the end product was lacklustre and people weren't responding positively, but this wasn't actually the case.

Going out on a high

I've always been mindful of ensuring that each issue contains a varied mix and hopefully appeals to a wide audience, but in truth, this is something of a lottery. Hitting the jackpot is always a fantastic feeling, and the stand-out issue for me will always be the Dec/Jan 2020 one, which featured Peter Dunsmore's wooden Land Rover Christmas toy. To this day, I still receive emails from readers with photos of the versions they've made, and most importantly, tales of the fun and joy experienced in making them.

Unfortunately there won't be a December issue, but wanting to go out on a high, it seemed a good idea to revisit the Land Rover build, share some alternative designs and also clarify a few measurements that'd previously caused confusion. While it's difficult to find the motivation to carry



Detail of leg brace joint on Chris Pretlove's 'CG1060' chair

on and make the last few issues the best they can be, it's the very least I can do as a thank you to all our loyal readers. While the future is daunting and uncertain, I do hope that I've done the magazine proud and that my input hasn't been in vain. Sadly, the economic landscape has changed so much in recent years and obviously the magazine's commercial viability was the deciding factor in cementing its demise. Unfortunately I think I was a tad naive in thinking the magazine would carry on indefinitely, but a heritage of 123 years is definitely worthy of applause and I'm so grateful to have been a part of that.

Cause for celebration

I don't want to focus too much on the doom and gloom, however, as there's still so much to celebrate, and I'm sure Alan Peters OBE would agree! This issue contains a dedicated showcase of various winning pieces chosen as part of the 2024 award, which has been running for the past two years, and it's been a pleasure to have done our bit in ensuring that Alan Peters' incredible legacy is kept alive for as long as possible. Shown above are various views of the winning pieces, in no particular order, but needless to say that each one is exemplary in terms of attention to detail, technique and skill.

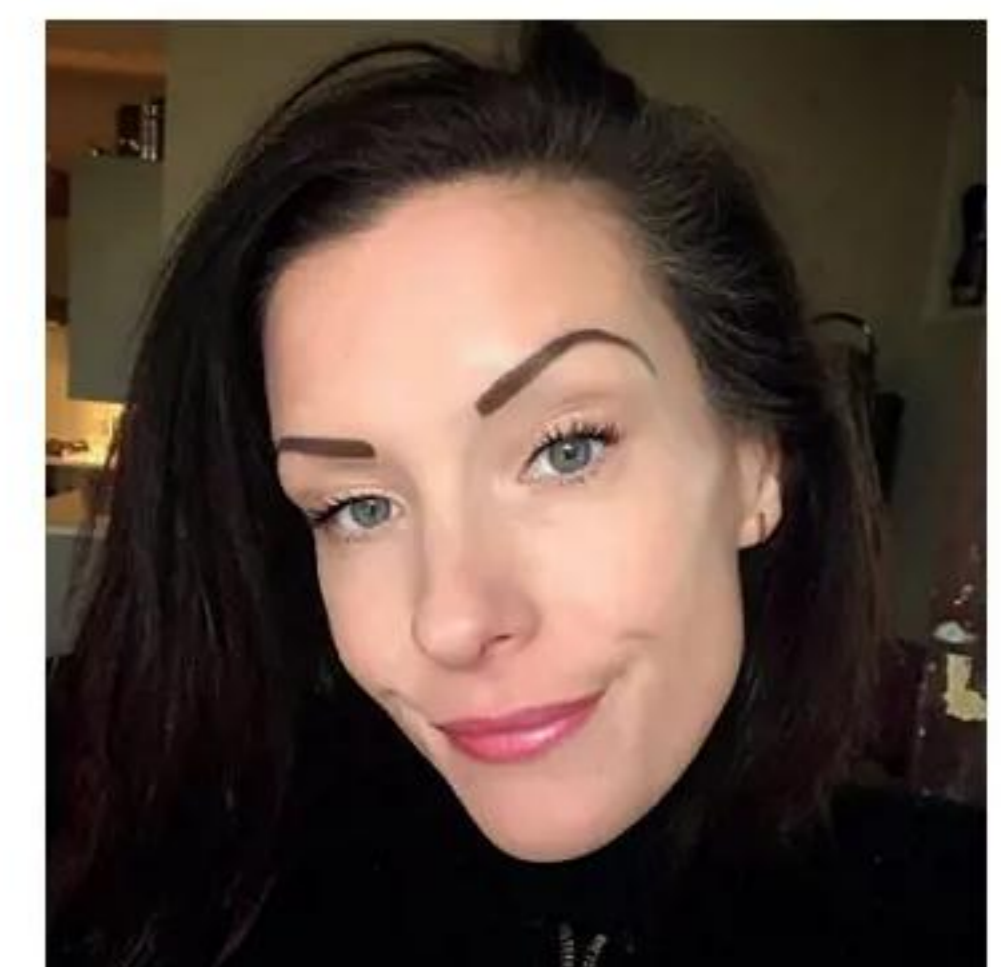
Finally, we hope you enjoy the penultimate issue of this wonderful magazine, and thank you to each and every one of our loyal readers for their unwavering support.

Tegan

Email tegan.foley@dhpublishing.co.uk



The frontage of Thomas Eddolls' 'Raise' chest of drawers is hand-shaped into a radial scalloped sunburst



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veritas

SEND IN YOUR TOP WORKSHOP HINT/TIP/POINTER OR PIECE OF ADVICE & YOU COULD BE IN WITH A CHANCE OF WINNING A VERITAS APRON PLANE – see page 69 for details



40 GET ON BOARD

With a few exceptions, almost any timber can be turned into chopping or bread boards, as Robert Stephens shows

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Please note that the first chosen winner will receive the 300/1,200 grit full kit, the second the 600/1,200 grit full kit and the third, the 300/600 grit full kit

See page 18 for further details



Good luck!

CHISEL RATING



PROJECT DIFFICULTY 1-5

Each project in this issue includes a difficulty rating from 1-5, so you can readily see whether or not a particular one is suited to you. While it's good to try and push yourself and develop skills, workshop safety should always be a main consideration and we urge you not to attempt a project/use specified tools or machinery, if you're unsure how to do so in a safe manner. A wide range of safety information is available online and a good place to start is www.hse.gov.uk

- 1 Very easy;** only requires basic tools
- 2 Simple to make;** only a few tools required
- 3 Aimed at beginners-intermediate;** some specific equipment/tools required
- 4 Aimed at intermediate-advanced;** sound woodworking knowledge required in addition to a wide range of hand/power tools
- 5 Advanced skills/knowledge required;** a wide range of specialist equipment is needed to complete the project

The Woodworker

Good Woodworking

OCTOBER 2024

PROJECTS & TURNING

34 Dedicated desk tidy

To mark his son's 30th birthday, Peter Dunsmore makes a desk tidy from quartersawn oak, which features a drawer along with some recesses for placing keys and other small assortments

54 Routing on the lathe – part 1

Colin Simpson likes to add carving and texturing to some of his pieces, such as using a hand-held angle grinder to apply carved decoration to a platter rim, but here, he looks at a different way of working

58 Safes & secret drawers

Peter Bishop puts his restoration hat on once again to bring this mahogany cased, brass-bound campaign safe back to its former glory

66 Good solid work

David Oldfield eschews his usual veneer work to make cabinets in ash and cherry

75 Clock these

Phil Davy makes good use of his router to ensure that the oak is the timeless star in this pair of simple mantle clocks



80 Feel that finish!

Les Thorne stresses the importance of finishing with some tips on using his favourites

ON TEST

14 MPOWER Tools SB2 double diamond sharpening stone set

20 MicroJig GRR-RIPPER+ 3D Pushblock with SafeRip kit

TECHNICAL

23 Plane speaking

Bevel-up or bevel-down? It depends on what you're doing, says Roger Wilson

30 Shelves & carcassing

Michael Huntley talks about the earliest form of furniture making – shelving

62 Hidden strength

"Wotsit all about?" Phil Davy examines the uses and value of torsion box construction

70 Thinking with pencil & paper

Mark Griffiths looks at the basics of sketching by hand and what benefits it offers over CAD



86 Boring, braces & cardboard boxes

In buying a new drill bit, to his surprise, Peter Scaife found that sometimes there's no tool like an old tool

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46 Join together

Continuing with this series, Phil Whitfield explores the point at which woodworkers started to be divided along craft lines



50 The timeless thatch

Knowing little about thatching, Len Markham arranged a visit to meet one of the leading craftsmen in the South of England, Master Thatcher Steven Hewlett and his apprentice son, Rudy

90 Take 5

This month's selection includes more wonderful work by various furniture making students, as well as a few examples of turning and carving using both hand and power tools to create exceptional results

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Tiger 7/260	2	7.8	24L	£109.98	£131.98
Tiger 8/550	2	7	50L	£149.98	£179.98
Tiger 11/550	2.5	9.3	50L	£169.98	£203.98
Tiger 16/550	3	14.5	50L	£239.00	£286.80
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* WAS £57.59 inc.VAT
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CBG6250L	HD	150mm	£72.99	£87.99
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Bosch PST700E	500W	70/4mm	£59.98	£71.98

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 • Table tilts 0-45°
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CMS10S2B	255/30	90/340	£169.00	£202.80

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THE NEW SYS-AIR PURIFIER FROM FESTOOL – CLEAN AIR FOR CONSTRUCTION SITES & WORKSHOPS



Festool's new SYS-AIR air purifier ensures clean air, both in the workshop and on the construction site

Festool's new SYS-AIR filters harmful dust from the air. Its compact Systainer format and low weight make it ideal for mobile and stationary applications. The new SYS-AIR uses a powerful, two-stage filter system to comprehensively clean the air. This means that the smallest dust particles and other pollutants end up in the air purifier as opposed to in the lungs. This results in less cleaning effort, a cleaner environment and, ultimately, better air quality. Fine dust particles often

settle on surfaces, machines and the environment. Many people are aware of this, which means that, in this respect, awareness of clean working with dust extractors has changed a lot in recent years. An increasing number of users appreciate being able to rely on good extraction directly on the power tool.

Festool is one of the biggest suppliers of extractors in conjunction with power tools and manufactures its own extractors at its site in Illertissen, near Ulm. Festool offers an extensive range of extractors – from small Systainer-types to larger models – in various dust classes as well as mains-powered and cordless versions. Festool has now added the SYS-AIR air purifier to its extensive range of extractors. Despite professional extraction, dust particles are released into the environment during daily operations, particularly in applications that can only be extracted poorly or not at all. With the new air purifier, Festool has created a complete system for the best possible extraction results, both on the construction site and in the workshop. The air purifier filters and cleans the ambient air, thereby improving overall quality. This means less cleaning effort, a cleaner environment and satisfied and enthusiastic customers, especially in mobile applications.

Simply clean – no matter where you are

Festool has designed its new air purifier in the practical, compact Systainer³ format. Its low weight makes it suitable for both mobile and stationary use. The new SYS-AIR is also easy to operate and can be regulated in two stages. A warning light signals the need to change the filter. If workshop space is limited, the practical ceiling bracket offers a safe and simple stationary solution. A particularly practical feature is the fact the filter can be changed very quickly and easily, without having to remove the SYS-AIR. Thanks to T-LOC, the SYS-AIR can be firmly locked into the ceiling bracket and removed again quickly for mobile use. This means total flexibility for use on the construction site or in the workshop.



Two-stage filter system: the pre-filter captures a large proportion of suspended dust, is economical and can be replaced quickly and easily

Festool has also designed a number of features especially for mobile use: integration of the air purifier into a dust protection wall, as well as the option to connect several SYS-AIR air purifiers, in series, within large rooms.

Purified air for your health

Fine, invisible airborne dust remains in the air despite optimal extraction, especially when sanding, drilling, or sawing. This fine dust can lead to lung and respiratory diseases or allergies. With a volume flow of up to 680m³/h, the powerful SYS-AIR air purifier ensures high circulation, therefore filtering harmful dust particles and other pollutants from the air. Festool has developed a special main filter in TripleV form to create a particularly large filter surface. This means the filter takes longer to become clogged, and therefore lasts longer. The main filter is available in dust classes M and H. This means the entire workforce can work with improved focus, productivity and, ultimately, long-term health thanks to clean air.

Optimal dust collection with dust protection wall

A dust protection wall in conjunction with a construction air purifier is suitable for preventing dust and dirt from getting outside the work area. A vacuum is generated, dust is guided out of the room in a targeted manner and work area air quality is consequently improved. An added advantage is that the surrounding rooms remain free of dust. Festool has developed the air purifier such that it's easy to install in a dust protection wall. The flexible, 6m long hose – accessory – can be positioned directly at the dust source for targeted dust collection. This reduces the dispersion of dust particles in the room. Targeted collection ensures that dust is kept out of hard-to-reach areas or small rooms.

The new SYS-AIR purifier will be available via specialist retailers from October 2024; visit www.festool.co.uk for further information.



The SYS-AIR air purifier weighs under 10kg and is supplied in a practical Systainer³ M437 format with carrying handle



The SYS-AIR offers total flexibility for use on the construction site or in the workshop

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Innovative project launched to tackle gender inequality in woodworking

Sylva Foundation, a national environmental charity based in Oxfordshire, has been awarded a £240,000 grant from The National Lottery Heritage Fund to tackle gender inequality in Britain's heritage woodwork and furniture making sectors.

The charity runs a successful wood school and hosts multiple businesses at its Wood Centre in Long Wittenham, South Oxfordshire. Through its work, including training the next generation of craftspeople and supporting business start-ups, Sylva is increasingly aware of gender inequality in the woodworking sector. This has been reinforced by the charity's independent research, which showed that among 954 employees represented in a survey, only 20% of the workforce were women, and among those working in manufacturing, the percentage dipped as low as 8.5%.

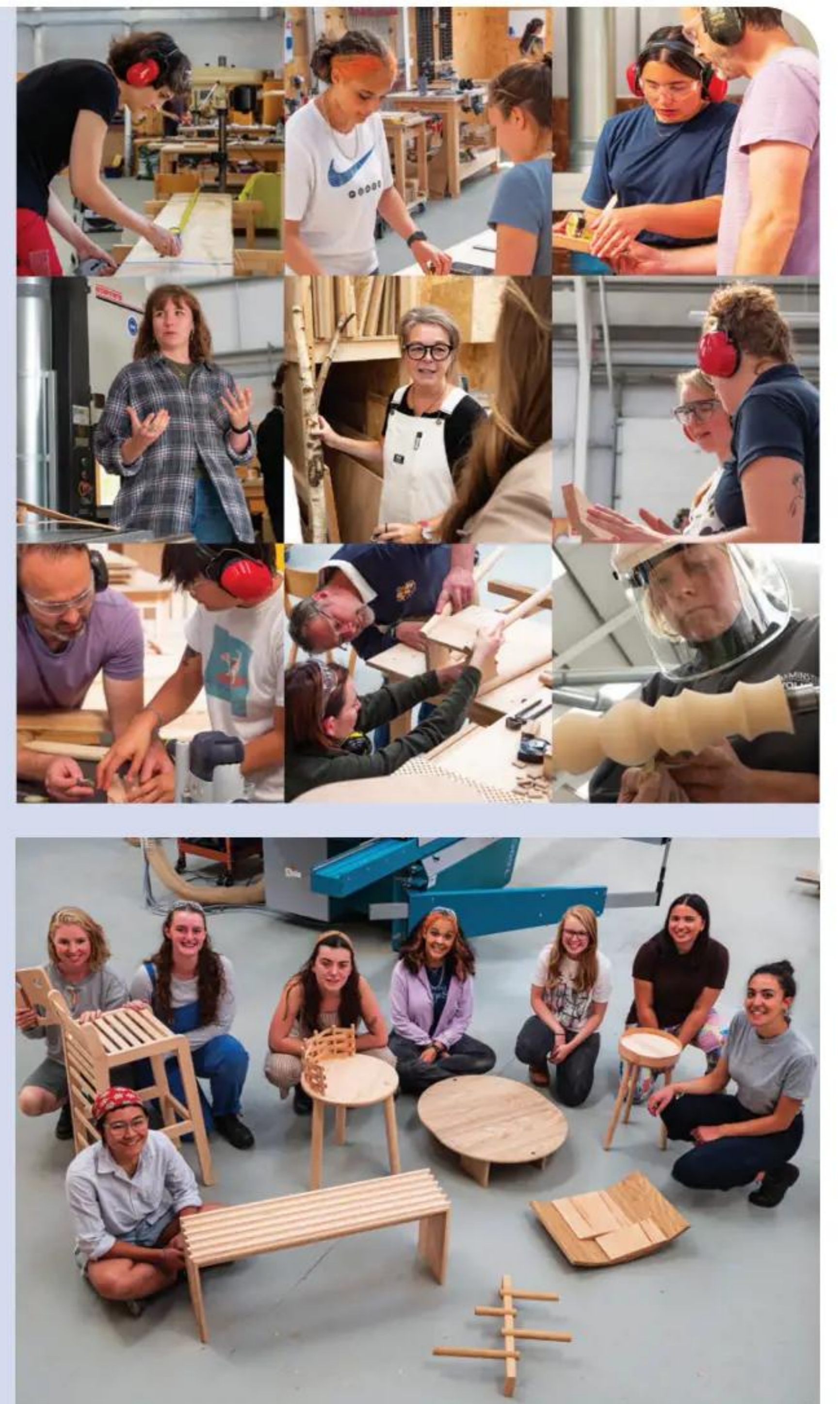
The grant awarded by The National Lottery Heritage Fund builds upon generous matched donations received from other supporters in the woodworking sector, including: Conran Foundation; The Mila Charitable Trust; Benchmark Furniture Ltd; and Vastern Timber Ltd.

Welcoming the launch of this new project, Stuart McLeod, Director of England – London & South – at The National Lottery Heritage Fund, said: "We're delighted to support this project, which thanks to money raised by National Lottery players, means that more people will be able to get involved with, protect and learn about important heritage skills, resulting in a more diverse

and better-skilled heritage woodworking sector. Preserving traditional skills for future generations is important, and this project is a fantastic example of achieving those aims."

Head of Wood School at Sylva Foundation, Joseph Bray, added: "We're incredibly excited to be launching this new project, which has taken a huge amount of work to bring together and been so generously supported by so many individuals, businesses, charities and funding bodies. We want to provide role models so that women and non-binary people can see themselves in the sector, to be inspired by enhanced career opportunities and inclusive workplaces. Ultimately, we hope to inspire more women and non-binary people to consider a career in woodworking and to become successful. We can't wait to get started and make a difference!"

Sylva Foundation is a national environmental charity working for a society that lives in harmony with nature, focusing on the stewardship of our forests and the utility of home-grown timber. It provides solutions to meet significant environmental challenges by innovating, collaborating, training and advocating. For further information, see www.sylva.org.uk.



MILWAUKEE® introduces new 8.0Ah & 12.0Ah batteries to its M18™ FORGE™ range

The new MILWAUKEE® M18™ FORGE™ 8.0Ah and 12.0Ah batteries deliver increased power and high speed cooling, all in a redesigned resistant housing. The 12.0Ah battery pack delivers 50% more power than the existing M18™ HIGH OUTPUT™ 12.0Ah variant, while the 8.0Ah battery pack delivers M18™ HIGH OUTPUT™ 12.0Ah power and benefits from being 20% smaller and 30% lighter.

The FORGE™ batteries are MILWAUKEE®'s most powerful and fastest charging batteries to date. Both batteries deliver high speed cooling while charging for less downtime in high demand applications – 45 minute supercharge to 100% – when using the M18™ Dual Bay Super Charger – and offer the longest life vs REDLITHIUM™ batteries.

Both the 8.0 and 12.0Ah batteries are COOL-CYCLE™ capable. The COOL-CYCLE™ Active Cooling System provides high speed cooling for less downtime. Patented ingress coating provides increased protection to maximise active cooling through an upgraded venting design. This unique feature works with the M18™ Dual Bay Super Charger, which benefits from COOL-CYCLE™ capability.

This Lithium-ion battery has the longest life, the most recharges, and the best performance over the battery's life. It's also designed with resistant housing for increased protection against exposure to common oils, greases and solvents. REDLINK™ Intelligence protects the battery from overloads, preventing users from damaging their

cordless power tools in heavy-duty situations. The M18™ FORGE™ 8.0 and 12.0Ah batteries are fully compatible with 290+ M18™ solutions.

SPECIFICATIONS

M18™ FORGE™ 8.0Ah battery M18 FB8

- Battery type: Lithium-ion
- Battery system: M18™
- Weight: 1.05kg

Kit includes: M18™ FORGE™ 8.0Ah battery
M18™ FORGE™ 12.0Ah battery

M18 FB12

- Battery type: Lithium-ion
- Battery system: M18™
- Weight: 1.51kg

Kit includes: M18™ FORGE™ 12.0Ah battery

Perfect match: M18™ Dual Bay Super Charger (4932492531)



To find out more about M18™ FORGE™ batteries, see video footage of it in action, or find your nearest Milwaukee retailer, visit the website: <https://uk.milwaukeetool.eu/>.

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METABO celebrates 100 YEARS of innovation



This year Metabo, the renowned German power tool manufacturer, marks its 100th anniversary. Since its founding in 1924, Metabo has grown from a modest family business into a global leader in the power tool industry, renowned for its high-quality, user-focused products.

The company's journey began in Nürtingen in 1923 when Albrecht Schnizler invented the first metal drill – the 'Metallbohrdreher'. This invention laid the foundation for Schnizler G.m.b.H., established on 19 February 1924, which would later become 'METABOWERK'. From the outset, Metabo has been synonymous with professional quality and innovative spirit, a tradition that continues to this day.

A strong partnership

Over the past century, Metabo has evolved from a mid-sized family business into an integral part of the international Koki Holdings Group. This partnership combines the strengths of Japanese and German engineering, enhancing the company's competitive edge through collaborative development, procurement, production and marketing efforts.

Today, Metabo's Nürtingen headquarters plays a pivotal role, housing the group-wide management for Research and Development and global purchasing. Additionally, Nürtingen is home to the manufacturing of Metabo's power tools, including the company's iconic range of angle grinders and other related products.

The anniversary motto, 'Building our world. Together' underscores Metabo's focus on customer relationships. This customer-centric approach is deeply embedded in Metabo's DNA, driving the development of tools that not only meet but exceed user expectations with smart solutions and technological advancements.

Peter Vullings, Metabo CEO, emphasises: "A spirit of innovation is

something you have to live out every day." This philosophy is evident in the company's pioneering products, such as the CAS (Cordless Alliance System), which is the world's first cross-manufacturer battery pack system. CAS offers users the convenience of a single battery powering over 400 tools from approximately 40 different manufacturers, embodying Metabo's values of cooperation, technological accessibility and sustainability.

Pivotal product categories

In its centennial year, Metabo is highlighting product categories that have been central to its success. The angle grinder – a cornerstone of Metabo's product line – exemplifies the company's innovation in cordless technology. Tools such as the WPB 36-18 LTX BL 24-230 Quick angle grinder – which delivers the power of a 2,400W plug-in tool using two 18V batteries – showcases Metabo's leadership in making the vision of a cordless construction site a reality.

Looking ahead, Metabo remains committed to pushing the boundaries of power tool technology. With a robust pipeline of new and enhanced tools designed to meet the evolving demands of professionals, Metabo continues to set industry standards.

Simon Miller, Managing Director of Metabo UK, reflects on the company's milestone: "Celebrating 100 years is a remarkable achievement and a testament to our dedication to quality and innovation. Our ongoing mission is to provide tools that empower professionals to perform at their best, day in and day out."

Innovative products & technologies

Throughout the anniversary year, Metabo is hosting a series of campaigns to celebrate its rich history and future aspirations. These initiatives will shine a spotlight on the innovative products and technologies that have defined Metabo's legacy and continue to shape its future.

For more information on Metabo's centenary celebrations, product promotions and to explore the company's rich history and forward-looking innovations, visit www.metabo.com/100years.



HiKOKI's new C12RSH3 mitre saw combines advanced technology with ease of use to redefine standards in woodworking and construction

Precision in every cut: HiKOKI launches new C12RSH3 mitre saw

HiKOKI Power Tools has launched the new C12RSH3 mitre saw, which is designed to deliver unmatched precision and power. Tailored for professionals, this new offering combines advanced technology with ease of use to redefine standards in woodworking and construction.

The C12RSH3 mitre saw is equipped with XACT CUT LED technology, which projects a precise shadow cutting line; this eliminates the need for re-adjustment and ensures accuracy right from the first cut. Its compact sliding system with double guides not only boosts stability but also facilitates operation close to walls.

The HiKOKI C12RSH3 has been engineered with functionality in mind, featuring a front-facing bevel and mitre mechanism for hassle-free adjustments. The bevel lock handle is conveniently located on the operator's side for easy loosening or tightening of bevel lock and improved efficiency. With the convenience of a one-touch mitre lock adjustments are quick and easy – a real time-saver when shifting between various cutting angles. The linear ball bushings allow smooth and precise sliding while the highly rigid metallic mitre scale has nine positive stops and indications, for easy-to-read measurements and quick settings.

The C12RSH3 mitre saw is robust, featuring a 1,520W power input and 305mm blade diameter. It operates at a no-load speed of 4,000rpm, offers dual bevel capabilities, adjusting from 0-45° on both the left and right sides, and weighs in at just 25.5kg. Available in a choice of two models – the C12RSH3J1Z 240V and C12RSH3J1Z 110V – both of which benefit from an automatic three-year warranty, which can be extended to five-years subject to registration and T&Cs.

For further details, visit www.hikoki-powertools.co.uk.



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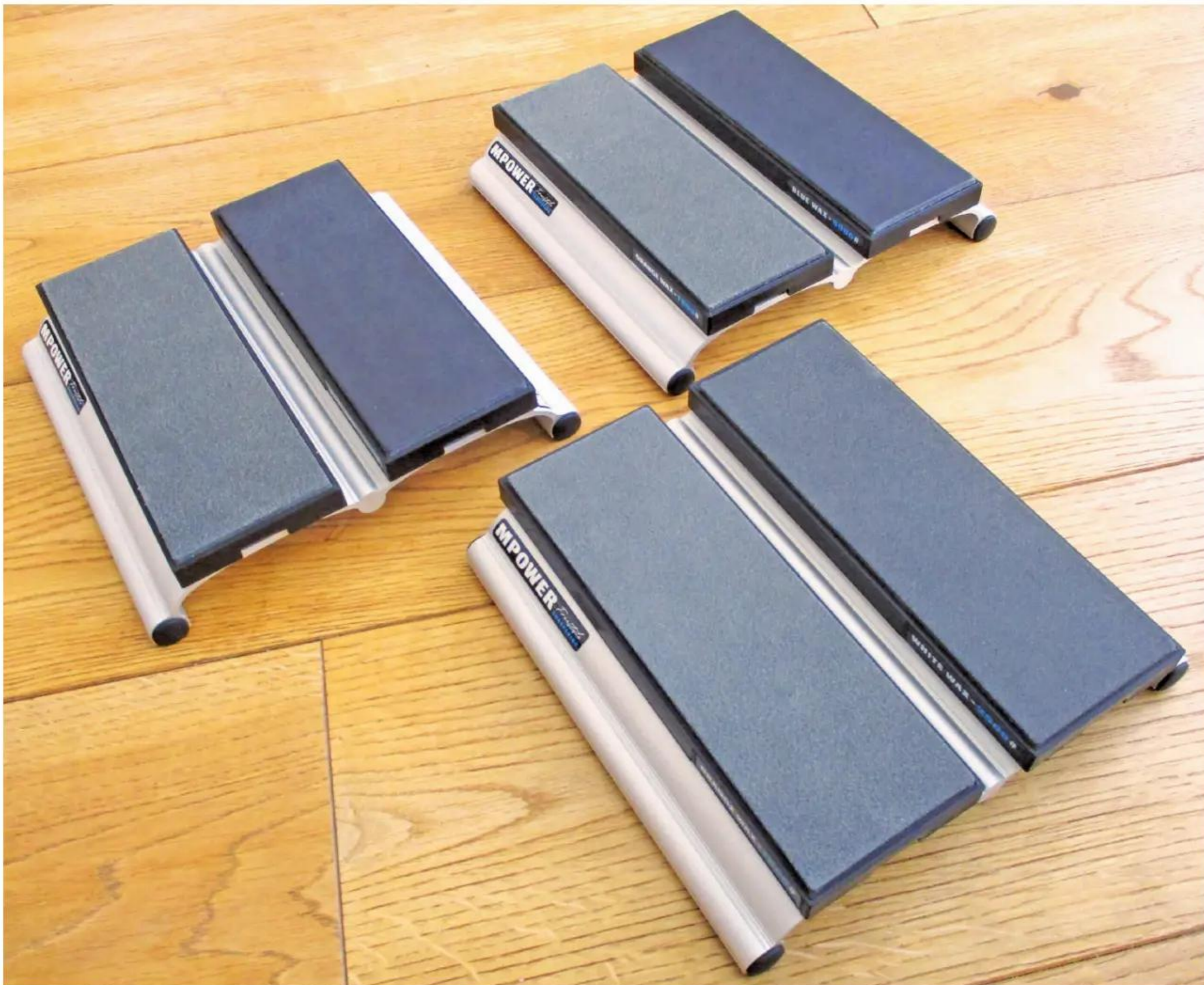
Open 8am to 5pm daily,
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The Alpaca Centre, Snuff Mill Lane, Stainton, Penrith, Cumbria CA11 0ES.
Tel: 01768 891445. Fax: 01768 891443. email: info@toolsandtimber.co.uk

MPOWER TOOLS SB2 DOUBLE DIAMOND SHARPENING STONE SET

Jonathan Salisbury has already tested the three-stone Side-by-Side, and separate single- and double-sided variants of MPOWER Tools' 8in diamond 'stones' range, but does the latest SB2 have anything new to offer?



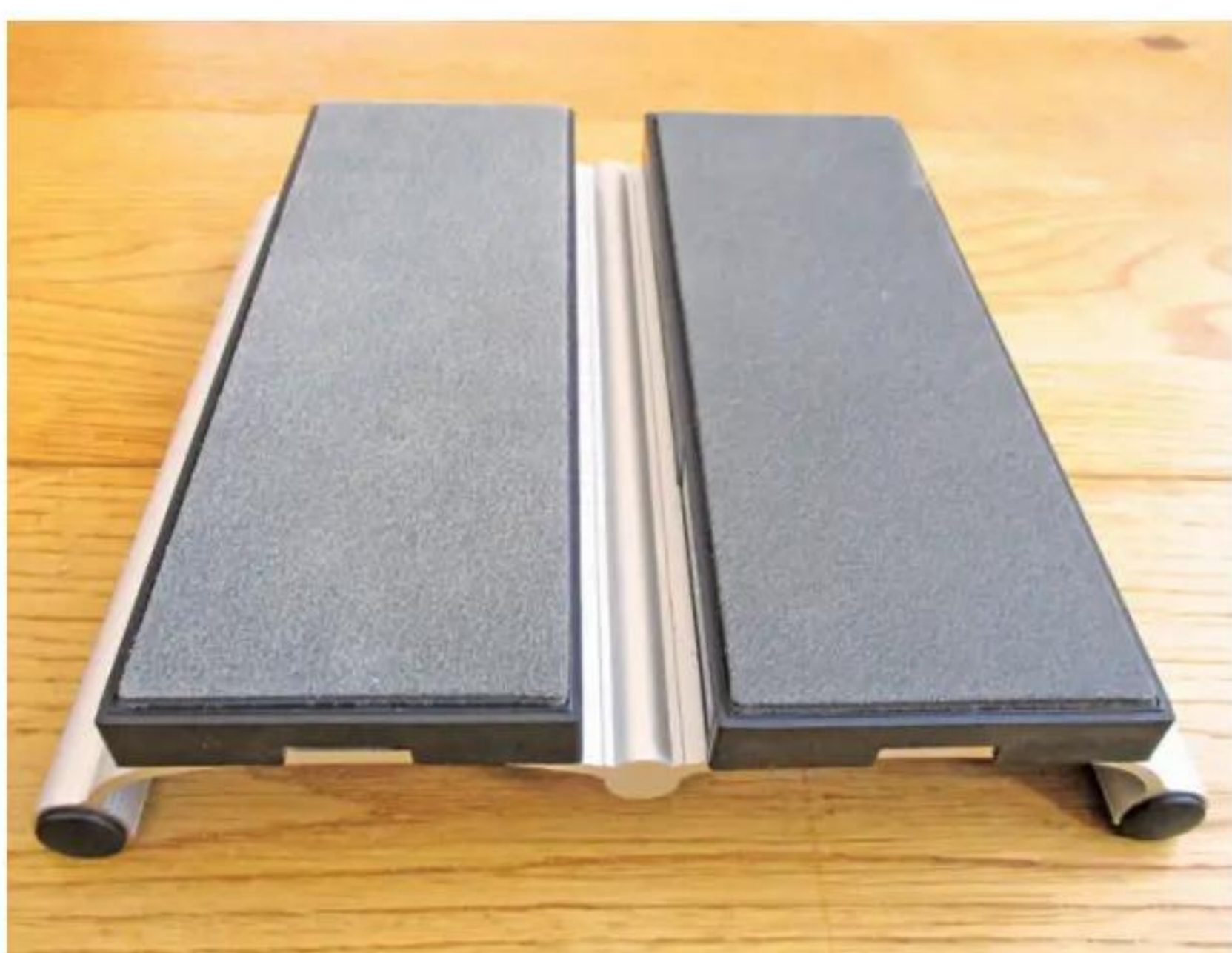
The three variations...

Since I began using diamond plates, I've appreciated the speed at which I can restore a sharp edge and the reduced maintenance requirements over my Japanese waterstones; I just keep them clean, dry and out of dust. I use The MPOWER 3-in-1 SBS for all my day-to-day sharpening, but still get out the Japanese stones when time allows.

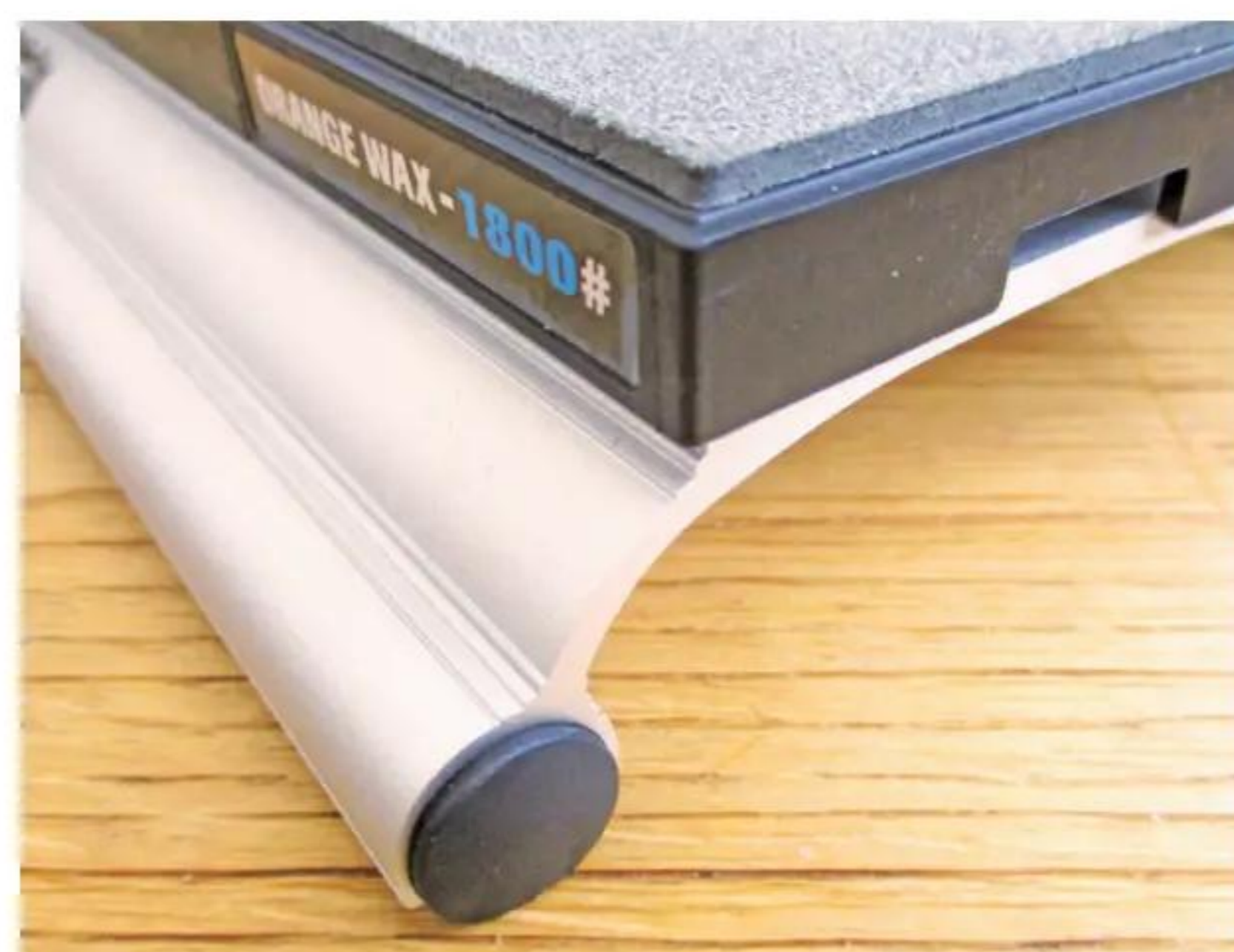
Carefully progressing through every stage results in a polished surface and very sharp edge.

In case you haven't already read about them, here's a quick resumé of MPOWER's 8in stone range. They all use the same three diamond plates, with grits of 300, 600 or 1,200, mounted on extrusions, single- or double-sided, or onto three-, and now two-stone wide extruded frames.

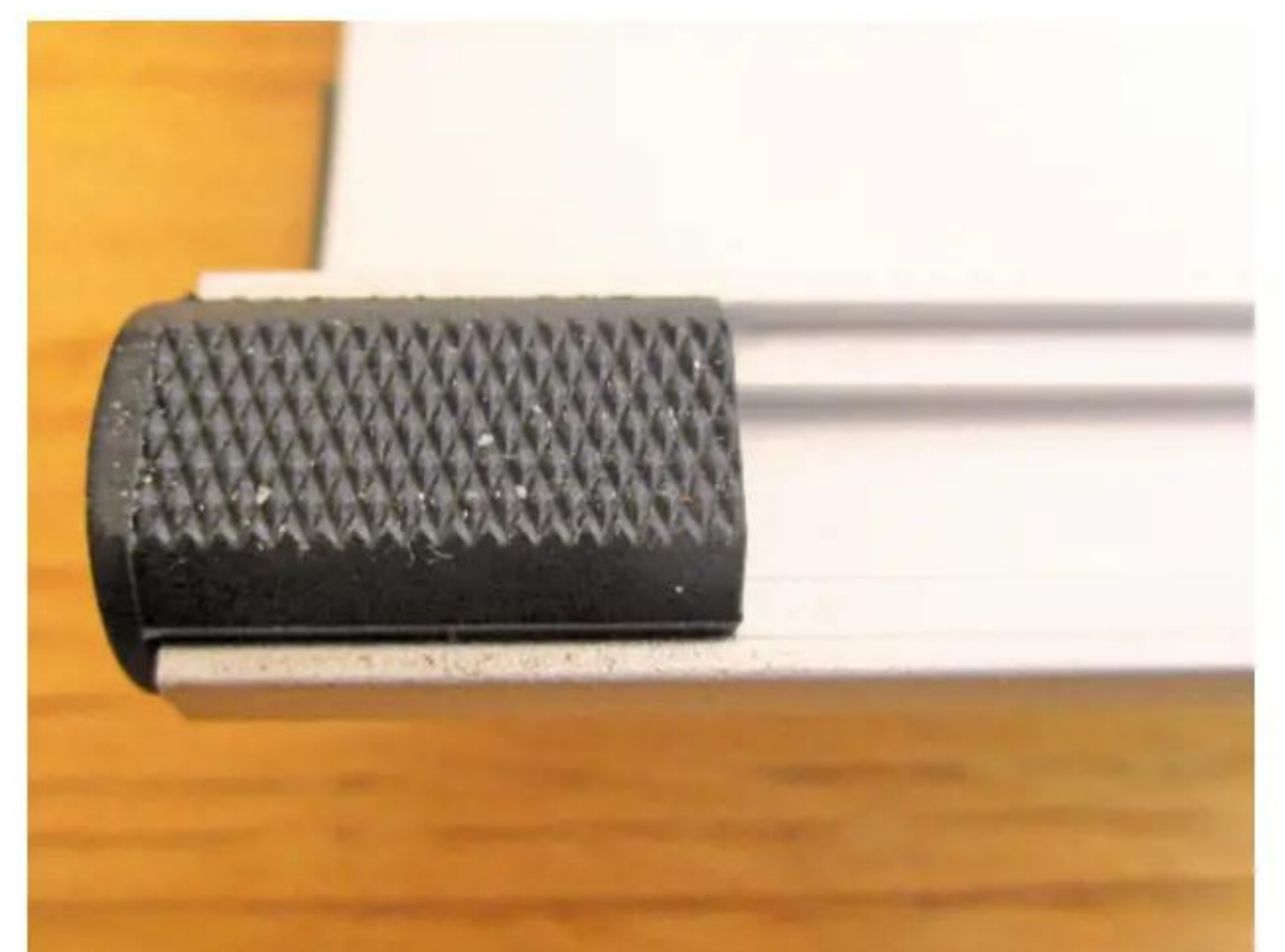
Swirl patterns help the steel-filled lapping fluid flow away from the cutting action, regardless of the angle at which it is being performed. Each plate has a magnetic cover with leather top – rough for the first two stages and smooth for the last – onto which an abrasive wax is rubbed. The wax is coloured depending on the grade – 1,800, 2,500 or 5,000 – and both the number



... and shown closer up



Wide base for stability in use



The rubber feet don't fall out!



and colour used on each is written on the side of the cover, which ensures you don't mix them up. When not in use the carry case keeps everything together, out of the dust, and contains a cleaning block, a spray bottle full of lapping fluid and an MPOWER cleaning towel. A booklet gives basic guidance and there are plenty of instructional videos online if you need more help.

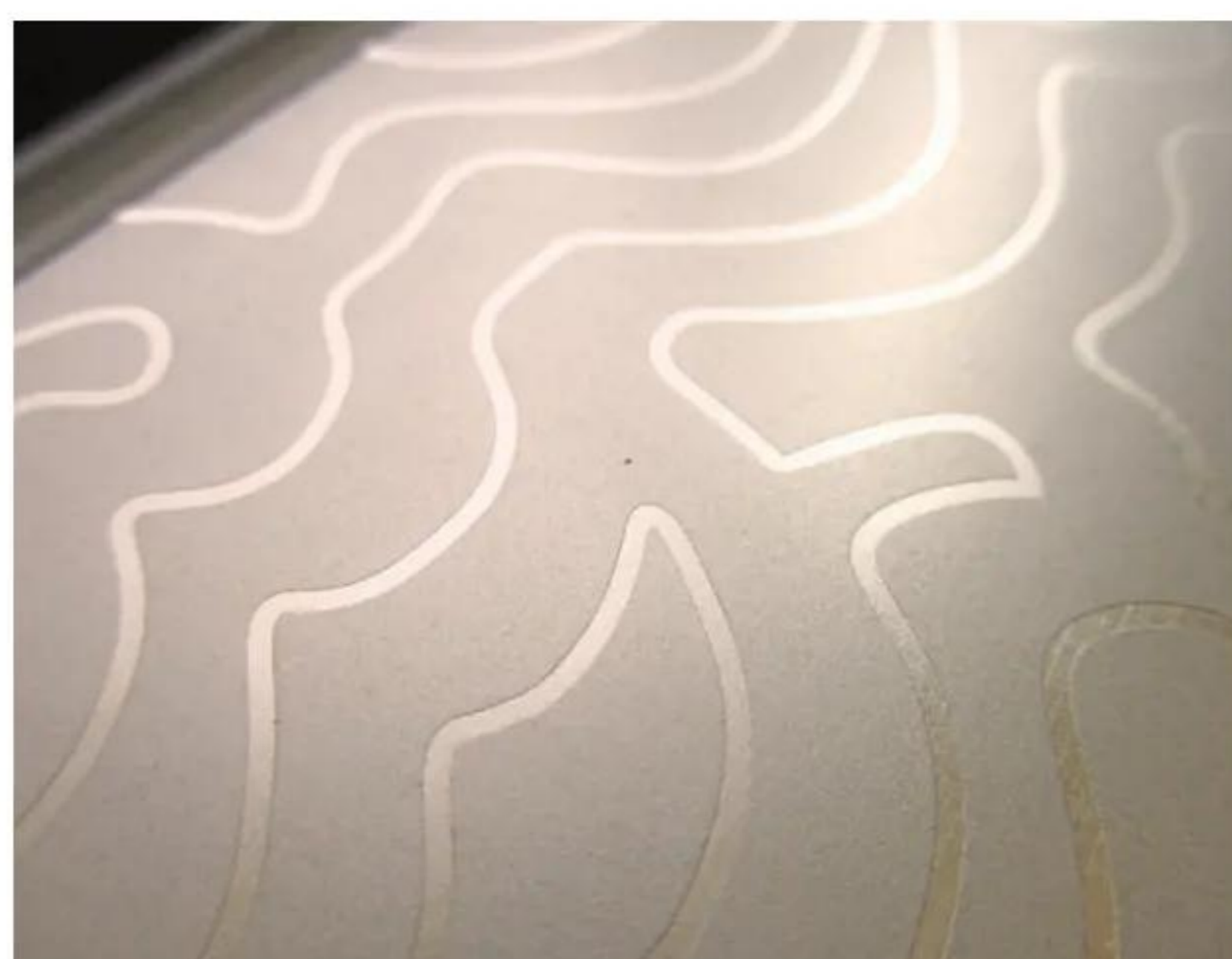
Lapping fluid

There are often nasty chemicals in lapping fluids, but MPOWER has always provided one that's safe enough to use without gloves. It's 97.28% water; 1% is tween, a detergent; around 1.5% is an orange and lemon grass oil perfume; the remaining 0.22% is amine carboxylate corrosion inhibitor, glycerine and

propylene glycol. The supplied cleaning block is a plastic eraser, which works very well on a dry surface. The plates can also be rinsed with clean water as long as they are dried straight afterwards. It's really important to clean the plates as soon as possible to clear waste metal particles and prevent moisture leading to rust, which can form under the leather strop covers. ▶



High-quality extrusion



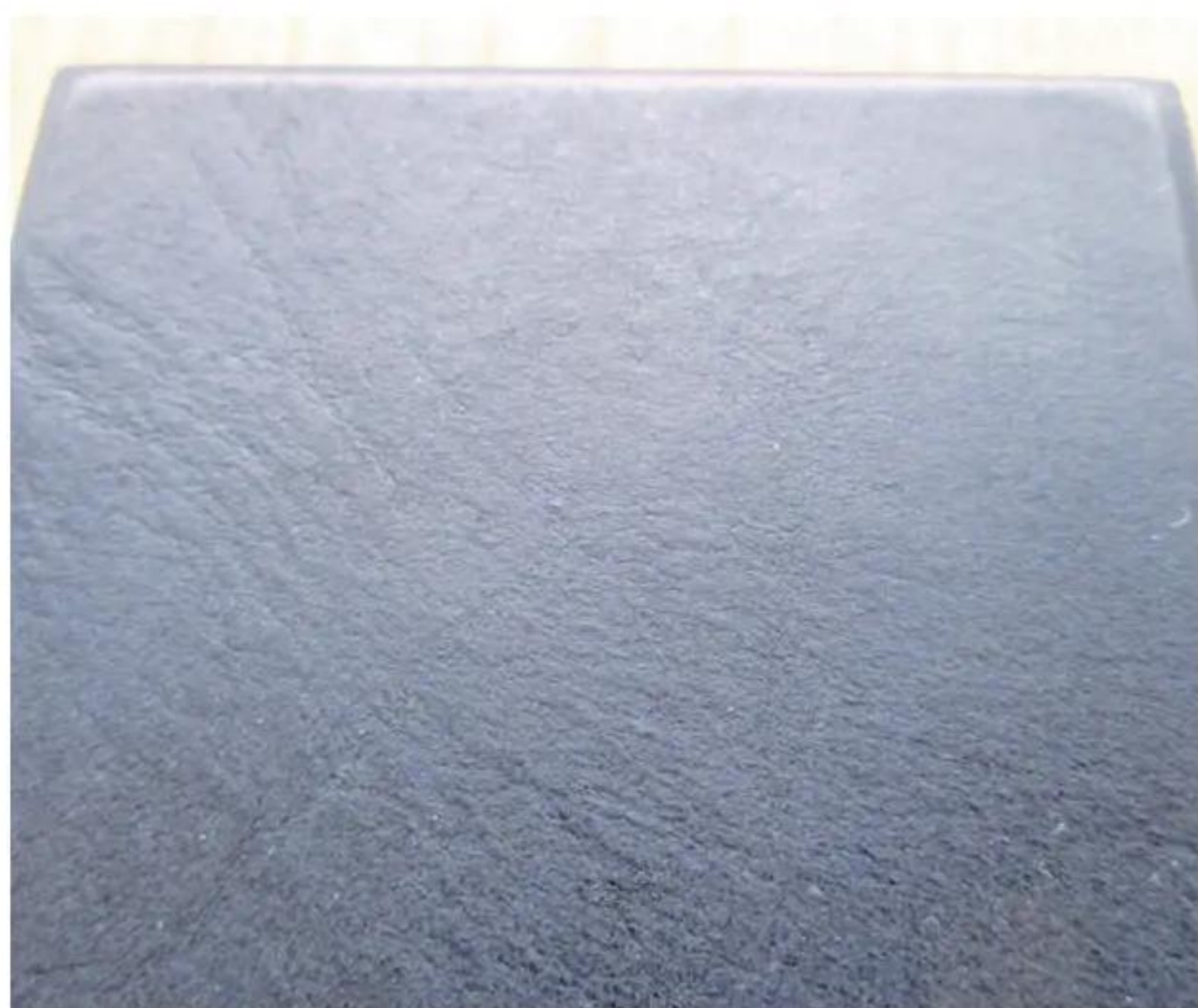
Recess pattern detail



There's no mistaking the grit size...



... nor which wax to use



The finest strop is smooth

So what's different?

Not a lot. The SB2 is the two-plate version of the Side-by-Side (SBS) and I was sent all three combinations: 300/600, 600/1,200, plus 300/1,200. The extruded aluminium base is the same shape as the SBS, just narrower. The strop covers match the plates as usual: 300 – 1,800; 600 – 2,500; 1,200 – 5,000. Each bag has the same 30ml lapping fluid bottle and the appropriate wax. Everything looks just as good as ever, but I'm still giving them a full test, just in case, to see if limiting the combinations



Grind stone sprinkled with honing fluid



Three grades of polishing wax

can still provide an acceptable result.

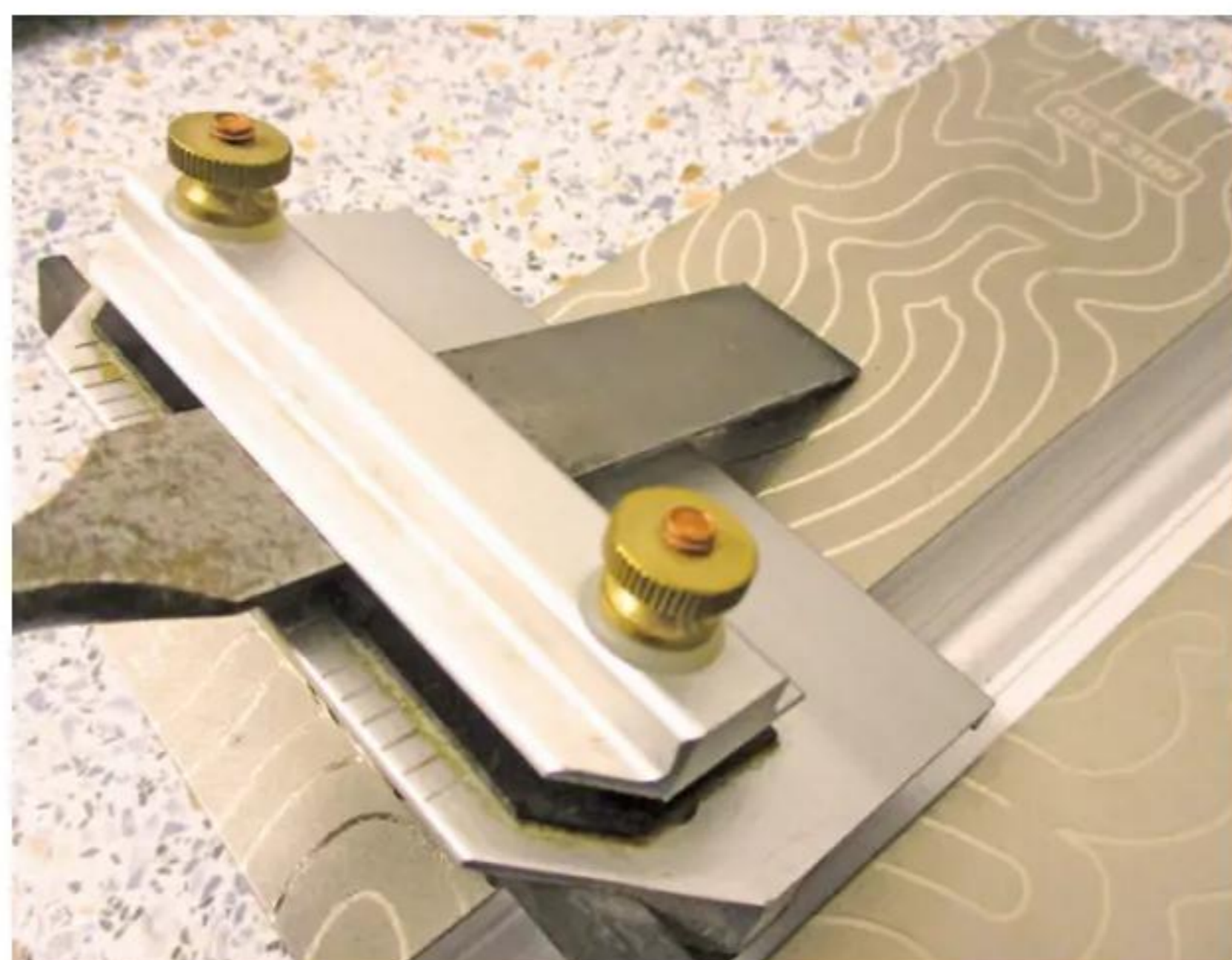
I started with the 300/1,200 model, the one I thought I'd be most likely to buy. Using a 'vintage' Stanley chisel, which is slightly asymmetric in section, I gave the stones a spray of the lapping fluid and began grinding the bevel. The coarse 300 grit plate quickly cut through the surface leaving a clean pattern of scratches, but regrinding the whole bevel down to a single flat surface still took some time. I moved on to the finer plate and finished as best I could. It seemed to take longer than usual, perhaps because I was

missing out the 600 stage, but I did get an acceptably clean finish.

Stropping

Once the plates were clean, the covers went back on for polishing to begin. The leather on top of the 5,000 cover is smooth and a little softer than the others, which are harder and 'crust up'; they look like suede. I usually go through every stage – 1,800 – 2,500 – 5,000 – but the first SB2 on test only has the first and last of these. Honing must be done from the top edge with the sharpened edge trailing, otherwise it cuts into the leather. If you're still using the honing jig, I recommend only applying wax to the top half of the leather so that the roller doesn't pick it up. It can be removed easily, but it's best not to have to, and wax transferred to the diamond surface displaces lapping fluid.

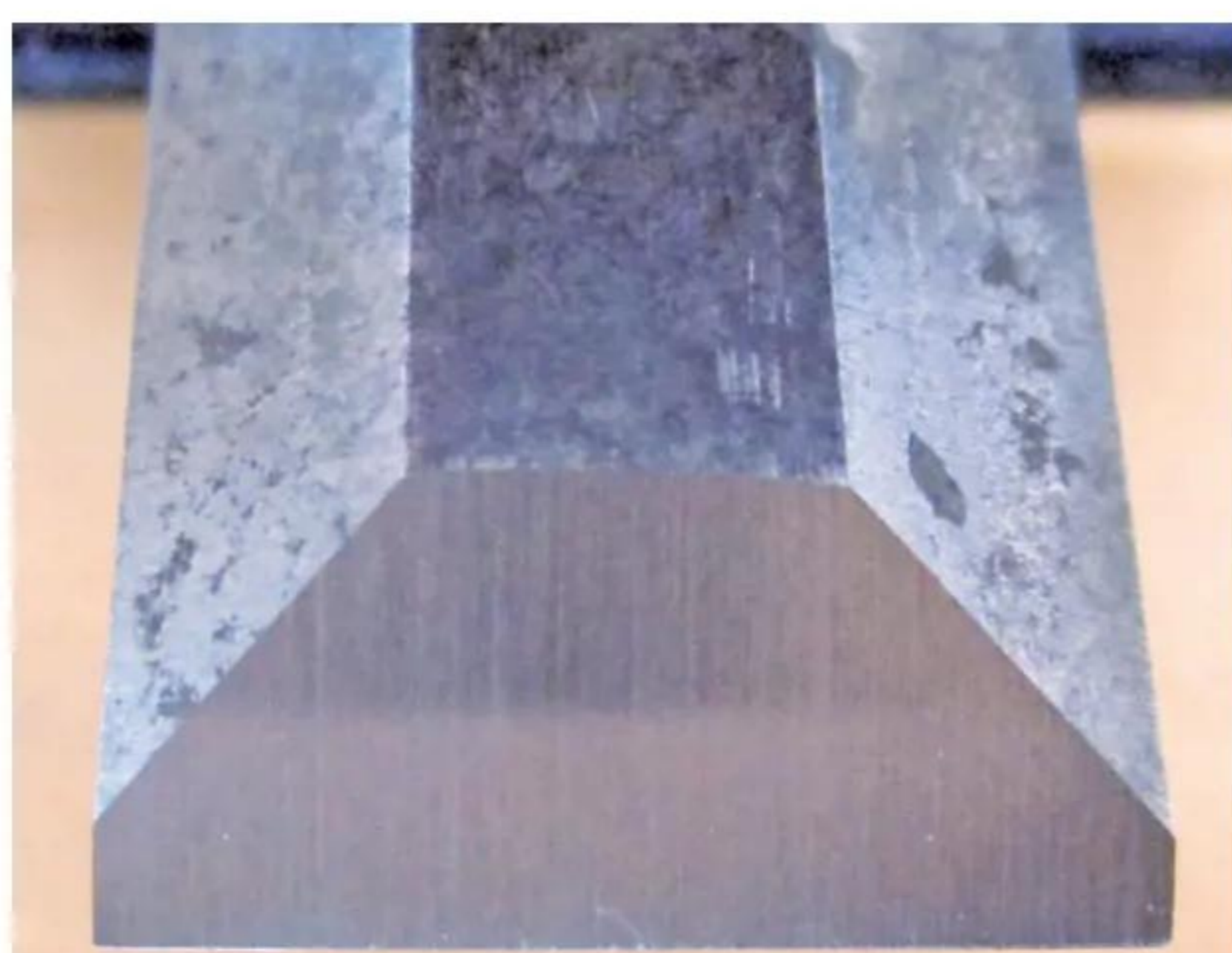
The orange – 1,800 – wax left a dull finish and the blue – 5,000 – polished it to leave a shiny surface. Removing all remnants of the wire-edge was taking too long with the jig, so I swapped to 'freestyle'. A paper cut test proved that the edge was very sharp and ready to use, even if some of the 300 grit



Honing jig set up for initial grinding



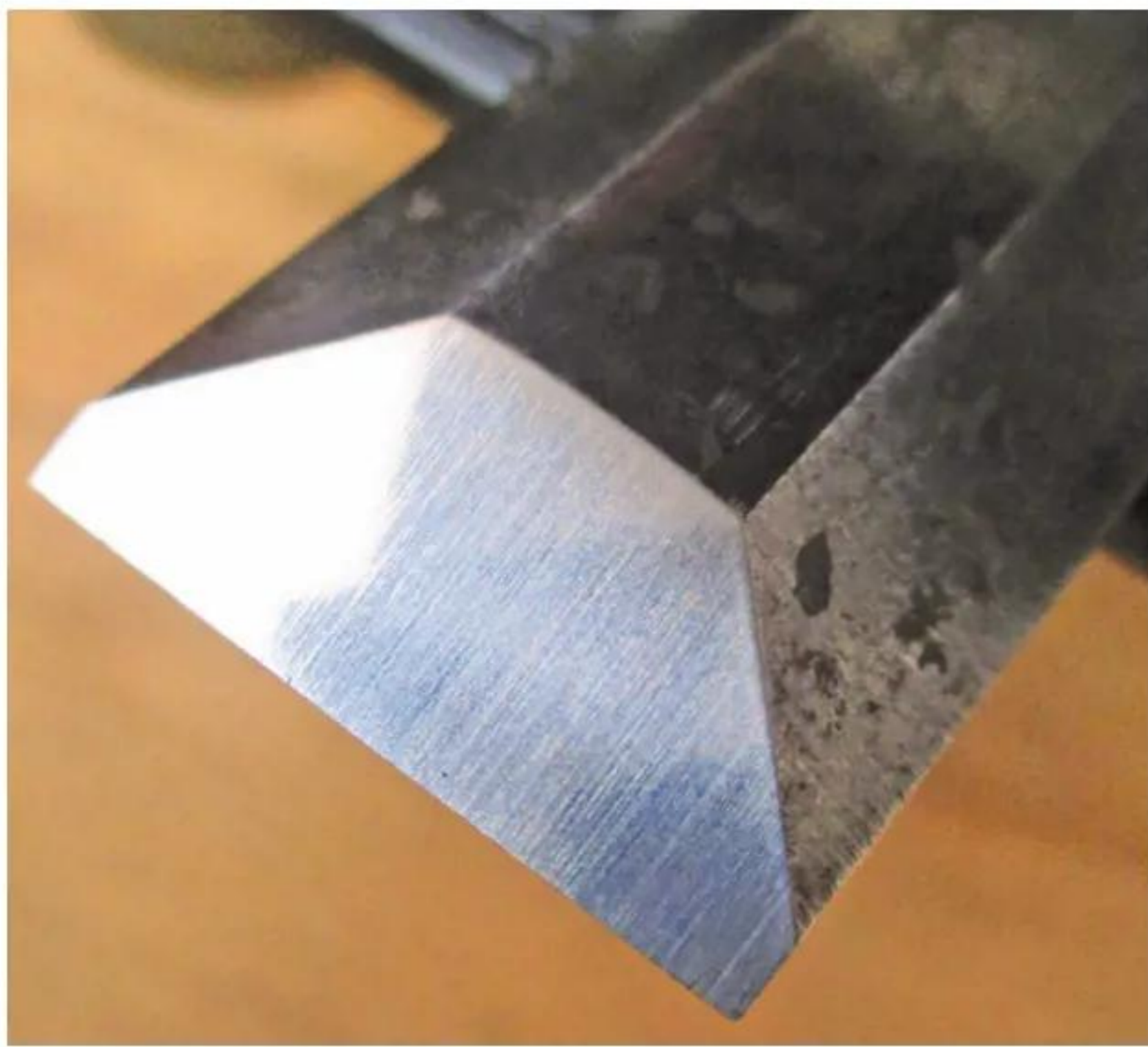
Ground on the 300...



... followed by the 1,200



Ready for stropping



After 1,800 wax

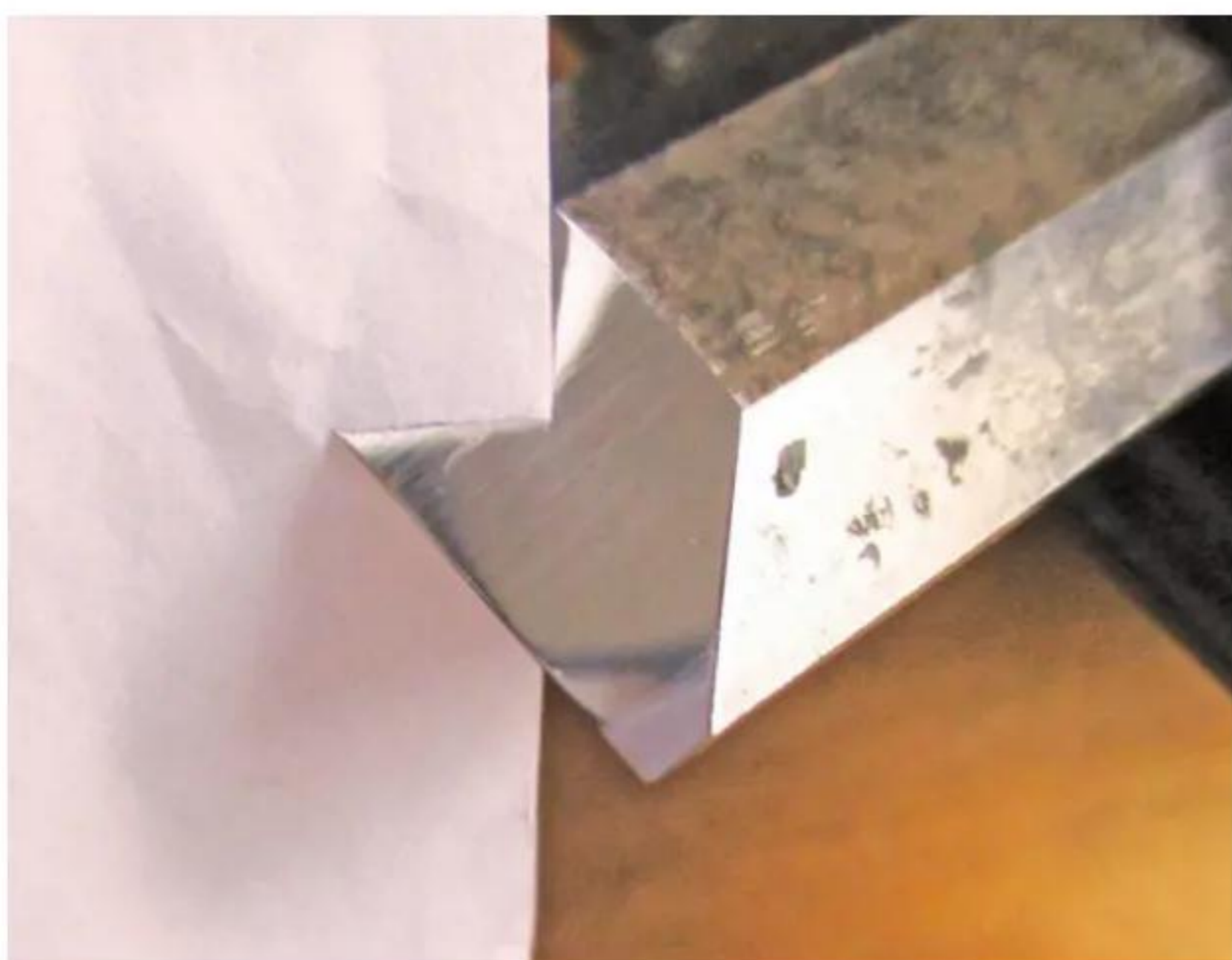
grinding scratches remained. Perhaps I ought to have spent longer on the 1,200?

Irons & other blades

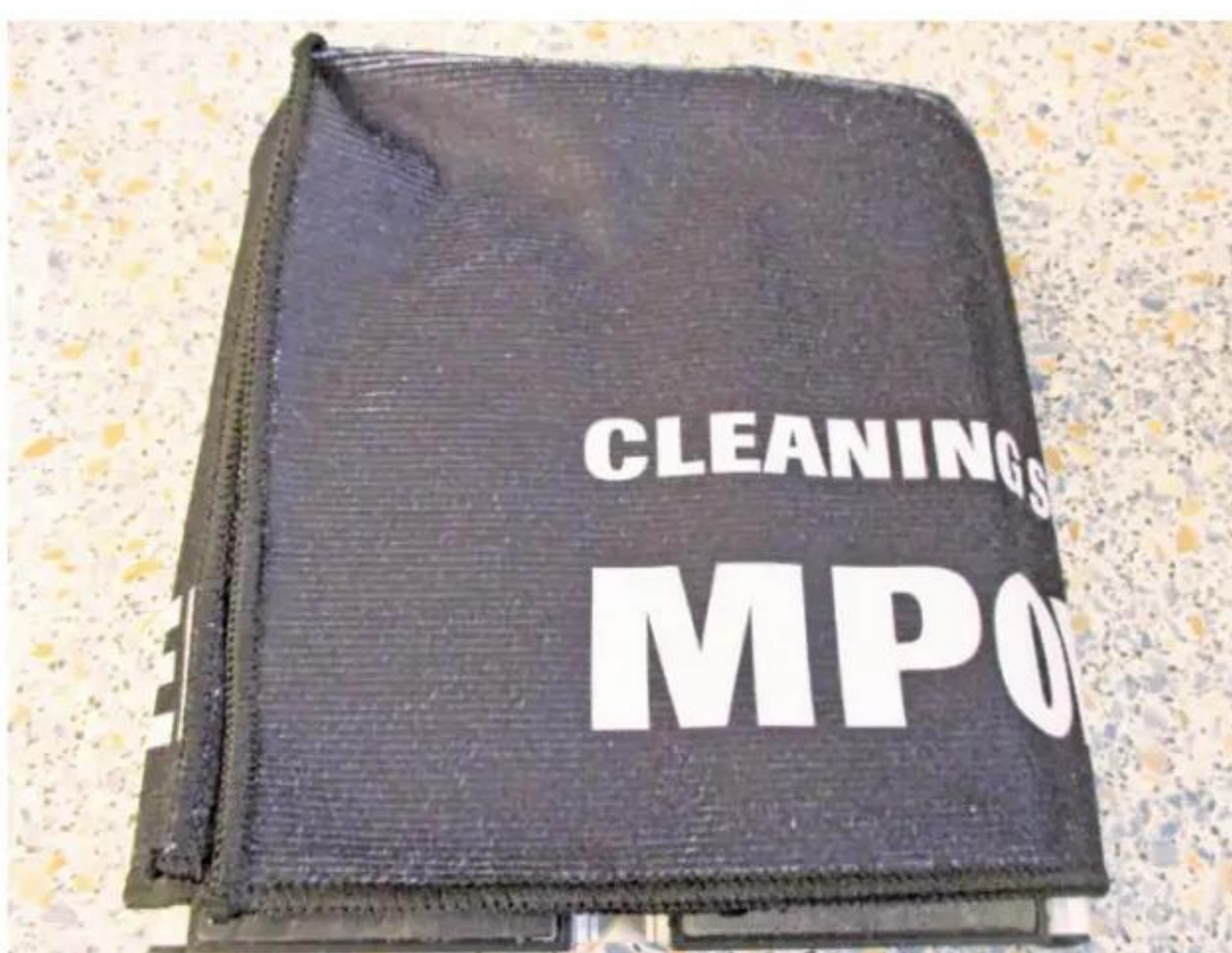
I continued my sharpening trial with a couple of other chisels, a block plane iron, spokeshave blade and a kitchen knife, achieving the same excellent results. I then tried out the 600/1,200 combination on a dull blade, but the missing 1,800 strop stage definitely made the 2,500 harder work. A different chipped blade was taking too long to regrind with the 600 – I really need that 300 grit! Next was the 300/600 set, which is great for initial grinding and sharpening, but this meant there wasn't a 1,200 for the final step...

Evaluation

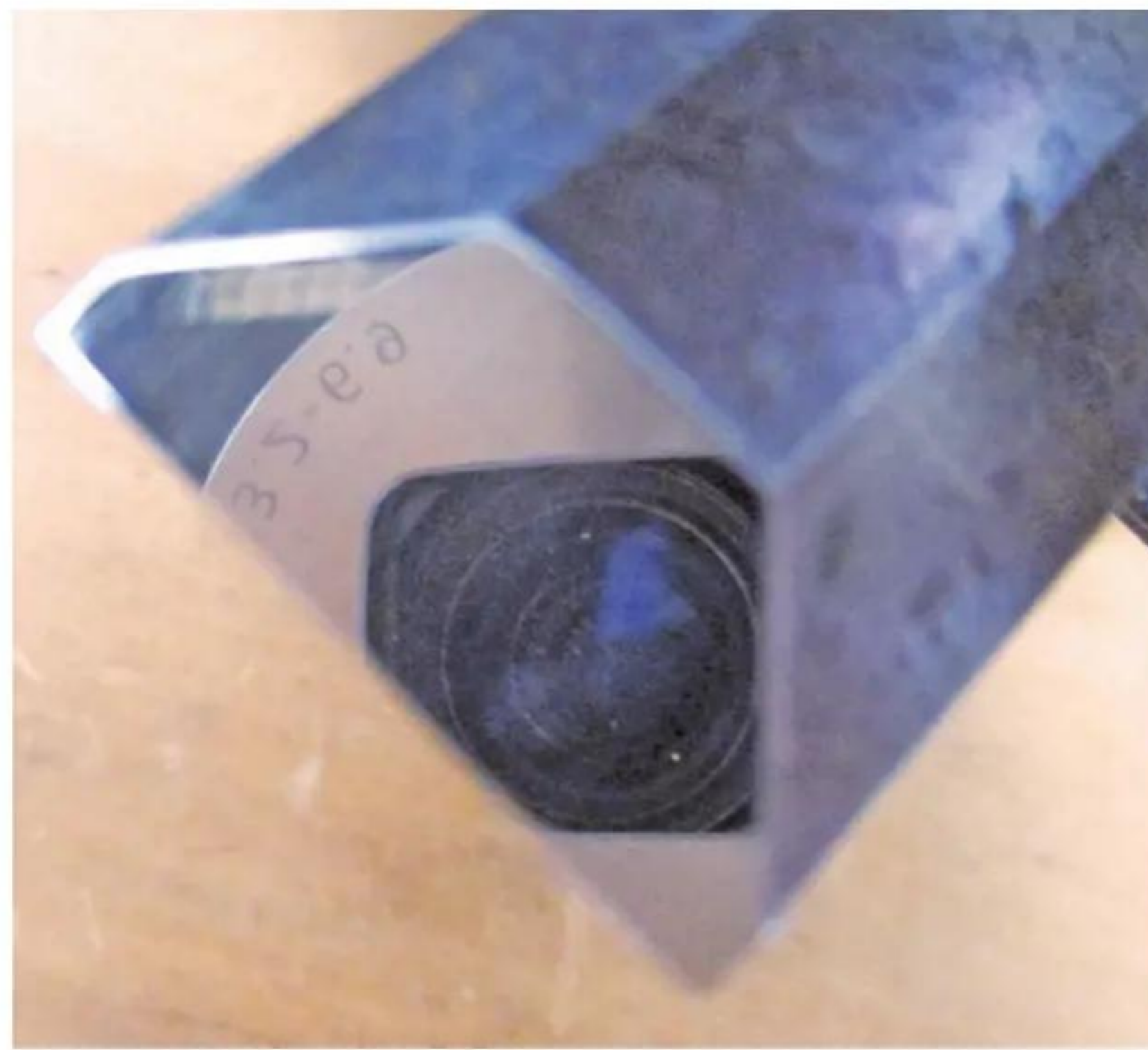
I can't fault the consistency in quality that MPOWER provides. Having two separate surfaces in-line and ready to use is convenient, and not having a middle plate – as in the case of the SBS – makes sharpening longer blades and flattening plane iron and chisel backs much



... but it cuts very well



The towel provides a protective wrap



After 5,000 – a mirror finish?

easier. But two stones leads to a break in the sequence: you can't grind without the 300; no 1,200 and you can't get the scratches small enough for polishing out; choosing the 600/1,200 also means missing the 1,800 wax stage, and choosing 300/1,200 neglects the 2,500...

Conclusion

I really like these double plate sets; their compact footprint is easier to use than the SBS and provide the same high-quality abrasive surfaces. They don't provide a complete sharpening solution on their own, but it's still possible to achieve a fine edge from a chipped blade with the 300/1,200 set, even if you miss out the 600 stone and orange wax. The nitrile rubber feet on the SBS needed glueing in, but on the SB2 they fit much more tightly and do not fall out.

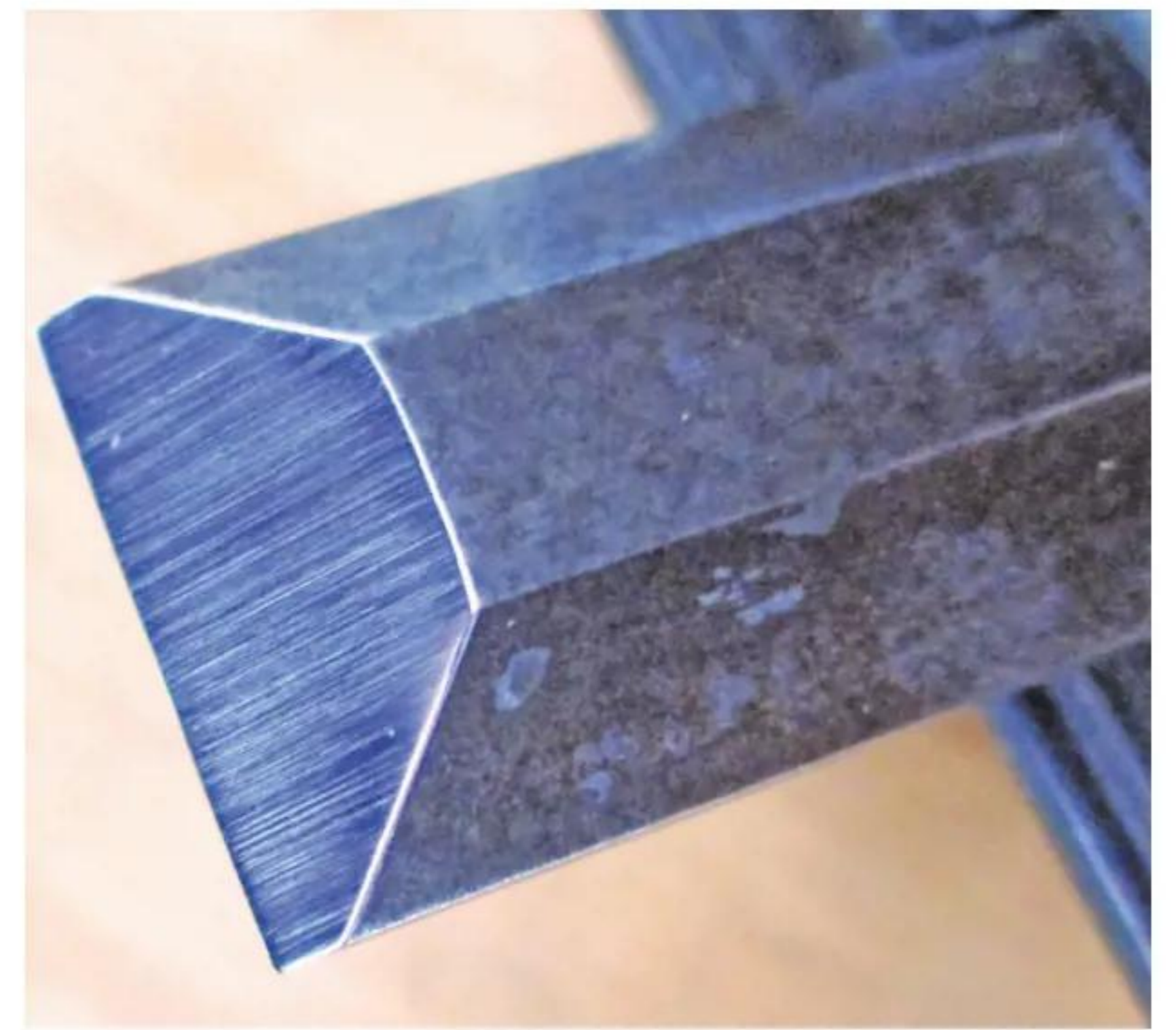
If I was only buying one of the SB2s, the 300/1,200 combination would be my preference. On the other hand, I already have a grindstone, so the 600/1,200 pair would be excellent for touching up an edge. The strength of MPOWER's



Knives can also be treated to a sharp edge



Packed up and ready to go



Not quite...

line-up is that you get the same surfaces regardless of model, so mix and match at will to create, or complete, your own set. You really can't go wrong with any of them.

Previous reviews of MPOWER 8in diamond stones appeared in the January 2023 and January 2024 editions of *The Woodworker*. ✕

SPECIFICATION

- Wide anodised aluminium base allows for improved stability
- Interconnected non-linear diamond recess pattern for excellent swarf removal
- Three combinations of monocrystalline diamond available from 300, 600 & 1,200 grit
- Replaceable diamond surfaces are inexpensive
- +/- 0.00175in CNC machined base surfaces for incredibly flat sharpening
- 'On board' click-on, click-off, magnetic leather strop covers
- 1,800, 2,500 & 5,000 polishing wax grits
- Tough carry and storage case
- 30ml fully synthetic lapping fluid
- 10-year guarantee; made in the UK

Typical prices: Double diamond sharpening set – £149.95; lapping fluid: 30ml – £9.95; 100ml – £13.95, 250ml – £17.95; wax blocks – £7.95 each

Web: www.mpower-tools.co.uk

THE VERDICT

PROS

- Compact two-in-one unit; various surface combinations to meet preferred sharpening combinations; good access from both sides for efficient use when sharpening longer blades and the backs of chisels and plane irons; everything required for grinding/sharpening and honing is supplied in the box; diamond plates are perfectly flat and replaceable; carry bag provides convenient storage and protection when not in use; the nitrile rubber feet no longer come out on their own!

CONS

- Lapping fluid remains a little pricey

RATING – PERFORMANCE: 5 OUT OF 5
RATING – VALUE: 5 OUT OF 5

WIN! 1 OF 3 MPOWER TOOLS' SB2 SHARPENING STATIONS - WORTH £149.95 EACH!

Transform the way in which you maintain your cutting tools while ensuring maximum performance and longevity – MPOWER Tools' SB2 represents the complete sharpening kit

Nearly two years ago, MPOWER introduced the Side by Side (SBS) – a six-stage, three grade diamond sharpening station that set a new standard in precision. Now, the SB2 has been launched, which offers four stages of sharpening prowess, and embodies the same excellence that made the SBS MPOWER's best-selling diamond stone. Boasting two diamond grades and two finishing strops, the SB2 ensures your chisels, plane blades and cutting tools remain razor-sharp.

The SB2 double diamond sharpening stone set aims to revolutionise the way in which professionals and hobbyists alike sharpen their tools, ensuring a lifetime of precision and durability. MPOWER's premium diamond bench stones offer the best in monocrystalline sharpening quality.

Craftsmanship & quality

Crafted in MPOWER's UK factory, every SB2 undergoes 11 rigorous quality assurance tests to ensure it meets the highest standards of excellence. This commitment to quality ensures that each SB2 diamond sharpening stone grit not only meets but exceeds professional expectations.

Perfecting the double-sided diamond sharpening stone

- Three diamond grade model options
- 300/1,200; 600/1,200; 300/600
- Premium monocrystalline diamond
- Superior diamond plate flatness +/- 0.00175in
- MPOWER 10-year bench stone guarantee
- New scientifically advanced lapping fluid
- Replaceable diamond surfaces
- Two real leather strop covers



- Two grades of polishing wax
- Tough canvas case
- Unique diamond recess pattern
- Precision and stability

Diamond stone specifications

- Overall dimensions: 203 x 210mm
- Diamond surface: 50 x 203 x 70mm
- Total diamond surface: 44sq.in
- Weight: 1.1kg – excluding ancillaries
- Gross weight: 1.85kg

The prize includes

- Two grades of diamond surface across three models: A – 300 > 1,200; B – 600 > 1,200; C – 300 > 600
- Magnetic leather strop covers for quick swaps, available in firm and soft
- Polishing wax in three grades: 1,800, 2,500 and 5,000
- 30ml fully synthetic diamond lapping fluid
- Diamond stone cleaning block
- Large lint-free cleaning towel

To find out more, see www.mpower-tools.co.uk.



HOW TO ENTER

There's three SB2 double diamond sharpening stone sets up for grabs, in each of the available options:

- 1 x 300/1,200 grit full kit
- 1 x 600/1,200 grit full kit
- 1 x 300/600 grit full kit

To be in with a chance of winning one of these, visit www.thewoodworkermag.com/category/win and answer the multiple choice question below:

QUESTION: How many quality assurance tests does each SB2 undergo?

A: 15

B: 11

C: 6

Please note that the first chosen winner will receive the 300/1,200 grit full kit, the second the 600/1,200 grit full kit and the third, the 300/600 grit full kit.

The winners will be randomly drawn from all correct entries. The competition closing date is **18 October 2024**. Only one entry per person; multiple entries will be discarded. Employees of David Hall Publishing Ltd and MPOWER Tools aren't eligible to enter this competition



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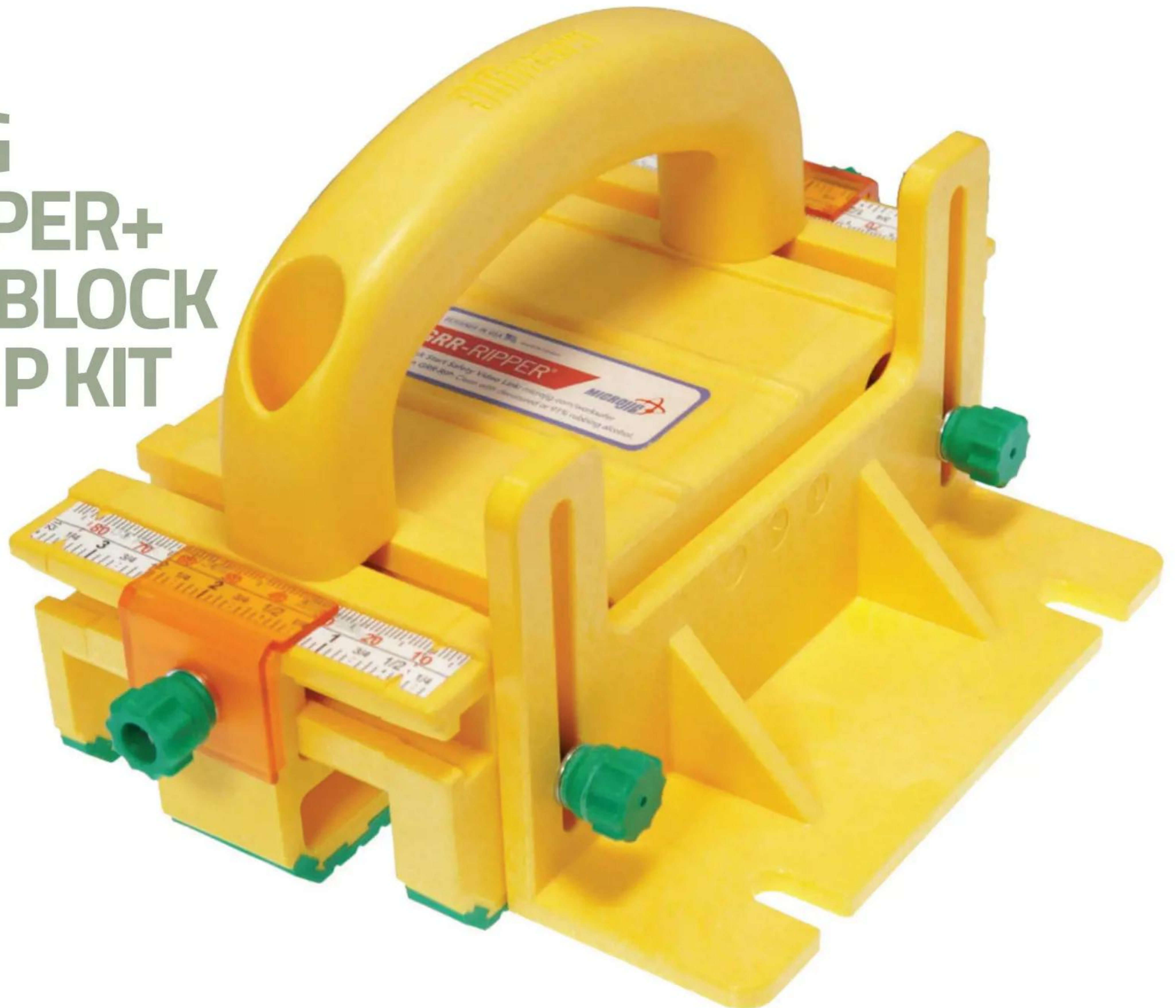


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MICROJIG GRR-RIPPER+ 3D PUSHBLOCK & SAFERIP KIT

Push blocks are an essential safety device; here, **Jonathan Salisbury** takes a look at the brand-new **MicroJig Grr-ripper+ 3D**, available from **Wood Workers Workshop**



Gone are the days of having to use home-made push sticks, unless you still want to! There are already a variety of push blocks on the market, all doing a similar job; then there are more specialist devices, such as the Grr-ripper+ 3D. Apart from improved function and comfort that comes from the materials and ergonomic design, the Grr-ripper+ 3D adds a safety feature to its predecessor – the 3D – and other similar models in the already extensive MicroJig range.

Details

The GRR-RIPPER+ 3D has strips of rubber material, which are dovetailed to two fixed and one independently-moveable and removable plates. The middle one can be set up so that saw blades and router cutters, which pass right through the material, don't make contact with the push block.

It's an American product that was originally produced for use on table saws. The grip bases press on the pieces either side of the saw blade so that they can be kept together as they're pushed through the cut to the back of the table.



Assembly time!



More information here



The large handle...



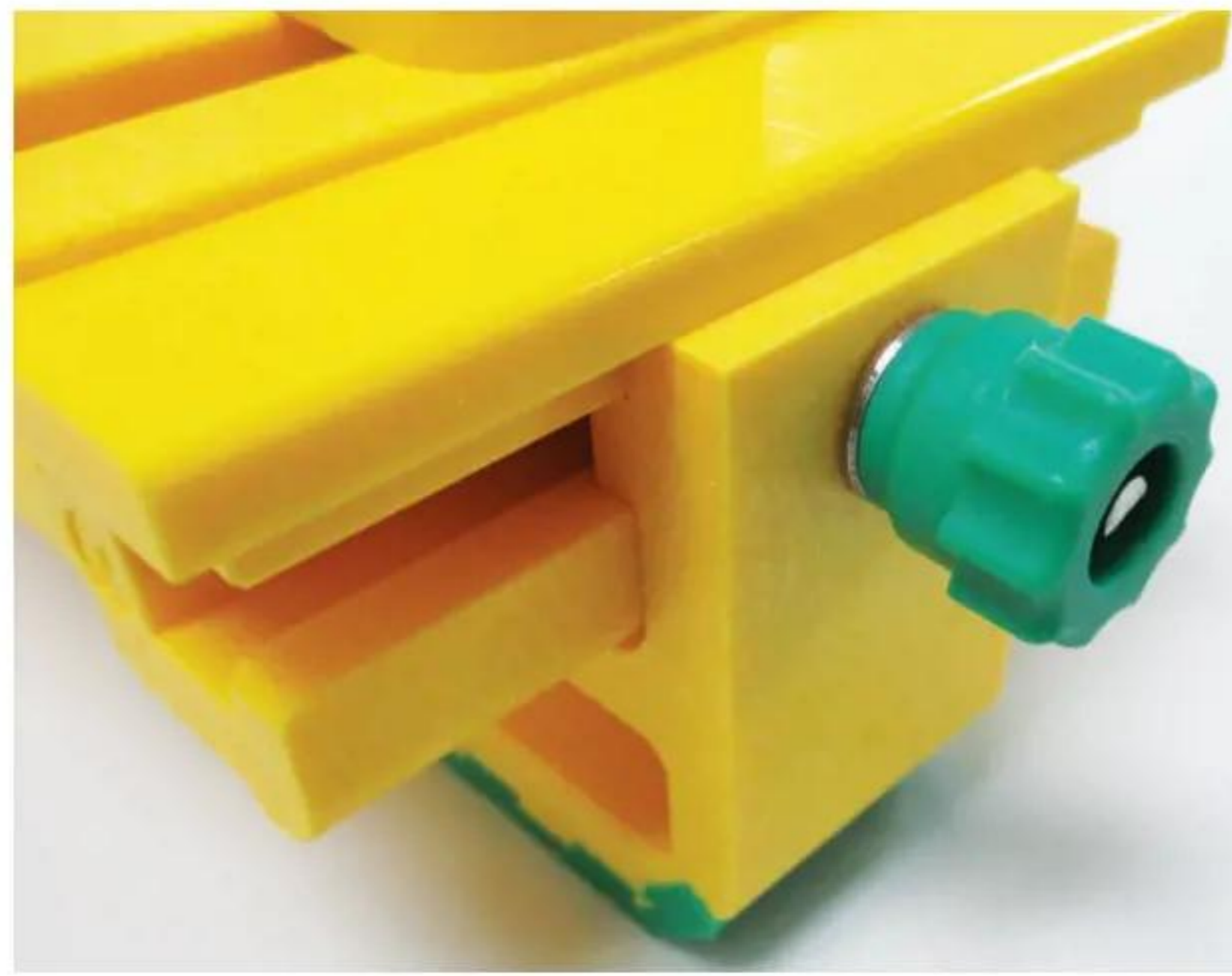
... can be angled for a more comfortable position



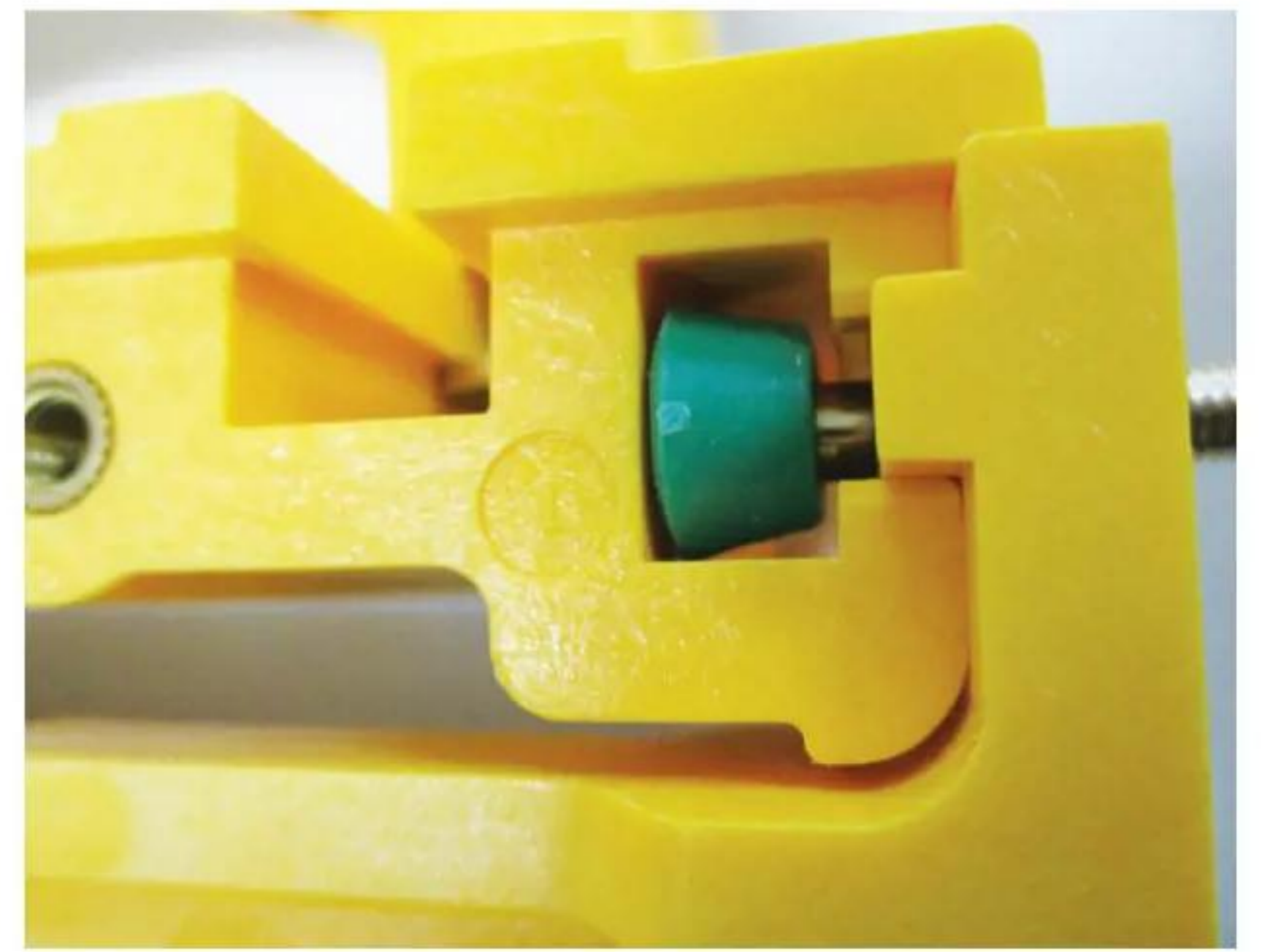
Standard MicroJig fixings all round

It only works if the saw blade and riving knife can pass through the gap in the push block, and that can't happen if the crown guard is kept in place – as we do in the UK. A crown guard would stop the push block from travelling over the blade, so this aspect of the GRR-RIPPER+ 3D's features is less likely to be required. Removing the crown guard so you can use it is definitely not recommended; I did, but only to demonstrate how the push block is designed to be used.

The only difference between the GRR-RIPPER 3D and +3D seems to be the SafeRip kit. This consists of two stick-on measures and two pieces of transparent orange plastic. These are fixed on both ends of the body, although for initial testing I only fitted one to the end closest to me. Ensuring that the reading from the gauge on the saw is correct – i.e. '2' really does mean that the blade is 2cm from the fence – the orange plastic must be clear of the same reading on the measure stuck to the push block. My saw's gauge is in centimetres and the push block is in millimetres and inches. Care is needed; a 2cm reading must not be transferred to a clearance of 2in! If things go wrong, replacement parts are available, although quite costly.



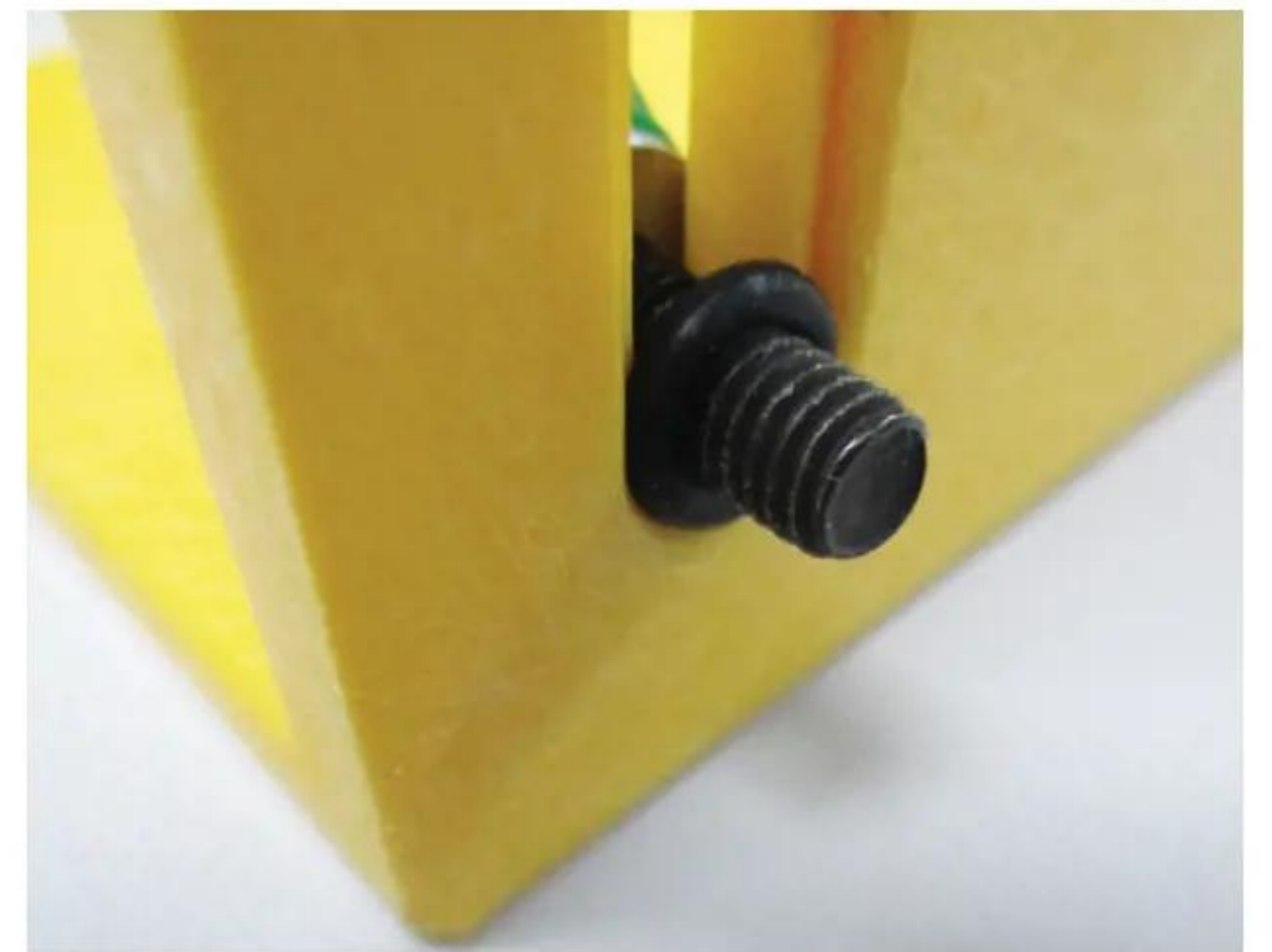
Middle, moveable foot in place



Dovetail slots provide secure fitting



Outside legs just screw in place



There's no danger of losing these screws

But does it work?

The grip material is certainly firm enough to provide a solid feel to the action and flexible enough for sufficient grip; it's suppler than the hard rubber found on some push blocks and isn't going to disintegrate as fast as the soft foam I've seen on others. The GRR-RIPPER+ 3D can be used horizontally and vertically, and the symmetrical handle can be moved for comfort, convenience or preference, for both right- and left-handed use. As long as the wood slides over the table easily, it works very well.

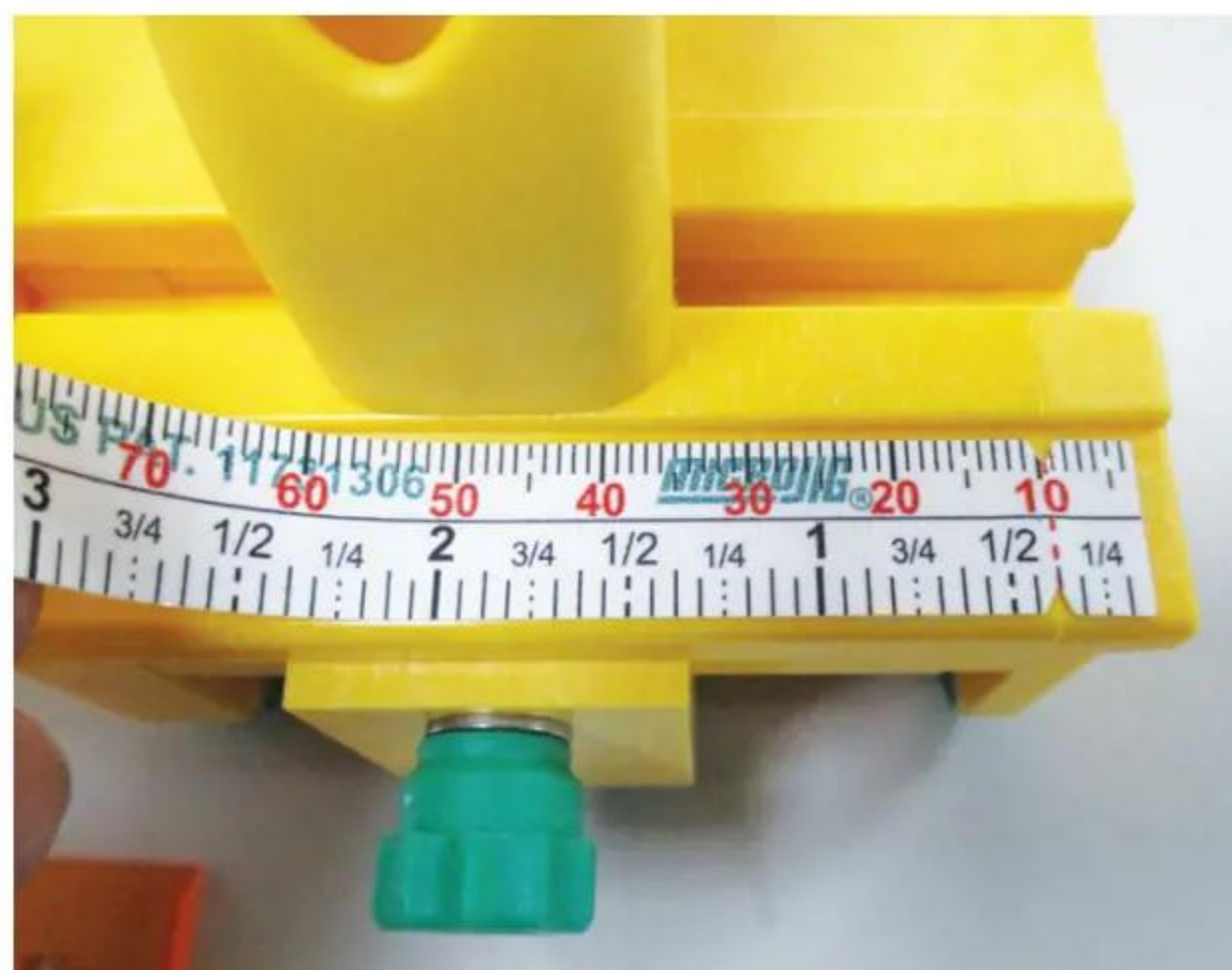
Keeping the piece cut between saw and fence under control when it separates from the rest of the wood is also safer, as long as pressure is maintained until the pieces are beyond the blade. But – as mentioned before – this only happens when there's no crown guard to get in the way; kickback will still have to be controlled by a push-stick in my workshop.

Conclusion

You can never have enough push blocks... Although, I'm not sure about this one. The



Stabilising plate in place



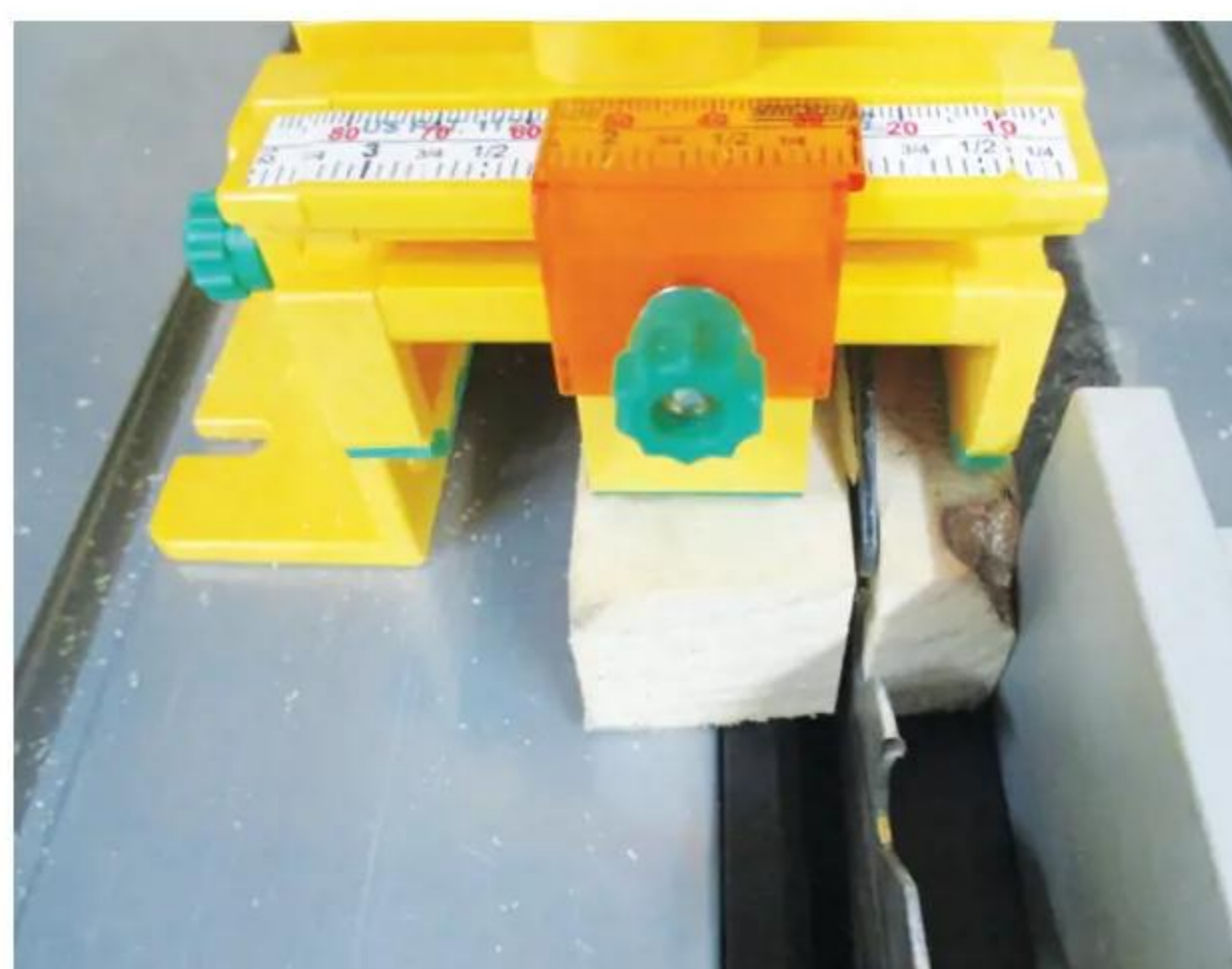
The new measure to ensure clearance



Check the blade position...



... ensure this isn't under the orange plate...



... and clearance is guaranteed



Easy to use and a positive feel

separate strips that bridge the blade help to prevent damage to the block, but unless you remove the crown guard this feature can't be exploited fully; used as an ordinary push block, the gaps are unnecessary. The GRR-RIPPER+ 3D can be used flat and on its side for cutting on bandsaws, for moving pieces around on a router table, for pushing timber over a set of plane blades, keeping offcuts in place on a mitre saw, or holding wood in a jig when drilling. However it's used, the GRR-RIPPER+ 3D will help you to feed wood more smoothly and hold wood more securely. It can be used around guards, has a stabilising plate for thinner workpieces, and is superior to almost all push blocks included with machines. The handle is large and comfortable to hold, even though it's not cushioned, and the replaceable soft grip-strips provide secure contact without needing to press hard most of the time.

The only omission that comes to mind is the lack of a tab to hook over the end of a board. Without this, more downwards pressure is needed to keep the block in place, which increases friction and can make pushing more tiring; it could be added with the gravity heel kit – at an extra cost.

Talking of cost, as an American product, the RRP suffers from the exchange rate and transport. £60 is a lot to spend on a push block. The GRR-RIPPER+ 3D is nevertheless a very good product; you alone must decide if you agree with my value rating!

Note: There are a variety of regulations and codes of practice for the guarding of machinery and they differ from country to country. What's required by law is particularly relevant to those who use machines for work, but best practice is highly recommended for home users, too. Any reduction in safety caused by the removal

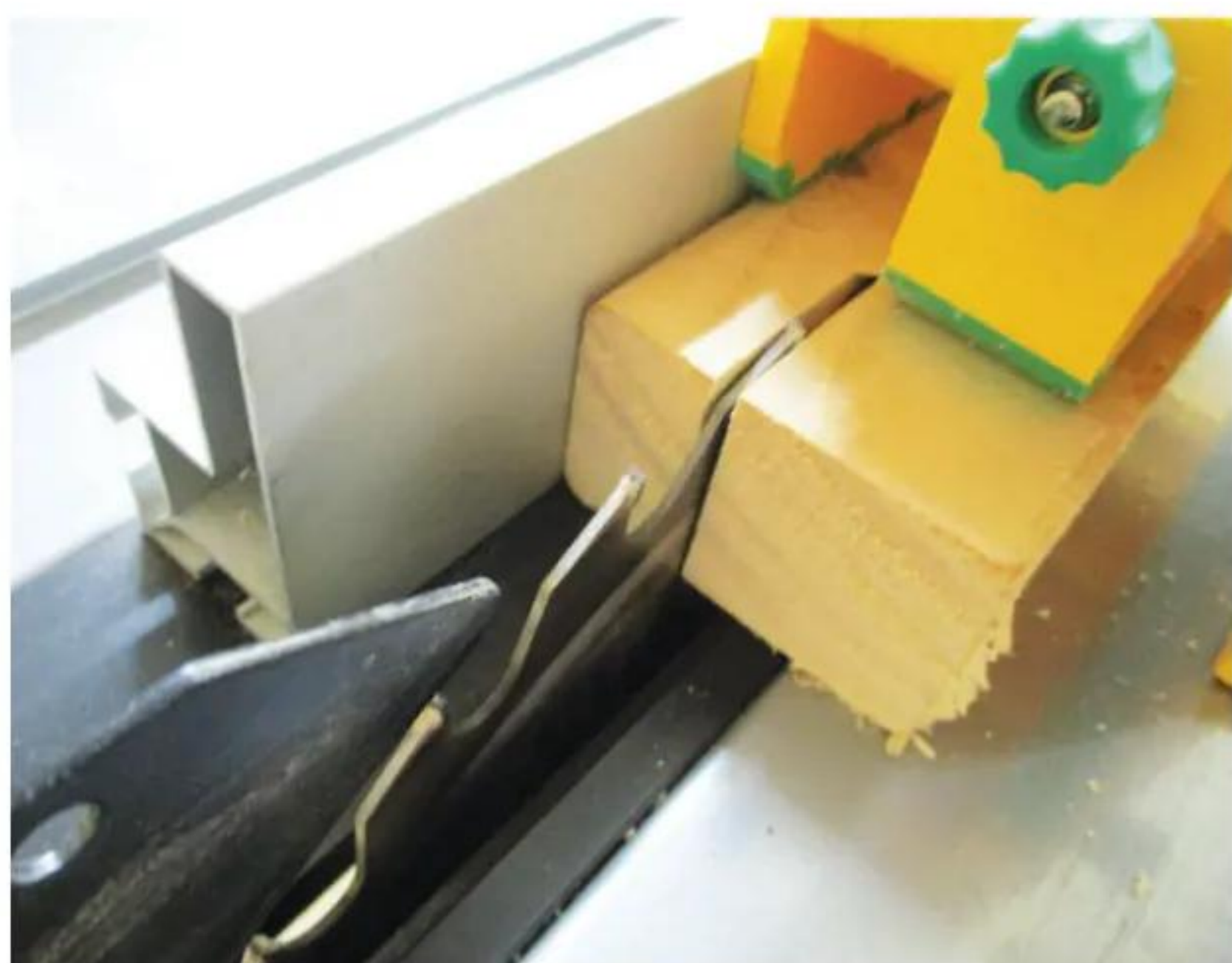
of guards, or any other part of a machine, can't be compensated for through the use of devices such as push blocks. In the UK, the HSE website – www.hse.gov.uk – is a very good place to find information. ✂

SPECIFICATION

- Three-directional force for unmatched workpiece control
- Moving-blade-guard hand protection
- Virtually eliminates kickback
- Work with small stock safely on the table saw, router table, jointer and bandsaw

Typical price: £60

Web: www.woodworkersworkshop.co.uk



Pressure both sides of the blade prevents kickback



If in doubt, read the instructions!

THE VERDICT

PROS

- Easy and comfortable to use; protects hands and fingers from cuts and injuries; virtually eliminates kickback on circular saws; can be used for guiding workpieces on other machines

CONS

- Intended function isn't possible when the crown guard is fitted; expensive

RATING – PERFORMANCE: 4 OUT OF 5
RATING – VALUE: 3 OUT OF 5




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PLANE SPEAKING



Whether reaching for the top or bottom, your plane should be based on the workpiece, not on fashion

Bevel-up or bevel-down? It depends on what you're doing, says Roger Wilson

Bevel-up planes are a somewhat controversial tool. Many people seem to take an 'all or nothing' approach to them, with woodworkers having very pronounced views about which they prefer to work with, but which type you reach for depends on factors such as mouth size and depth of cut, not to mention that 'horses for courses' approach in the choice of tools.

Mouth size

Let's start by looking at mouth size. The mouth's lead edge, just ahead of the blade, controls the fissure, which the cutting-edge starts. Left to its own devices, this will run on and eventually dive so far below the wood's surface that it snaps off, resulting in tear-out.

Solution: close the mouth down, which gives a downward pressure, and take a very light cut. This should get you out of trouble in most cases, and it applies to bevel-down planes as well as bevel-up.

Every piece of wood is individual

With regard to low-angle, common and York pitch, I grant that one might do a job better than another, but this is a function of the nature of the individual piece of wood, not the plane, its angle of pitch, or the blade's bevel. These will certainly have their effect, but it's necessary to consider what those wonderful little fibres are doing in your particular workpiece.

Some woods with interlocked grain – such as sapele or iroko – really can be a nightmare and not many planes will deal with them successfully. This is when you bring out the trusty scraper,



and these are available as hand scrapers as well as in plane form. Pick them thick and hard. I've got both – hand and plane – and it really is 'horses for courses'. I was cleaning up some ebony edging on a little fumed oak box recently and the hand scraper was the only thing that'd suit.

I've been around wood and tools since I was old enough to see over my dad's bench: I was five or six then, but if there's one thing I've learned since, it's that every piece of wood is individual. It differs not just from others from the same butt, but within its own length and breadth, so nothing can be taken for granted.

This means looking carefully at your workpiece, assessing it as an individual. Choose your plane to suit, and be prepared to be wrong.

The right tool for the job

I still get surprises. Luckily I have a collection of planes from which to choose, running from a Lie-Nielsen 103 – low-angle block; a Lie-Nielsen 95 edge plane – basically a low-angle skew block

plane with an integral fence; a Lie-Nielsen low-angle smoother – that all-important adjustable mouth; my dad's old pre-bedrock Bailey/Stanley – still with an adjustable frog, hence an adjustable mouth; Lie-Nielsen 112 and 212 scraper planes; and finally, my dad's old wooden fore-plane, at 22in and boasting a lovely iron with a chipbreaker having its own built-in brass nut.



Adam Leitch using a bevel-up jack plane on some walnut for a cutlery box

I've just bought a Lie-Nielsen No.4 smoother with a spare York frog. Add to that a spare blade with a ready-honed 10° back bevel and I'm ready for anything. Oh yes, I nearly forgot my teeny-weeny Lie-Nielsen 100½, curved side-to-side as well as fore and aft. Am I a plane-collecting nut? No. I just believe in having the right tool for the job.

That last item I used on an electric guitar, to give it the slight 'belly' that makes it look a little like a Les Paul. Am I a plane snob? No. To round over the tight curve inside the horn of that same guitar – the bit where the fingers go when you're hitting those screaming high notes – I used a round Surform. After that, I cleaned up using a swan-necked hand-scraper. I was working on African walnut, which has a nasty tendency to interlocking grain. The curves of the body shape were cut on a bandsaw and faired in with a couple of spokeshaves.

What I'm saying is, choose the right plane for the job, not the one that's in fashion. And to make that decision, you must really know the timber in the particular piece you're working on; not just the generic type, but the individual piece that's in your hands. ✂



The Lie-Nielsen was the only plane that worked this timber without tear-out

BEST OF BRITISH

MEET THE MAKERS



Overall winner of The Alan Peters Online Furniture Award 2024: Thomas Eddolls' 'Raise' chest of drawers – brown oak and rippled sycamore – 800 x 500 x 1,200mm

The judges awarded scores relating to design, craftsmanship, aesthetics and originality. As Jeremy says: "Design isn't just about the way something looks, but also solving a bunch of technical and aesthetic problems," into one solution "that works."

Maintaining a consistency of excellence

The 2024 award received a total of 12 entries and all pieces are showcased here: www.jeremybroun.co.uk/apaward2024winners. There's a mix of schooled applicants and those with varied backgrounds, such as ex-carpenters, for example.

Judging proved to be quite a difficult process as there were opposing views on two or three of the entries, which demonstrates that however impartial and objective a judge tries to be, they're still bound to slip into subjective thinking. However, in the case of this award, luckily the guidelines are anchored by the Arts & Crafts principles rooted in good design, of which fitness for purpose is one such criteria.

Maintaining a consistency of excellence in craftsmanship and design – especially the latter – relating to previous winners is a challenge and we hope readers agree that the bar has been maintained.

This year's award also features a fantastic selection of prizes for 1st, 2nd and 3rd place winners, from award sponsors Workshop Heaven, Evolution Power Tools and the judges themselves, so a big thank you to all.

Since the last award two years ago, time seems to have flown by as we now take great pleasure in announcing the winners and runners up for The Alan Peters Online Furniture Award 2024. As we'll go on to reveal here, it also takes time to think up new ideas and execute them to the highest standard of excellence.

Online, biennial format

This year's award is an online event making it similar to the 2021 format. The 2022 award culminated in an exhibition hosted by first prize sponsor, Axminster Tools, at the Nuneaton store. Award Organiser, Jeremy Broun, came up with the idea of changing the award to a biennial format, with the idea of giving entrants more time to submit worthy work and for suitable prize sponsors to be found.

The award aims to keep alive the legacy of Alan Peters OBE, who sadly passed away back in 2009. Two of the judges – Jeremy Broun and Andrew Lawton – both knew Alan well, with Jeremy having exhibited alongside him for over three decades and Andrew working with him as well as completing Alan's last commission in 2005. The guest judge for 2024 is Fernanda Núñez, herself an award winner and ex-student of the Waters and Acland Furniture School.

Design, craftsmanship, aesthetics & originality

In order to keep Alan Peters' legacy alive, winning pieces were expected to echo his design and making ethos: practicality, honesty of construction, respect for material in terms of timber movement, along with having a simple understated form.

THOMAS EDDOLLS' 'RAISE' CHEST OF DRAWERS

1ST PRIZE WINNER
£1,000 Workshop Heaven tools voucher
 WORKSHOP HEAVEN
Fine Tools

Meet the maker

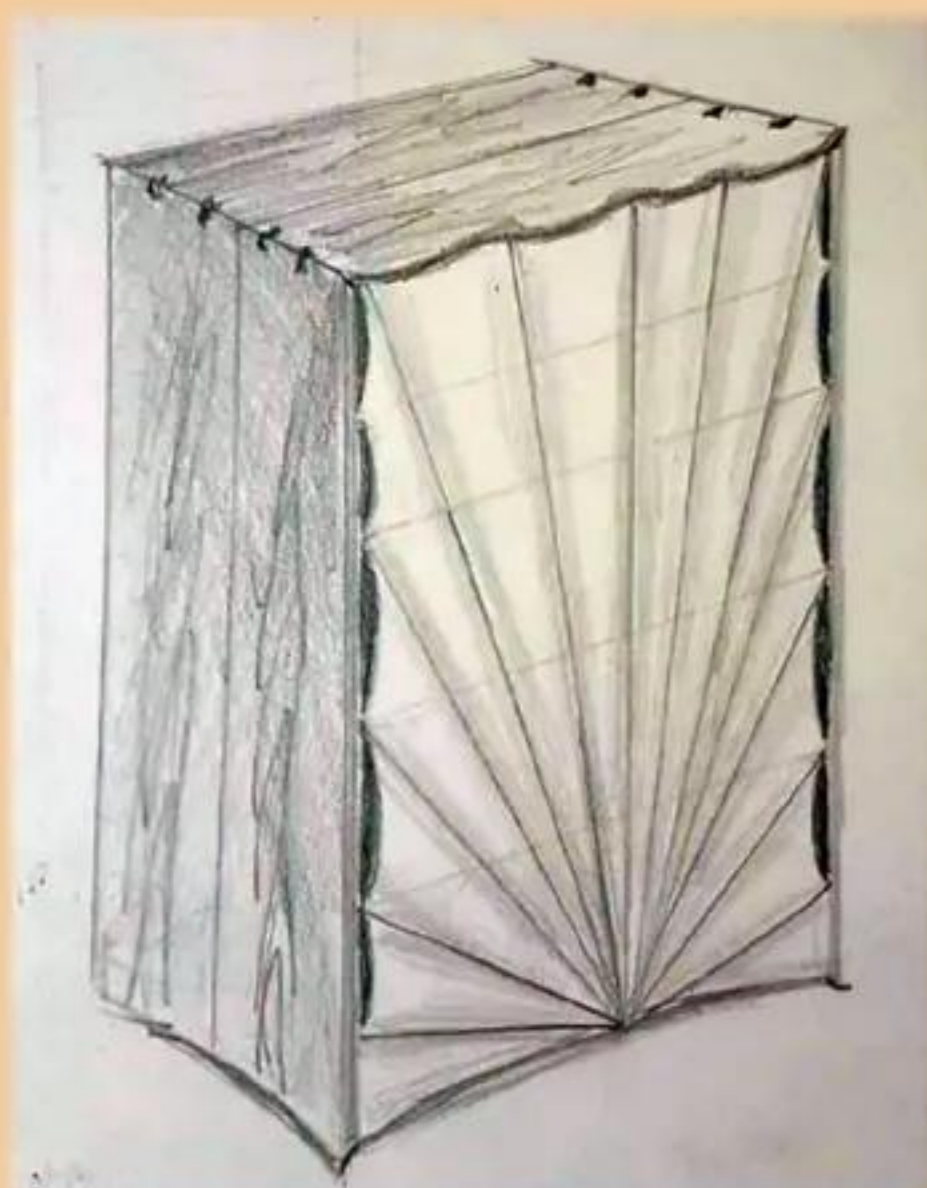
Thomas was apprenticed to a local cabinetmaker after leaving school and completed his training at Warwickshire College's Leamington Spa campus, where he attained City & Guilds qualifications with Distinction.



This allowed Thomas to go on and work for some of the country's most highly respected workshops including Robin Furlong Furniture and Waywood Furniture Creation. During a 15-year professional career, he worked in many different industry sectors, not afraid to go out looking for work, and eventually there came a point where Thomas decided to venture out on his own. "Six years ago, I realised this ambition by founding my own business, which after a lot of hard work and struggle, is still ticking along supported by a growing list of clientele," he confirms.



'Raise' chest of drawers at the oiling stage



Pencil sketch of 'Raise' chest of drawers



Drawer fronts are shaped by hand

MAKER'S STATEMENT

Inspired by the suns of the universe's prevalent light over darkness, the piece incorporates traditional Arts & Crafts exposed joinery using skills handed down by Alan Peters via one of his former craftsmen. "I've emulated the universe's grandest gesture as indeed the craftsmen of old used to look at the natural world in their carvings and depictions," Thomas comments. "A fine handmade chest of drawers, which incorporates exposed hand-cut Arts & Crafts carcass through dovetail and wedged tenon joinery, housing a bank of five hand-cut dovetailed, traditionally hand-fitted drawers."

The frontage is hand-shaped into a radial scalloped sunburst, which was achieved using antique wooden moulding planes, and has undercut finger pull handles shaped into the ends of each drawer.

The drawers work inside a maple and birch ply framed dust board system, which has been carefully housed into the carcass to allow for long- to short-grain movement issues.

"The piece was developed from sketch book to drawing board, stemming from an initial moment of inspiration in the mind's eye and while possessing both Arts & Crafts and Art Deco stylistic features, still retains a contemporary air. The chest was hand finished with Osmo polyx oil."



Carcass construction stage



Final clean up of drawer frontages

JUDGES' COMMENTS

A magnificent well-proportioned chest of drawers designed to emulate the power of light over darkness, with bright suns against the dark voided vaults of time and space. There's echoes of Arts & Crafts in the carcass and Art Deco in the drawer fronts. Particularly noteworthy are the integrated handles, sculpted into the design to ensure nothing disrupts the grand motif of the central carving. The shaping of the drawer fronts lifts this piece onto a plane of its own. Boasting finely-made and fitted drawers, 'Raise' is an outstanding piece of work all round.

Instagram: @englishfinefurniture
 Web: www.englishfinefurniture.co.uk

CHRIS PRETLOVE'S 'CG1060' CHAIR

Meet the maker

A second generation cabinetmaker with 29 years' woodworking industry experience, Chris has spent the last 25 of those exclusively making one-off pieces, in nearly every style imaginable, including Gothic, Victorian, Modernist, Arts & Crafts, in addition to yacht interiors, etc. Chris' work is influenced by the early modernist movement, Japanese woodworking, simplicity of line and using geometric forms to provide strength.



"Setting up my own workshop 10 years ago allowed me to explore the idea of using birch ply to create fine furniture. I experiment with new techniques and aim to expand the possibilities of this fascinating material, making best use of its unidirectional strength and stability, huge uninterrupted veneers and interesting end-grain." Chris' design style is intrinsically linked with his workshop experimentation as well as the geometry and structural loading lessons of his A-level engineering drawing. "Moving forward, I aim to develop a range of sustainable, functional, long-lasting designs," he says.



'CG1060' chair –
birch plywood, brown
oak and Danish oil –
552 x 457 x 880mm



Birch ply prototype of 'CG1060' chair



Side view of chair



Detail of leg brace joint

MAKER'S STATEMENT

'CG1060' chair is designed with sustainability at the forefront, using plywood made up of fast growing birch for the structure and economical and beautiful brown oak on the wear surfaces. Designed to last many decades, the chevron seat is connected to the legs with robust glued, sliding dovetails. It bestows both comfortable, supportive, versatile seating and structural integrity. "The design aims to minimise visual and rectilinear elements, to provide interest and calm simplicity. The laminated, hollow form legs reduce weight and the chevron seat shape resists rotational forces applied to the leg braces by the cantilever design. The Danish oil finish is intended to make maintenance feasible for the layman."

Chris' underlying design philosophy is to create timeless modernist furniture using renewable resources.



Construction in the workshop



Chevron dovetail joint

JUDGES' COMMENTS

Chairs aren't easy to design, but this piece demonstrates an intelligent use of materials and the construction looks sound. The award encourages batch-produced furniture as a balance to the predominant 'one-off' market and although this is a prototype, the design appears to be well resolved and the chair well made. The use of plywood, which still raises some eyebrows in furniture making, would've been encouraged by Alan Peters in celebrating its edges without hiding them. Perhaps the oak veneered edges could be slightly bevelled to protect them from chipping. The shallow V-grooved construction gives integrated strength with the seat and back members offer adequate comfort.

Instagram: @cpretlove
Web: www.cmpcabinetmaker.com

JENNIFER SEASTONE'S 'EVEN-ASH' SIDE TABLE

Meet the maker

Before relocating to the Lake District in September to study at the Waters and Acland Furniture School, Jennifer had lived in New York City her whole life. Having previously worked in rougher carpentry, making crates for art shipping, Jennifer has also made her own wood sculptures and conceptual art, and prior to that, was an actress.



"These seemingly disparate careers have shaped my aesthetic entirely," she says, "each piece has its own life hidden inside the grain, its own story; they all have their own gait, their own tone of voice. In my sculptures, I used reclaimed wood and direct carving to reveal the hidden – and untranslatable – stories of the wood's past lives." All of these pieces were touchable and approachable; a quality that Jennifer brings to her current work, except that they're made to be used. "And there's craft present; a history of all the craftspeople who have come before me embedded in each dovetail."

**3RD PRIZE
WINNER**
£300 Judges'
cash prize



'Even-Ash' side table –
ash – 700 x 378 x 324mm



Detail of carcass joint



Work in progress – jig #1



Close-up of drawer front and handle

MAKER'S STATEMENT

Jennifer's ultimate inspiration is nature and the wood itself, especially grain and movement. She's influenced by the Arts & Crafts Movement, Art Nouveau and contemporary art. "I want my work to be approachable, have flow, elegance and softness," she comments.

"The piece asks you to look at it, touch it, and to consider it as something hand-made. The title, the 'Even-Ash' side table, comes from folklore; ash being a tree of strength and power, of protection and healing. Leaves from the tree that have an even number of leaflets on them are considered lucky."

Jennifer's design process flows from pencil drawings to Sketchup – design and layout – in addition to 1:1 scale drawings. Hand fabrication: hand dovetailing; extensive custom jigs; comprehensive hand shaping. Machine fabrication: routing – table and hand – spindle moulder; Domino jointing. Additional refinement techniques to ensure precision and design include using shadow gaps; piston-fitting drawers; adding blocks and grain matching.



Work in progress, prior
to beginning shaping

JUDGES' COMMENTS

A quirky, articulate adventure in space with room to place a book or newspaper within it, perhaps. The rounded drawer box is a clever morphing of a traditional rectangular construction, working well with the radiused through dovetails that echo the same ones on the drawer, which have the effect of lap dovetails with the added drawer front. The sculpted shape shows off the ash's bold grain in a pleasing way and the table/cabinet has a tactile appeal with many practical uses. The use of many jigs to acquire the shape and countless hours spent finessing the forms highlight soft and square angles on the top. The high level of craftsmanship is evident, and under the touch of light, the impeccable finish is revealed.

Instagram: @jenniferseastone
Web: www.jenniferseastone.com

RICHARD CROSSLEY'S 'ISAAC' CABINET

Meet the maker

Richard worked as a carpenter for over a decade before focusing his skills and interests within fine-furniture making. He trained at the renowned Rowden Atelier woodworking school from 2021–2022 and now combines traditional and modern techniques to create contemporary furniture from his workshop in North Devon.



"My work focuses on classical proportions and characteristics of the material itself rather than expensive distractions and unconscious flourishes. My furniture is born from a lifelong relationship with exploring how the refining of practical techniques facilitates the creation of the unique."



HIGHLY COMMENDED

'Isaac' cabinet – American walnut, American walnut veneer, sycamore, cedar of Lebanon and MDF – 700 x 350 x 875mm



Dovetail detail on drawer



The piece under construction

MAKER'S STATEMENT

"The 'Isaac' cabinet was originally inspired by the straw marquetry of Jean-Michel Frank; I wanted to create a piece that uses light to engage the eye as you move around it. I intended the solid wood carcass to be a picture frame for the doors, purposefully keeping it simple with a bevelled front edge that angles inwards combined with a slight lift in the front rail to draw the viewer to the doors."

The door veneers are divided into four sections; these were flipped for each door so the grain on each section juxtaposes to catch the light differently. The result is an experience of contrasting exposure of light as the viewer moves around the cabinet.

"The piston fit, dovetailed drawers are made from sycamore and cedar of Lebanon. As the exterior is walnut, I wanted a burst of light when opening the drawer and for the rich scent to trigger the senses beyond visual."

JUDGES' COMMENTS

This striking piece brings various elements of cabinetry together with its tightly fitting drawers immaculately cut dovetails and beautiful sunburst veneered doors. The splayed legs give a retro mid-century look, which is fashionable today. The originality is in the door marquetry. What lets this cabinet down, however, is a noticeable very slight tapered gap between the doors. The drawers are a piston-fit and the handles, although delightfully understated, seem a touch too small and difficult to grip.

It's interesting that the maker has lacquered the drawer lap dovetails to the shoulder line, which isn't something Alan Peters would've done, but is common practice in some of the private furniture schools. It'd be good to know what large objects are intended for the interior space.

Instagram: @fielden.atelier
Web: www.fieldenatelier.com



'Dynamic Seasons' chest – maple – 350 x 500 x 1,030mm

KERED WINDER'S 'SWIRLING TRIANGLE' JEWELLERY BOX

This jewellery casket possesses charm as a desirable object. It demonstrates a well considered combination of timbers and is well made, except for a slightly messy mitre joint on the top, which prevented this piece from ranking higher. Wide mitres on small objects, especially in a pale wood such as sycamore in this case, are always a challenge!

The box has two trays and involves a lot of intricate jointing. Looking at the closed box, what's interesting is that the 3D Escher effect – apparent from just one particular viewing angle – wasn't intended by the designer or noticed by all the judges. Often, a design can accidentally reveal something else, in the same way a tool is designed for a specific purpose but can do so much more – the router, for example, which one of the judges wrote a pioneer book on!



TAIDGH BROWNE'S 'DYNAMIC SEASONS' CHEST

Meet the maker

Inspired by his carpenter/builder father, Taidgh has always been fascinated in making, breaking, fixing and creating anything and everything he was able to gain access to.

Having worked in the construction industry as an engineer for the last 10 years, he decided to pursue furniture making by attending the Waters and Acland Furniture School. "This past year at the school has given me incredible insight and understanding into hand tool skills and furniture making," he comments.



Detailing on drawer pulls



Carcass glue up

COMMENDED

JUDGES' COMMENTS

This design is an ode to the English countryside that feels like peering through a small window into a timeless cherished landscape of rolling fields and stone walls. The piece is technically challenging with its three piston-fit drawers and hand-cut dovetails, and the playful design boasts originality, functionality and immaculate craftsmanship. The undulating front surface created by using slats is a clever touch. It isn't clear how this shaping was carried out, but if it was by CNC, an inventive application of this technology, which the judges applaud. Made of maple – a favourite of one of the judges – it's not the most forgiving of timbers and any discrepancy shows. The finishing of the slats would've been a marathon. One observation is that, on opening the drawers, some handle ends are sharp and vulnerable. It's difficult to rank this outstanding chest, but winning pieces should echo Alan Peters' ethos, which includes understated form. This cabinet is a little busy and over-crafted, albeit beautiful. The ranking of pieces, apart from 1st place, has been a very close call.

Instagram: @taidgh_browne_designs

MAKER'S STATEMENT

"The 'Dynamic Seasons' chest is conceived as a standalone statement piece designed to adapt and transform with the changing light throughout the day and across seasons. Inspired by the rhythmic patterns of farmed fields in the countryside, the chest reflects the geometric shapes and parallel lines created across the landscape."

This chest on a stand is intended for important documents, folders, etc. The design combines functionality with a sculptural quality, ensuring it serves both practical and aesthetic purposes.

"Constructed entirely from maple, it was a pleasure to work with and, I feel, best suited to allow the full visual impact of the piece to be achieved. The chest's mitred carcass houses three piston-fit drawers, with hand-cut half blind dovetails on each one. Routed grooves on the drawer fronts house the 36 shaped fins. These were routed on a hand-shaped jig and also refined by hand."

'Swirling Triangle' jewellery box – birch ply core, burr elm, ebony and ash – 330 x 240 x 135mm



JARRARD BELTON'S 'HOMAGE TO NATURE (2ND BALLAD)'

This is a skilfully made, striking looking piece, which although derived from nature is original in its interpretation. For some it'll evoke a sense of peace and harmony and for others, a slightly awkward feel as though it's an alien creature poised to pounce. The table is technically articulate apart from the single leg's jointing into the top where short-grain is further weakened by large dowel joints. The veneered walnut top's configuration is immaculately executed.



OTHER NOTABLE ENTRIES

'Homage to Nature (2nd Ballad)' – English walnut – 820 x 400 x 490mm

EXPERT JUDGING PANEL

Jeremy Broun – Organiser

Designer-maker and co-exhibitor with Alan Peters from 1978–2002

Fernanda Núñez – Guest judge

Award-winning furniture designer-maker, whose striking 'Guilloché' bedside tables received a Bespoke Guild Mark in 2021

Andrew Lawton

Furniture designer-maker who worked with Alan Peters, as well as contributing towards his last commission

COLLECTIVE JUDGES' COMMENTS

This year's award received 12 applications, all showing an interesting range of personal styles. From the eight shortlisted, we selected those winners who particularly captured the spirit of Alan Peters' design and craftsmanship in some way, honouring his enduring legacy. There was a preponderance towards cabinetry and although a clear winner stood out, it was a very close call in terms of deciding on the ranking of the remaining four pieces. All winning entries were excellently made, showing a sensitive use of wood and with individual styles being expressed. ✕





SHELVES & CARCASSING

Michael Huntley talks about the earliest form of furniture making – shelving

It's almost time to put together the first proper carcass. Furniture is divided up into 'support' furniture – tables and chairs – and 'containing' furniture – carcass furniture – which ranges from bookcases to cupboards and chests of drawers. Support furniture has a more fragile structure than containing furniture, which is generally built 'foursquare'.

CRAMPS & SAWHORSES

We also need to know how far apart the bookcase's sides are. The further apart they are, the more the shelf will bow. Depending on loading, you normally have shelves somewhere between 600 and 700mm wide, but you can conduct a simple test. Take your shelf, stand it on some bricks placed 700mm apart and load it up with books. You'll soon see what the maximum spacing for supports should be. Always build in a safety factor because while you may have lightweight books, the next person may collect rocks!

If fitting your bookcase in an alcove, remember to fit the side planks within the alcove. You don't want to cut a load of shelves alcove width only to find that they all have to be recut to take account of the side uprights



A close-up of the little sawhorses I use for raising work up to a comfortable height on the bench. You can easily make them up from offcuts; they don't have to have shaped legs!

So the purpose of the preceding articles has been to introduce the apprentice to those tools and joints required to make carcasses. As I said right at the beginning, one of the most useful and simplest carcasses is the bookcase. The books sit on shelves and the shelves then sit on side supports. Even stone-age houses had shelves, so shelf making, probably to keep food safe, is a very ancient tradition. The earliest shelf furniture type that we're likely to see is the oak sideboard from the 16th and 17th centuries. The term 'board' was used for both central tables and tables against the wall, i.e. sideboards. In later years, the mortise & tenon frame became boxed in, then later still, this was replaced with solid sides held together by dovetail joints.

Making shelves

We'll start with simple shelves. Take two matching planks and mark them up for shelves. Think about the spaces between the shelves. It's common to have graduated gaps between these, which often correspond to the books' different sizes. You'll also



2 Cutting shelf housings to depth



1 Laying out the shelf spacing

need to remember that the shelf has thickness, probably about 20mm. Mark both the shelf's top and bottom edges, then measure the gap for the book to go in. It may take several attempts to get this right (**photo 1**).

Supporting shelves

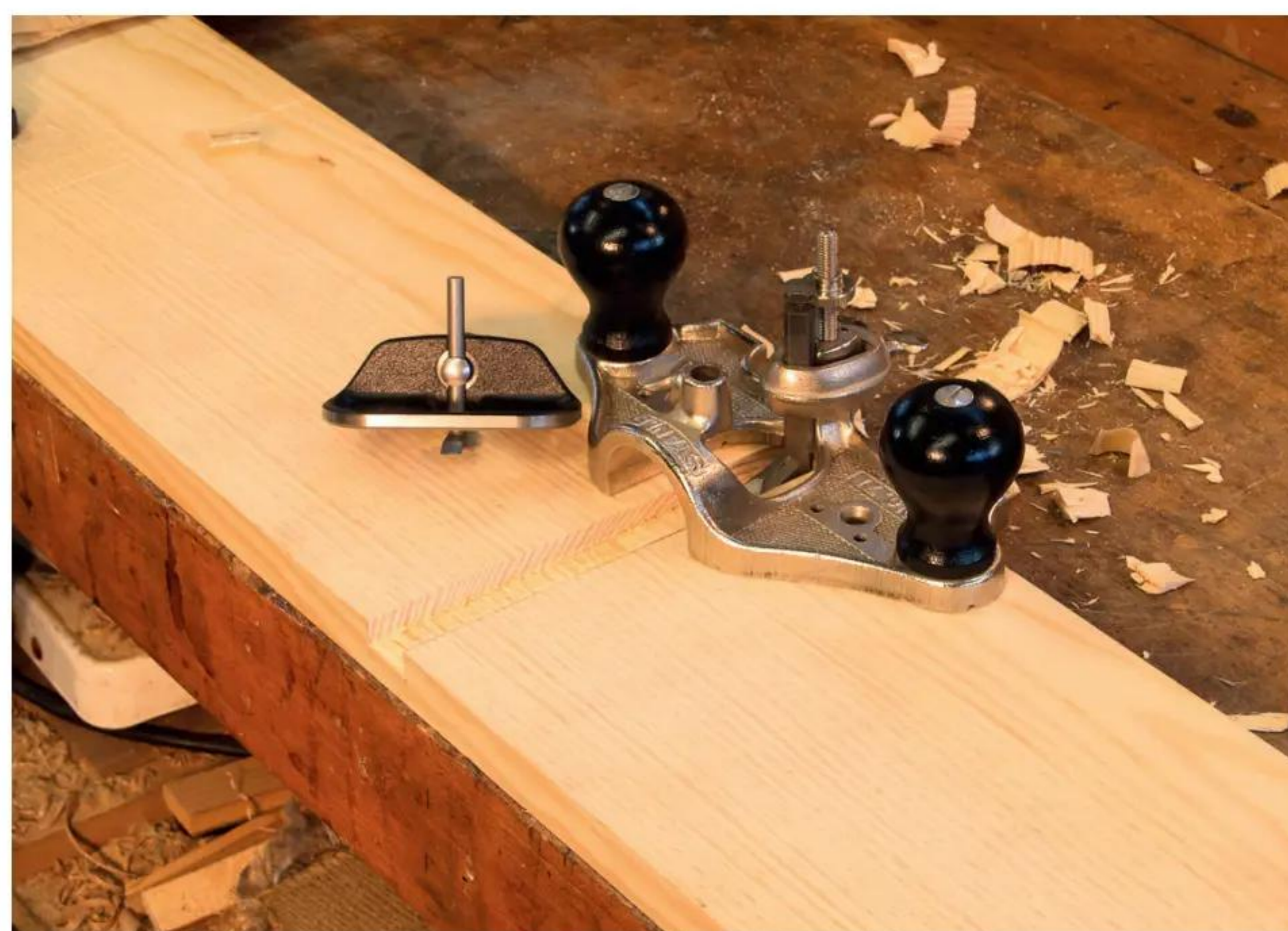
You could support the shelves by screwing a batten to the side support, then laying the shelf on the batten. This would work but it'd be ugly due to the fact the batten's end-grain would be visible. The usual method is to recess the shelf into the side plank. That means you can have three measurements: overall width including side planks; internal width you can use for books; and internal width plus recess depth, which is the shelf's actual width. At this point, it's best



3 Taking an angled cut down to the line



4 Coming back in from the other side to avoid breakout



5 Hand routers come in two sizes and are very useful

to draw it on a shelf and offer the shelf up to check everything prior to cutting.

If you're going to cut the shelf grooves by hand, saw to depth, just inside the line (**photo 2**). If using an electric router, however, scribe a knife line along the cut edge to give a clean edge. You'll notice that I'm using a Japanese saw fitted with a depth gauge, but you should learn to saw to depth freehand.

Trenching waste

Once sawn, you can continue the next stage of 'trenching' by chopping the waste out with a long

chisel (**photo 3**). Bevel up or bevel down? This'll depend on the grain. Look at the shelf's end-grain and see whether the growth rings look as though they'll encourage splitting into the waste or into the bit you want to keep. The alignment chosen for your side plank may have a bearing on this.

So might knots. If you have to chisel through a knot, and it'll happen at some stage, stay bevel up and take thin slices off the knot. That way, it's less likely to break uncontrollably.

It goes without saying that your chisel must be freshly sharpened. Don't try and take too much out in one go; it's better to carry out lots of accurate small cuts (**photo 4**). Once you've removed most of the waste, you can then use an old-fashioned hand-router to clean up the groove's bottom (**photo 5**).

One problem of having trenches going all the way through the side board is that the carcass' vertical line is broken by the groove. You can avoid this by 'stopping' the groove. Start the saw cuts in the usual way, but angle the saw so that it doesn't cut right to the end of the groove. Use the normal saw for as long as possible to make a hypotenuse cut. The far end won't be to depth. Use a Japanese azebiki (**photo 6**) to cut down to depth; the azebiki is a most useful variety, with curved cross and ripping blades. Chisel and rout out the waste in

the normal way, but go gently as you approach the stopped housing's end (**photo 7**).

Finger-jointed shelves

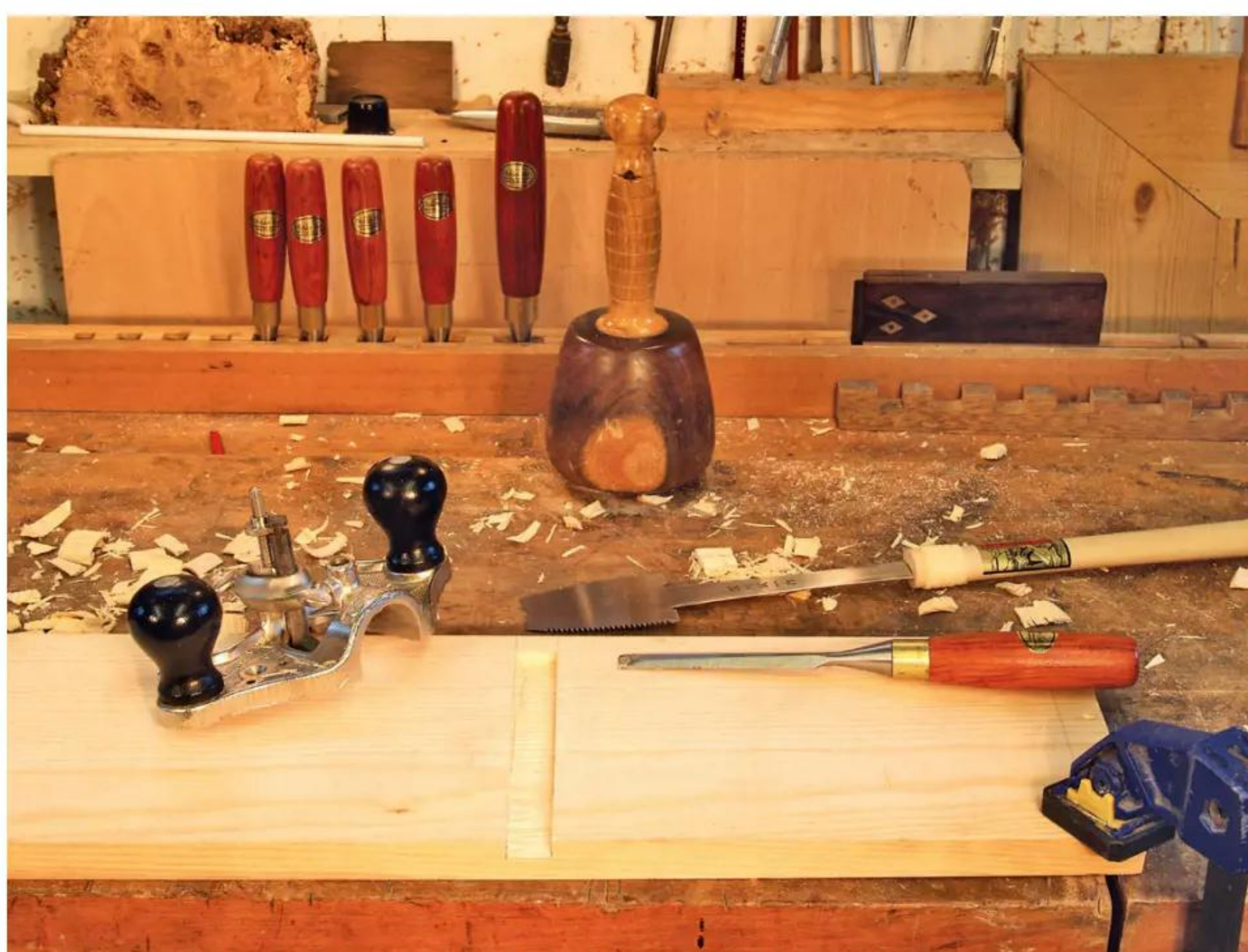
Now, it's always a good idea to read project instructions through before starting, because in this case there are two 'special' shelves: the top and bottom ones, which require particular joints. They could be dovetailed, but as we haven't covered that yet, I suggest cutting finger joints. These are like dovetails but without sloping sides. Marking and making finger joints is good practice for creating dovetails.

Set out some 'fingers' on the side pieces' base (**photo 8**). I've chosen 25mm fingers, but they can be any attractive spacing. In general, furniture looks better if the side supports come straight down to the ground and the horizontal base is jointed into the side – as furniture designs developed, this horizontal base was raised up slightly to give a space underneath the carcass, thus making the whole piece appear lighter.

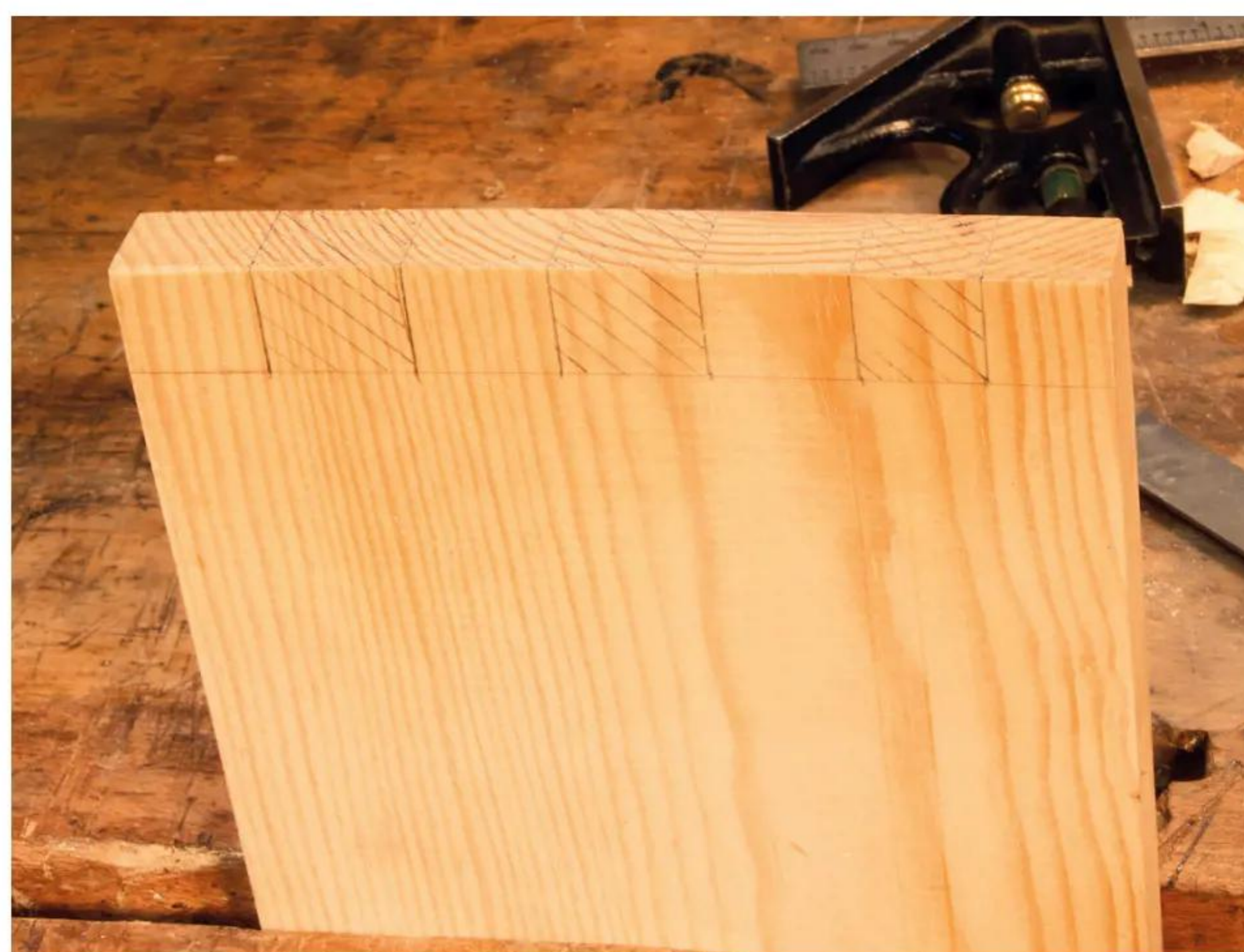
So when designing your finger joint, let the finger facing front on the side board go down to the ground. Therefore, the next one along will be 'waste' and get chopped out. Continue marking the waste right across the board, then carefully saw down to the line, keeping the saw in the



6 Cutting a stopped housing with an azebiki



7 The stopped housing once complete



8 Finger joints marked up – good practice for dovetailing



9 Cutting finger joints with the rip side of a specialist ryouba with very fine teeth

waste (photo 9). You'll want a rip saw for this.

Don't leave too much of the board projecting above the vice otherwise you'll get unpleasant vibrations. Of course, the side panel may be too long for a vice anyway if the finished article is full height, in which case you'll need to work on trestles. In this situation, you can't easily see the board's reverse so the saw with a depth gauge therefore becomes very useful.

The waste is then removed with a coping saw. Cut in diagonally towards one corner, free that piece, then cut across just above the baseline to free the second piece (photo 10). You can then chop out the last bit down to the baseline.

To chop out waste, set a baseline in with a wide chisel, not too heavily, then select a smaller chisel and, using your set-in line, make three clean downward chops across the baseline. Turn the board over and do the same on the reverse. One more set of smart chops should free the waste (photo 11).

Next, set up the mating piece and mark the

fingers with a fine pencil or scalpel (photo 12). Carefully mark the waste and cut and chop this away. You should now be able to join the two boards together and begin to make up the carcass. This carcass-making exercise with finger joints is good practice and preparation for a dovetail carcass. ✂



10 Cutting out waste with a coping saw, but you could also use a piercing or fretsaw



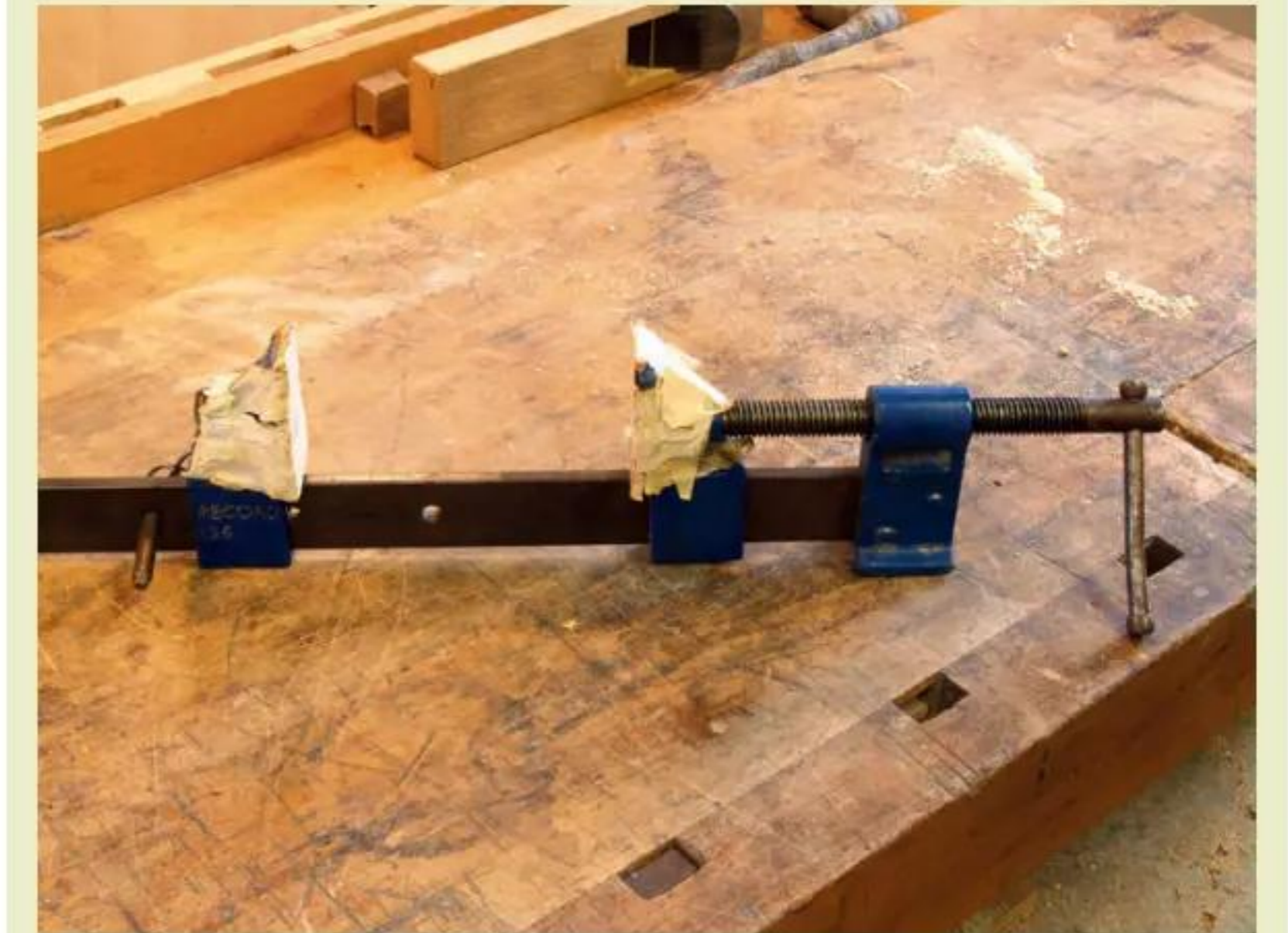
11 Cleaning up to the line: a very slight undercut will help



12 Method of transferring marks for the fingers as a practice for dovetails

SASH CRAMP ADVICE

You'll need some cramps to make carcasses. Get good ones because the bars of cheap ones bend and the threads don't spin easily, which is vital if gluing up in a hurry. Always raise the cramp bar above the work; this stops the cramp staining the timber, lets you get a rule underneath the bar, and also place a wet rag under the bar to wipe off excess glue



The heads of my sash cramps have little cork pads fitted to them with double-sided tape, subsequently repaired with masking tape. These prevent the cramps from bruising the work

TOOL SUPPLIERS & EXTRA INFORMATION

Axminster Tools: www.axminstertools.com
 Classic Hand Tools: www.classichandtools.com
 Workshop Heaven: www.workshopheaven.com

NEXT MONTH

Michael looks at the other major carcass process – mortise & tenon carcassing

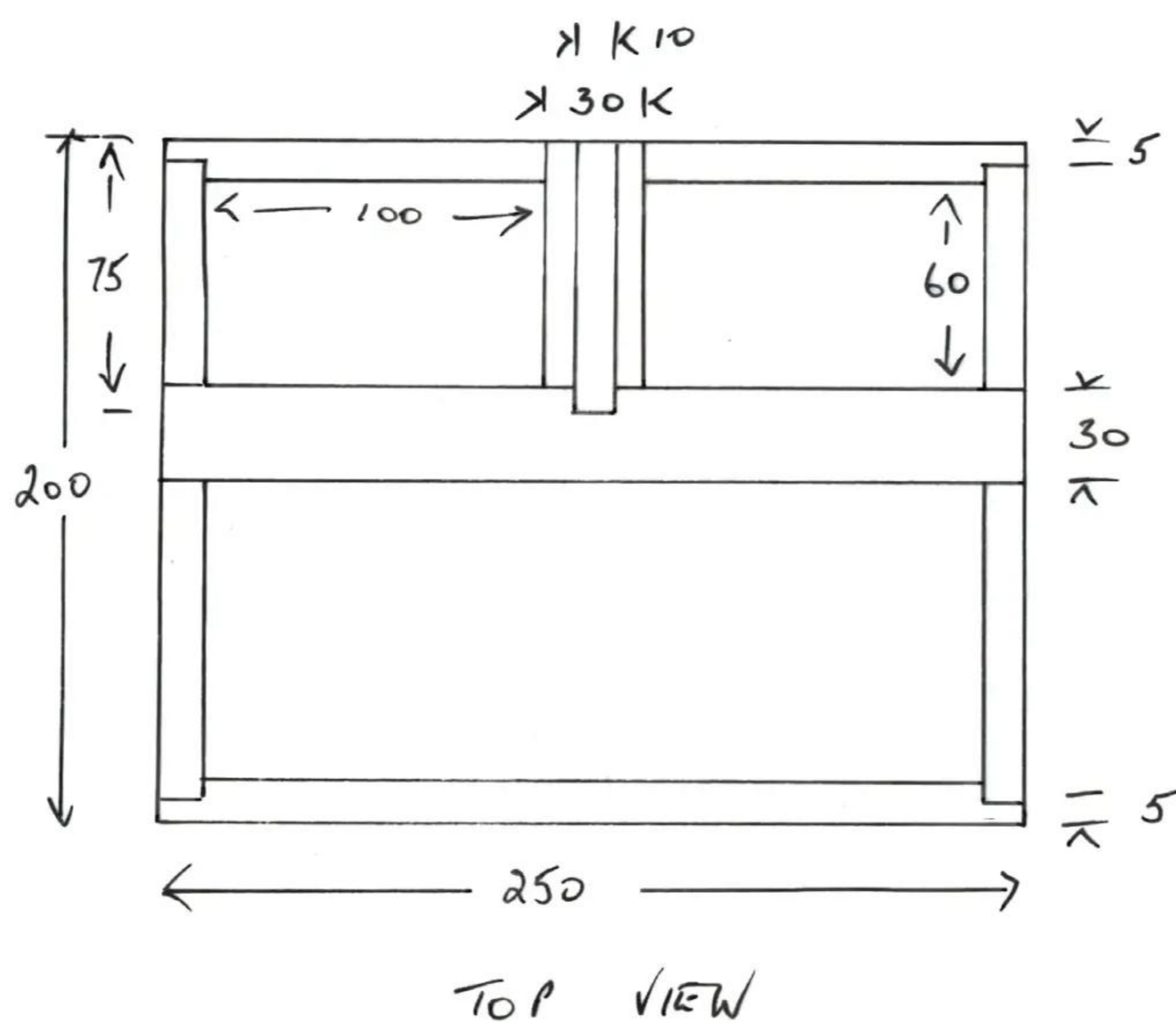
CHISEL
RATING

DEDICATED DESK DISPLAY



To mark his son's 30th birthday, **Peter Dunsmore** makes a desk tidy from quartersawn oak, which features a drawer along with some recesses for placing keys and other small assortments

Fig.1



With his 30th birthday not far off, my son asked me to make a desk tidy to mark this occasion. The brief he gave me was that

it needed to enable the display of some watches, contain a drawer along with some recesses for placing keys and other small assortments. Apart from these specifications, the design was very much up to me and the resulting project is what I came up with.

I was fortunate, or rather Peter was, that I already had a 1,000mm strip of beautifully figured quartersawn oak, which had been in the wood pile for some years, just waiting for such a job. It was obtained from one of my favourite supplies of old seasoned timber, an old piano that was otherwise destined for the bonfire.

The design of this project very much relies on

simple joints, which for the majority of this work, can be easily cut with a small router table.

Making a start

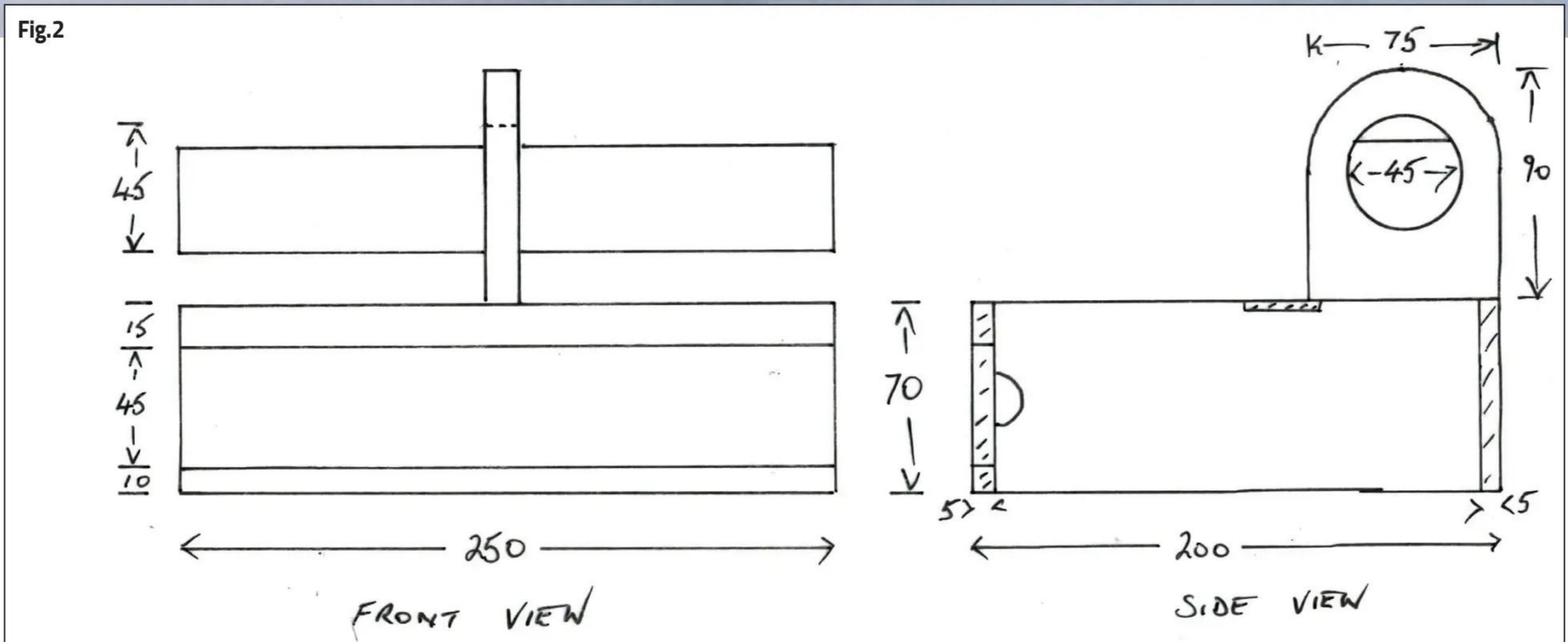
Looking at the main photo of the completed desk tidy, you can see that the design is basically a four-sided box, joined at the corners with rebate joints. Under normal circumstances, the four sides of a box would all be cut from the one width of timber, but in this case, the drawer front would be incorporated into the front face. As such, to begin with, this piece had to be wider to allow for the saw blade's thickness when cutting this part.

The first step is to cut the 10mm thick board to 80mm wide along the entire length, then with a soft pencil, mark this into the four parts required, ensuring that each face is named and its top edge marked for easy reference when cutting the

grooves. That's one side, the front, followed by the second side, then finally the back piece. The remaining piece at the end will be used to make the bracket that holds the maple dowel. Cut these four pieces to length ensuring the opposing sides of the desk tidy are exactly the same length as one another.

After marking the timber with a sharp knife as a guide, I find an accurately set up disc sander brilliant for squaring the ends. At this stage, put the piece of timber for the front to one side and either cut or plane the remaining three pieces to 70mm wide, which is the desk tidy's final height. Next, fit a straight cutter into the router, mounted in a router table, and set the fence to make a 10mm rebate, 5mm deep, and cut rebates on both ends of the front and back box side. When cutting pieces like this, I like to use an MDF







1 A scrap of MDF helps prevent any breakout when the rebate is cut

support piece, which has been cut square with a handle secured on top for holding the oak against. Its purpose is two-fold: firstly it gives the oak some extra support as it's pushed along the fence; and secondly, it helps prevent any breakout on the oak's back edge (**photo 1**).

The base and upper compartment floor are both made from 5mm plywood, with a suitable rebate cut along the lower edge of the four sides to accommodate this (**photo 2**). The groove along the upper face should be 10mm from the top edge. The top will ultimately have some baize fitted into the compartments, which can be a little tricky to cut and fit neatly. I find it much easier and neater to cover the entire plywood panel with baize, then fit this in place. When cutting the groove for this piece, ensure to make an allowance for the felt's extra thickness (**photo 3**); I find it's useful to make a small test piece from a scrap ply offcut and baize.

Making the box front piece

As already mentioned, the front piece needs to be cut into three. Before doing this, using a



4 Cutting the rebates requires a little care



7 Using the rail as a guide to set depth of cut

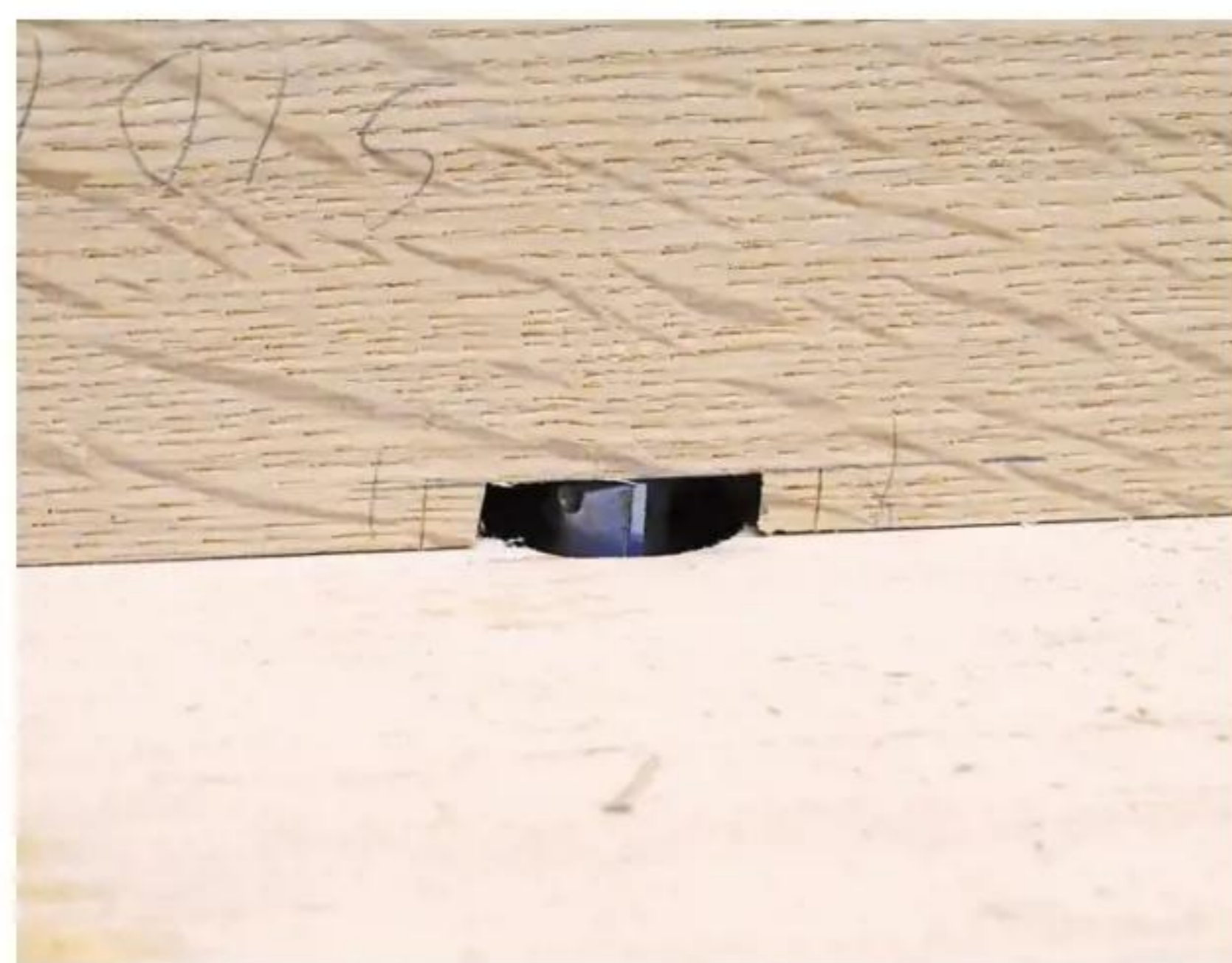


2 Next, cut a rebate along the lower edge to suit the plywood

soft pencil, make a large 'V' sign; this will aid orientation when it comes to cutting the rebates later on. Next, cut the front piece to give a 15mm wide top rail and 10mm wide lower rail. Plane the edges so they're smooth and square, so that when the three pieces are pushed together, the total width will be the same as the remaining three sides. Rebate the upper rail piece so that it matches those cut on both the box sides and back. It goes without saying that when cutting the rebates on the narrow piece of timber, great care needs to be taken (**photo 4**). When cut, lay the components together on the bench and check that all goes together satisfactorily (**photo 5**).



5 The main case components laid out



8 Using the rail to set the depth of cut



3 Make a small test piece from a plywood scrap to check the groove's thickness

Making the compartments

Lining small compartments with baize can be a little tricky and the following method makes for a much simpler and neater finish. The compartment floor is made from one piece of 5mm plywood, which is covered in self-adhesive baize. The compartments are formed by making a 'T' shaped frame that's let into the box sides and back, then pushed down on top of the baize. To begin, plane a length of 10mm thick timber to 30mm wide in order to make the frame's rails. Cut this to match the length of the rear box side, then cut a 10mm rebate, 5mm deep at each end in a similar way to those previously made on the box front and back pieces. Clamp both side pieces together in a vice ensuring their ends are perfectly level and lay the rail at right angles on the top edge, 65mm from the rear edge.

Using a sharp knife, mark the box sides' edge (**photo 6**). Cut a rebate on the top edge between the knife marks, then square their ends with a chisel. Alternatively, this can also be cut on the router table and the depth of cut accurately set by using the tongue on the rails' end as a guide



6 Ensure the timber is held at right angles



9 Square the end of the cut with a sharp chisel



10 Carefully set the depth of cut

(photo 7). The method I find easiest is using a cutter that's slightly wider than the timber and pushing the wood down onto the cutter in stages, before sliding it sideways (photo 8). This results in a very flat base that just requires a chisel to square off the ends (photo 9).

In a similar way, fit a second piece of timber to the rail's centre using a half lap joint, then rebate this into the rear side in a similar way to the sides. To cut the half lap joint both quickly and accurately, I use a 10mm long bearing-guided trimmer, the method for which is as follows: mark the joint extremities on the rail's face and clamp a piece of MDF with a straightedge against one of the marks. Now place the second piece of timber against the MDF and butt a second piece of MDF tight up against the timber (photo 10). After setting a 5mm depth of cut, pull the timber out and use a router fitted with a trimmer to cut the rebate. The corresponding half lap can be cut in a similar way or on the router table. Either way, the end result should be a very neat joint (photo 11).

Cut the second piece to length and rebate the underside to fit into the box's rear. When marking



11 The end result is a very neat joint

out, remember that the rear rebate is on the opposite face to the one just cut (photo 12). It's an easy mistake to make – don't ask me how I know! Before gluing these two pieces together, cut a groove along the top face; the dowel support bracket will be glued into this.

Making the watch holder

The dowel that displays the watches is a piece of 45mm diameter maple dowel, which is readily available online in short lengths. The bracket that secures the dowel needs to have a 45mm diameter hole cut into the oak. You can make a hole using a fret saw, then carefully sand to shape until you obtain a good sliding fit. However, a far more accurate method involves using a circle cutting jig to cut the opening. It's worth making a test cut on a piece of MDF first to ensure the jig is set accurately as this needs to be a tight sliding fit as opposed to one that's too loose. Another point worth mentioning is to secure the piece of oak to a waster board with some double-sided tape; this prevents the cutter digging into the circle's side as it breaks through (photo 13).

Draw the outer curve onto the timber, cut freehand and clean up with either abrasive or by careful use of a disc sander. Next, cut a small rebate along the lower edge to suit the groove made in the bracket support piece (photo 14). I made this bracket marginally wider so that it overhangs the divider slightly; this required cutting a small haunched tenon on the bracket's base. Although this can be easily cut with a saw and chisel, the router table provides a quick method, using a scrap block cut at 90°, which acts as a support piece (photo 15).



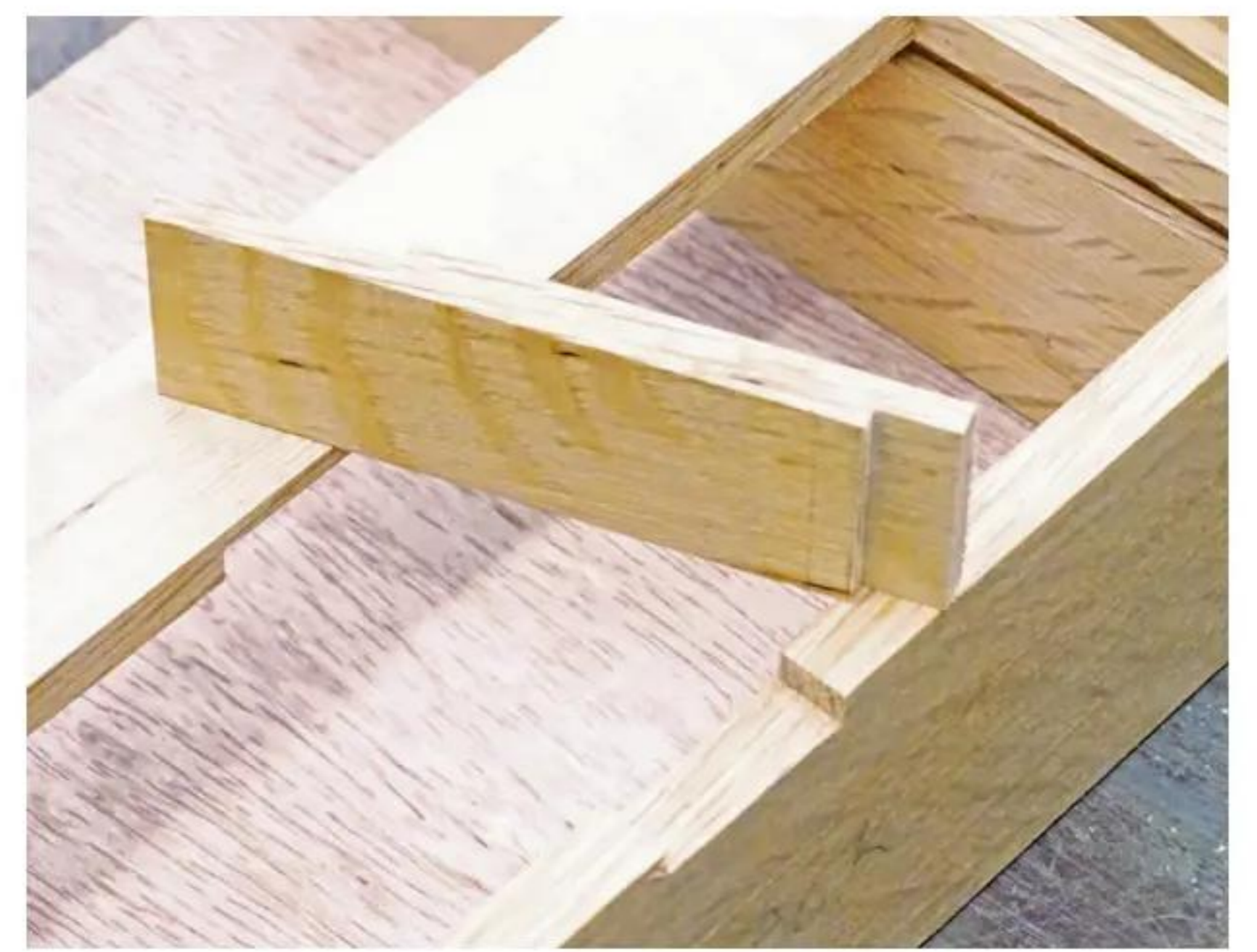
13 A circle cutting jig is really useful



15 A support block makes this part easy



16 I really must replace some of my clamps!



12 Remember that the joints are on opposite faces

Assembling the parts

Having quickly checked that all goes together well, it's now time to add a little adhesive to the box construction. Temporarily slide the plywood pieces in place to keep the box square. A little candle wax in the plywood's corners prevents this sticking in place as the ply will be removed once the adhesive has dried. At this stage, only glue the rear side and front lower rail in place and secure everything with some clamps and scrap softeners; this will prevent any damage to the oak. When dry, glue and pin the lower plywood panel in place, slide out the top panel and lift out the compartment dividers. If all has gone together as it should, the lower front rail should be 5mm higher than the plywood base.

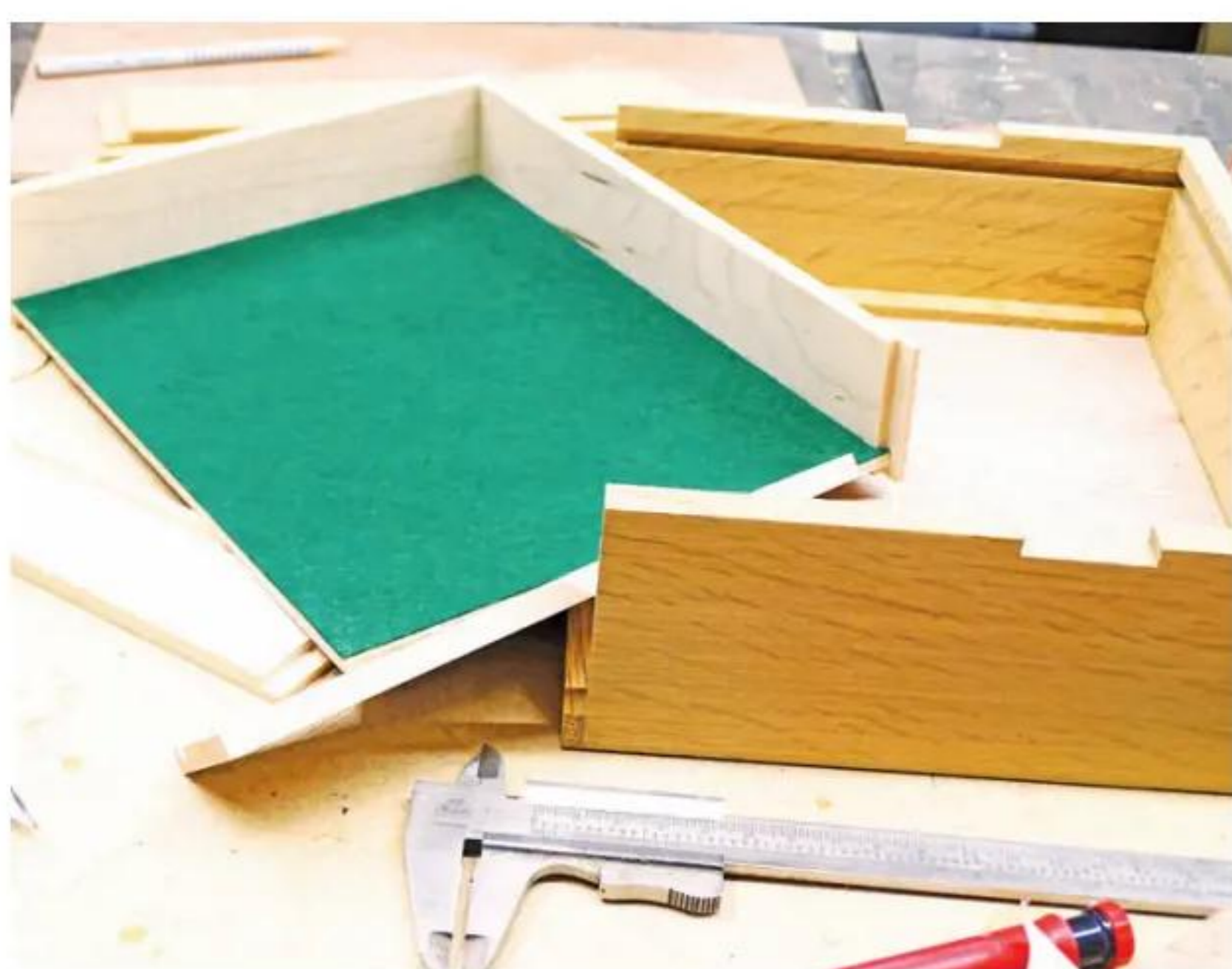
Next, glue some oak strip, 5mm thick and about 10mm wide onto the base and against the box sides, which acts as a drawer slide. On a temporary basis, use some masking tape to secure the top rail in position; this will pull the sides into place but don't glue into position at this stage.



14 The project is now starting to take shape



17 Rebates for the box's drawer sides are cut on a router table



18 The drawer is also taking shape

Making the drawer

I used some leftover maple to make the drawer sides; this complements the dowel and is fairly straightforward, comprising of four sides glued together with rebated corners in a similar way to the desk tidy construction (photo 17). The main difference is that the drawer base is let into the drawer sides a few millimetres from the bottom edge, and everything is on a slightly reduced scale. The drawer is made so that it's a sliding fit into the box tidy, so ensure to take care when marking out.

Cut the front and rear pieces to the box's internal width, then fit the sides into the rebates cut on their ends. Also, cut a groove for the plywood drawer base and glue the components



21 Slide the plywood base into place



23 Cutting a finger slot on the router table



24 Plane a flat on the dowel's surface



19 Note the use of softeners to protect the drawer

together, ensuring that all is square. In a similar way to the box top, I covered the plywood drawer base with green baize prior to fitting, and an allowance needs to be made for this when cutting the groove's width (photo 18). When this has dried, fit the drawer into the box and check the sides sit level with the lower edge of the top grooves on the box sides. When satisfied that all goes together well, clamp up the four sides (photo 19). Place the drawer in the box, then glue and clamp the drawer front in place ensuring it's the correct way up by checking the previously drawn 'V' lines (photo 20).

Finishing off

Next, cover the top plywood piece in baize and trim to the edges, then slide the plywood panel into place (photo 21) before gluing in the front upper rail. I ran a small bead of glue along the plywood's front edge, but keep this to a minimum to avoid any overspill onto the baize (photo 22).

I was really struggling to come up with an idea for a suitable drawer knob. My stash didn't produce anything useful and I was beginning to struggle with ideas. Was it going to be a black knob-type button or a ring pull? I didn't want anything that'd cover the lovely grain, then it occurred to me that I needn't have any kind of handle. Why not cut a couple of finger slots



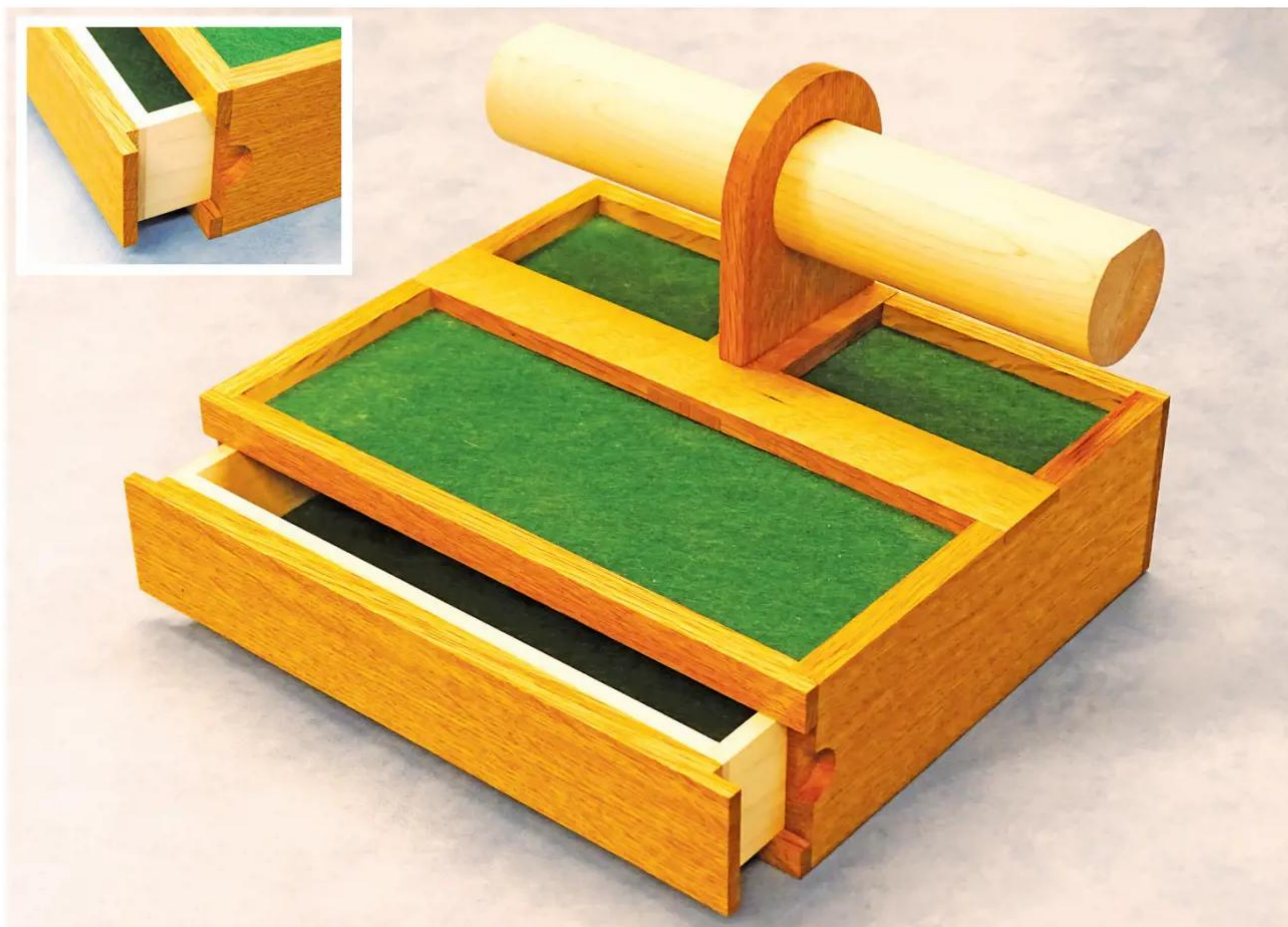
20 The drawer front is glued to the drawer in situ

on the box sides? This works brilliantly and can be easily cut on a router table (photo 23). When this has dried, push the compartment divider in place on top of the baize and glue onto the box sides. Clamp the dowel in a vice, then plane a flat along the top edge that's wide enough to support the back of a watch (photo 24).

When this has been done, push the dowel into the support bracket and secure with either a little adhesive, or fit a small dowel/screw through the bracket's reverse and into the dowel. When complete, glue the bracket in place ensuring that it dries vertically. Finally, I'm pleased to say that Peter was 'over the moon' with the result, which was a relief as he'd left the design in my hands. ✂



22 Clamp the upper rail into position



25 The completed desk tidy should look something like this

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CHISEL
RATING

GET ON BOARD

With a few exceptions, almost any timber can be turned into chopping or bread boards, as **Robert Stephens** shows



I used a router table to round off the edges of this board; doing so makes it easier to lift and protects the edges from bumps. Here, a hole drilled with a Forstner bit helped an aunt with arthritis to pick up the board more easily

A friend of mine plays the drums. Whenever we go to a gig, he barely notices what the rest of the band does; he's far too focused on the sticksman. I have a similar relationship with cookery programmes; while most people concentrate on the chefs' actual output, I'm more interested in their chopping boards. Jamie Oliver tends to plump for a natural 'planky' board with waney edges, while the Hairy Bikers serve up a range of practical chunky boards in a variety of shapes and timbers. With any number of wooden serving platters to add into the mix, who needs the food? Of course, it's easy for me to be an armchair critic. With several years of making chopping boards, cheeseboards and platters under my belt, however, I've developed a pretty good idea of what it takes to produce a long-lasting, hygienic, attractive board. With a bit of luck, this article will inspire you to find a good use for many of those smaller pieces of timber that tend to collect in the corners of a workshop. In my house, no piece of wood ends up in the woodburner until I'm sure that I can't find a more constructive use for it.

Choice of timbers

With a few exceptions, almost any timber can be turned into chopping boards. Although highly decorative and desirable for furniture, yew is poisonous and should be handled with care when processing. Similarly, laburnum looks great, but every part of the tree is poisonous – not something you really want in the kitchen.

Less obviously, oak can be a problematic choice for a chopping board. While many chefs happily employ boards and platters made of oak, the wood contains a lot of tannic acid, which can taint food and react with steel knives. If you've ever used steel screws in oak furniture projects, you'll recognise the black stain the combination produces.

Be cautious, too, of open-grained woods that can pick up stains and particles easily. I use an ash board daily that requires a vigorous wipe with a plastic scourer every now and then to keep it in tip-top condition.

Hard, close-grained beech and maple have traditionally been associated with making 'treen' for the kitchen, and remain good choices. Iroko, also known as African teak, has a natural oiliness that allows it to shed water easily. This property, combined with its toughness, means it's often used for making boat decks and worktops. ▶

The only downside is that this oiliness can make creating good glue joints tricky. Of course, if you do get hold of some real teak, don't waste such a fine timber on a mere chopping board!

With changing fashions in kitchens and general décor, other shades of timber are more in demand. I'm a big fan of walnut, both American black and European; it's an expensive wood, but offcuts are often cheaply available. Ask a friendly local kitchen fitter for any bits left over from worktops, or look in skips at the posh end of town. Fruitwoods, such as cherry, plum and apple, can be used too, and you can sometimes pick them up from gardeners who are clearing overgrowth or need to chop down unproductive trees. Then you can begin your education in processing timber from

first principles – just make sure your bandsaw has a new, sharp skiptooth blade fitted.

Softwoods – the pine family, for example – are commonly used as serving platters in restaurants. While generally fine to use, their softness does render them more vulnerable to knife marks than an equivalent hardwood board. They also tend to have bigger and more frequent knots, and can be resinous. In my experience, they also tend to warp easily. I recall recently watching a fellow diner with interest and amusement, as he chased his posh gastro-burger round the table on a serving platter that rolled on its warps.

These recommendations should give you enough knowledge to begin manufacturing boards. If you want to use any timber not

mentioned here, identify the wood correctly online and also using appropriate books, and ensure you know its properties so that you can make a safe and lasting product.

Glue options

Just like choosing the wood, selecting the correct glue is very important. Ordinary wood glues such as the ones you probably have kicking about the workshop won't serve in this case. Some of the commonly available 'waterproof' glues contain anti-mildew agents that don't mix with a healthy diet. Read the small print on the glue containers with care and don't use any containing unwholesome additives.

I use Titebond Premium for most of my

CONSTRUCTION TIPS

A router is ideal to use for making a meat carving board. Just be careful that you keep the machine moving as core box cutters burn the wood easily.

Almost any woodworker capable of joining a few pieces of wood together can make a serviceable board. The simplest option is to plane up a suitably-sized piece of beech or maple, then bevel or round over the edges. The difficulty with this approach is that wider pieces tend to move more unless they're quartersawn, so you could end up with nothing more useful and picturesque than a curved bit of plank that slides all over the worktop.

Many of the boards I've made use a variety of woods that have been edge-jointed. By considering the timbers' patterns and colours,

it's possible to create some striking combinations. It's important to ensure that edge-to-edge joints are accurate, with no gaps, because these'll eventually let in moisture and the board will split.

Machine & hand methods

I find that breadboard ends are a good way of ensuring longer-term stability, flatness and resistance to end-grain water ingress. It's possible to make bread board ends by hand but this is a tedious job, so I use a router and some jigs, or – easiest of all – the router table and slot cutter.

I'm lucky enough to have easy access to a friend's thicknesser, so when I've glued all the strips together, I simply thickness the board

and ends to the same thickness.

If wanting to make a board by hand, ensure that all your strips are nearly the same thickness and glue them together on a board jig – a flat piece of ply or MDF with a 50 x 50mm piece of softwood screwed along one edge against which the clamps are fixed.

The whole board should be given a couple of coats of polyurethane varnish or covered in strips of plastic tape, which ensures that any glue seepage won't cause the board to stick to the gluing jig.

Breadboard ends

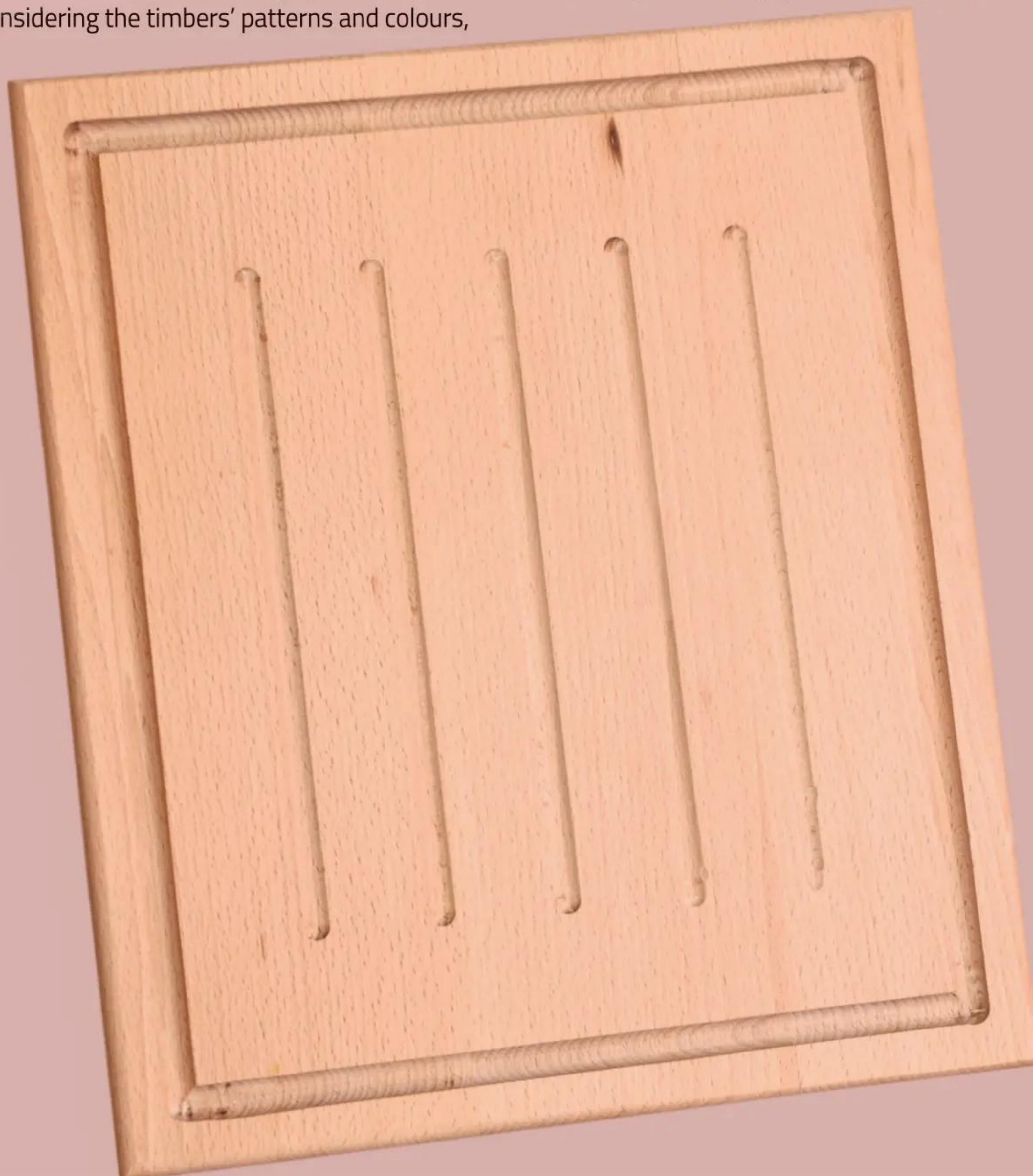
Once glued, the whole board can be sanded as flat as possible using a belt sander or thicknesser and the ends cut square ready for creating the tenon.

Clamp the board securely to the bench with one end over the bench's edge. Use a 12 or 20mm straight cutter in the router and the router guide fence, and create a tenon about 8 or 10mm wide.

It may be necessary to add a long sub-fence to the router guide fence so that there's sufficient length for accurate cutting. Ensure the router depth stop is set accurately so that the tenon is an equal depth on both sides.

The next step is to cut a groove mortise on each breadboard end. The router cutter should be of a small diameter so that the groove is machined from both sides of the end, thus ensuring that the resultant groove is exactly centred and matches the tenon's depth and width.

Clearly, accurate router skills are required here but, as always, never push the router to cut too



1 Breadboard ends are a traditional construction that reinforce the ends and make the end-grain less likely to be penetrated by water

boards and have never had a failure or complaint. It's water resistant, and guaranteed food-safe by the American FDA.

Agents for the original dark brown Gorilla Glue in the UK assure me that it's safe to use in cutting boards and similar applications. With Gorilla Glue, both parts of the joint need to be dampened to start the curing reaction, and the resultant slight foaming is a useful gap filler in less-than-perfect joints. Both of these types of glue are widely available in shops and to buy online.

Designing boards

A good board can be anything from a bit of flat plank to something much fancier. I've made many using 'stripes' of contrasting timbers

What could be simpler? And yet my family asks for lots of them as they can be used to serve individual portions as well as doubling up as a cheeseboard



deeply. It's always better to make a series of lighter cuts that are easier to control and will be more accurate than inadvertently cutting too deeply and ruining an otherwise quality board.

Big board ends can be held in a vice when routing, but smaller ends will require holding in a jig that's big enough to be held in a vice.

Using a slot cutter

If you own a router table and slot cutter – I use a Trend arbor and slot cutter – tenons can be cut in a fraction of the time. Set the slot cutter so that it'll cut flush with the table's surface, then set the fence so that the board edge can

run against it using the cutter bearing as the datum point. Next, simply run the board against the cutter to create the tenon end. In a thicker board, it'll be necessary to repeat this process to make a thinner tenon by raising the cutter in the table.

Using the tenon end of the board as a measure, line up the tenon's bottom surface with that of the cutter's bottom by raising the cutter in the table. It's better to be a bit conservative, as it's easy to cut a wider groove than necessary if the cutter isn't raised enough. Next, run each board end against the cutter twice, top and bottom, so that the groove mortise is centred.

With luck, the fit will be tight, then the ends can be glued and clamped onto the board.

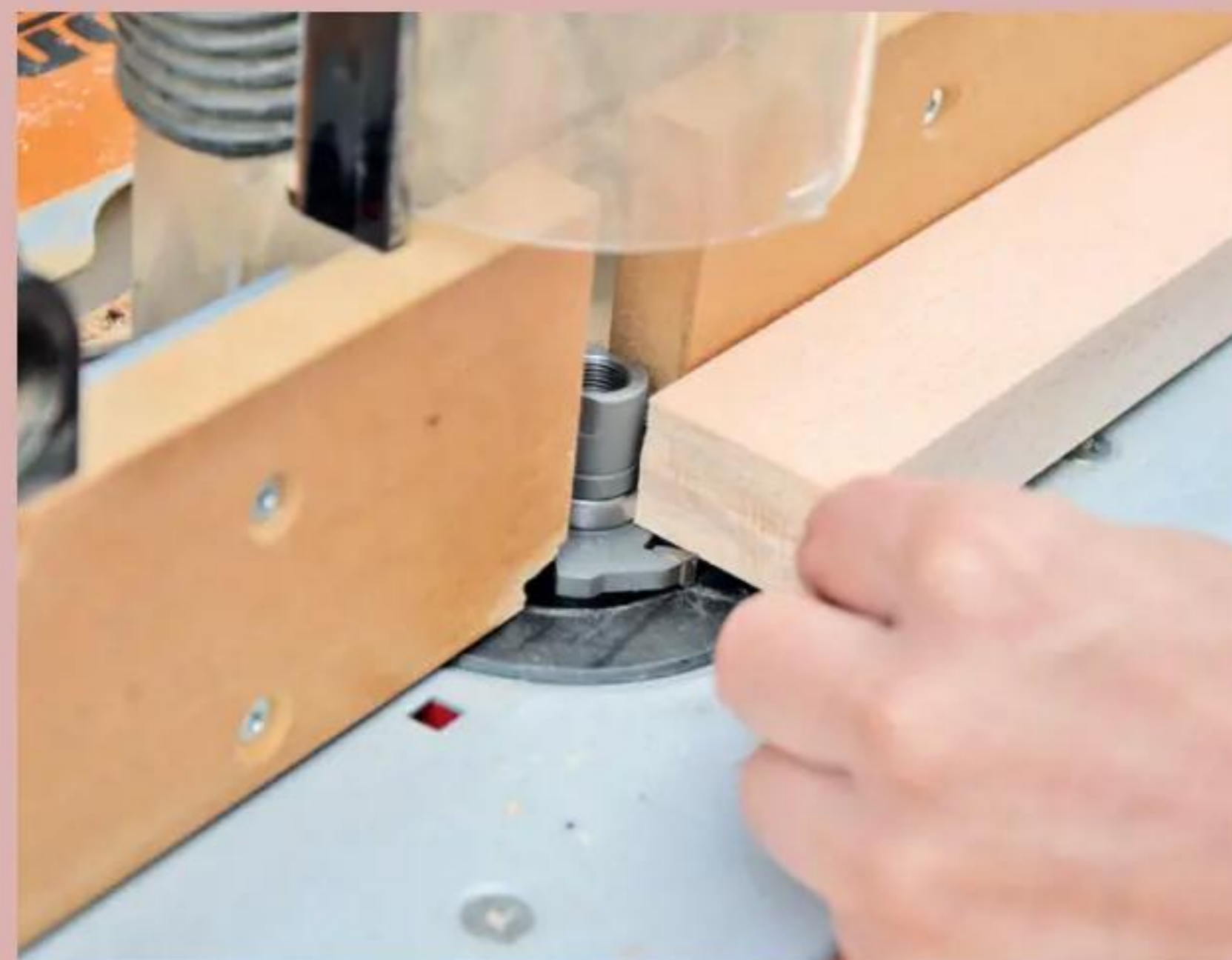
Planing ends

Once the glue is cured, tidy up the ends with a sharp plane so that all the edges are square and neat. I use a belt sander to flatten out any slight irregularities, then a random orbit sander fitted with a 180 grit disc to create a smooth surface.

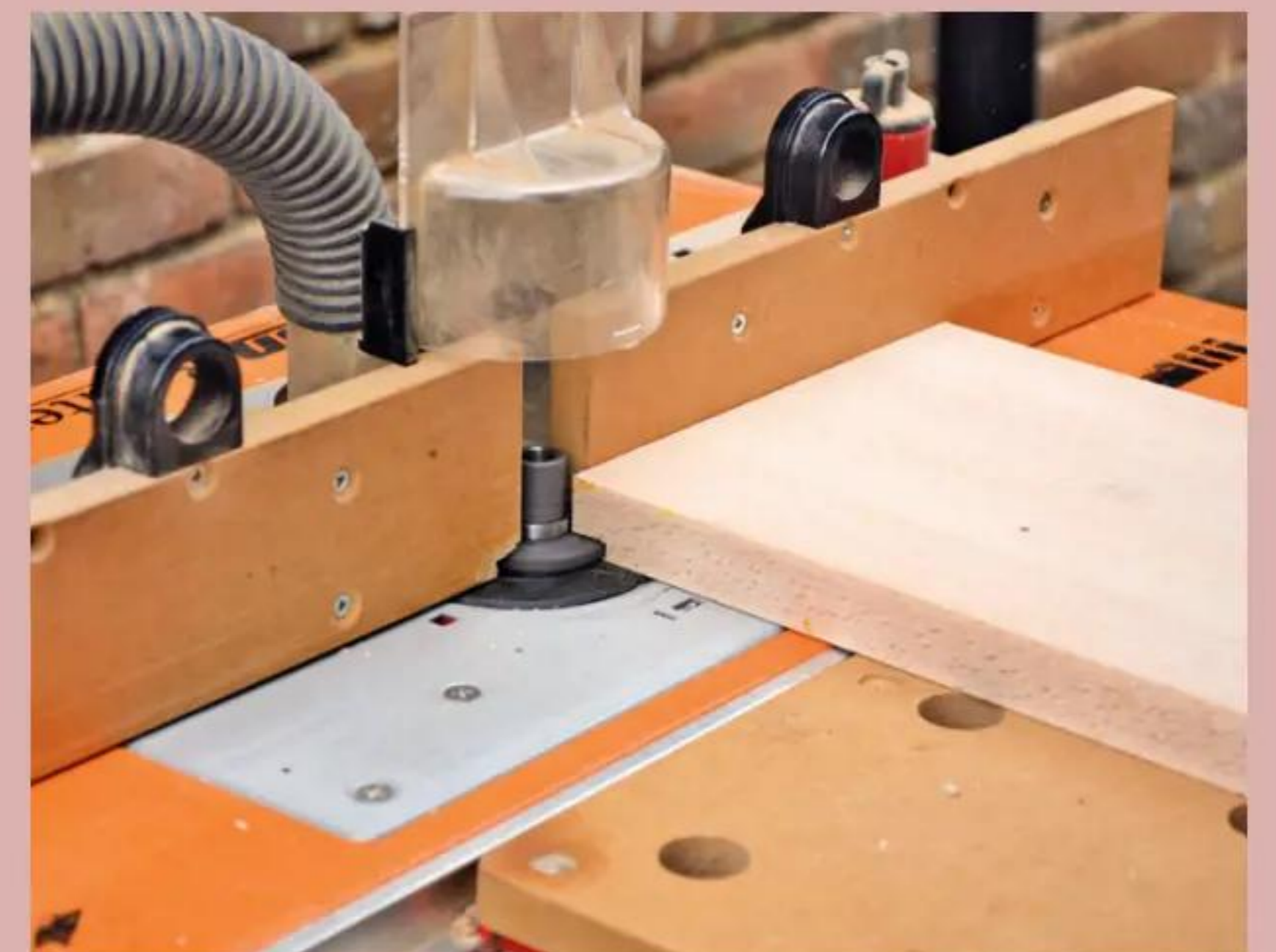
A simple bevel on all the edges is easy to achieve with a sharp plane or bevel cutter in the router. Rounding over works too, to create a slight gap between board and work surface, thus making the board easier to pick up.



2 A slot cutter is perfect for making breadboard ends; this robust version from Trend features a good long shank, which is ideal for router table use



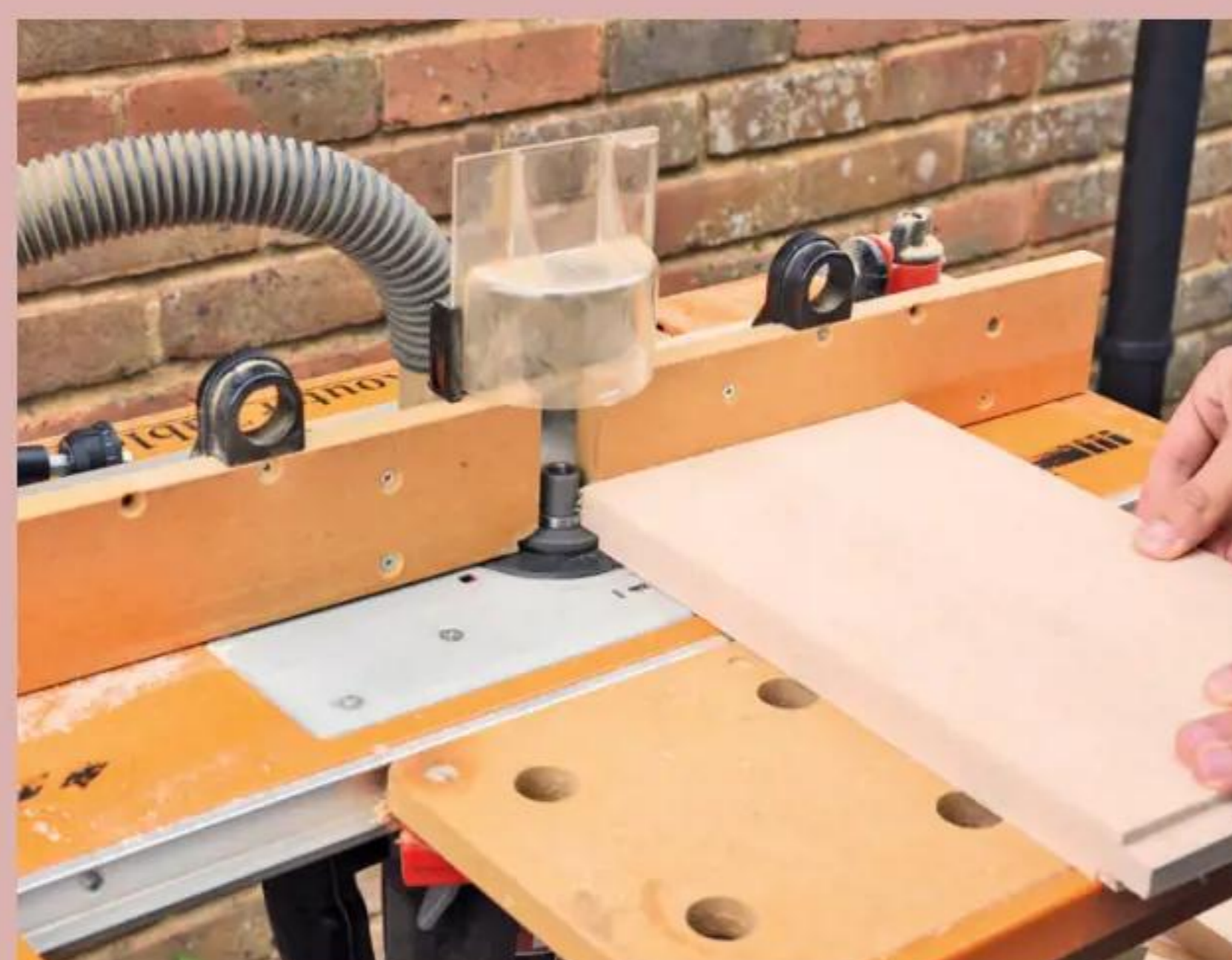
3 Once the slot cutter is mounted in the router, use a straightedge to ensure the bearing aligns with both the infeed and outfeed fences



4 With the cutter's bottom set level with the table, begin the first cut. As I don't have a sliding quadrant fence support, I did this freehand; it's also good to have a bit of support behind the board, which prevents breakout on the end



5 The tenon on one end of the board is almost complete; remember to keep the board pressed tightly to the fence and flat on the router table



6 Repeat this process on the board's other end



7 The ends as they come off the router table; remove the splch with abrasive before you start fitting or gluing up

PROJECT

Bread & chopping boards

and a 'breadboard end' that conceals most of the moisture-absorbing end-grain. Be creative. The chances are that, if you build your boards with love and attention to detail, they'll find a home in which they're well appreciated.

Having said that, however, I've found that, with chopping boards as in all other areas of life, fashion plays a part in people's preferences. Influences include TV as well as cooking and lifestyle magazines. I have, for example, been asked to produce platters designed to emulate those used by TV chefs.

Another influence is the specific requirements of different people. Older people often have a touch of arthritis, so may be looking for lighter and thinner boards, which are easier to handle. A friend of mine working in the NHS has commissioned several boards featuring special grips and inserts for her disabled patients. At another extreme, a hungry Mancunian friend requested a special 'eight bacon-buttie' board, almost large enough to use as a cricket bat, for midnight snacking.

To reduce mess, think about carving boards with 'juice grooves' round the perimeter. These are fairly easy to create with a router and core box cutter, providing you have good router control.

When designing cheeseboards, a handle can make a nice feature; aesthetically pleasing, they make the board easier to bring to table. Sometimes all it takes is a simple hole drilled

A simple beech slab – just run it through the thicknesser



strategically into the board to provide a grip for a finger or thumb.

Pizza boards are another increasingly popular style, although their size means that unless your name is Luigi and you run a lovely trattoria, you'll probably only want one of them.

Finish choice

Generally speaking, I find that plain old corn oil is perfectly adequate as a finish. It's renewable and also provides the wood with some protection against water penetration. An online search found that some makers recommend using pharmaceutical-grade mineral oil, and there are also specialist oils that are commercially available, such as tung oil.

To counter any ignorance by recipients of my boards, I've created small printed cards that detail care instructions. This card states what seems obvious to a woodworker, but may not be to the average householder: don't soak wooden boards in water, just wash them under a running tap using a cloth; never put wooden boards in a dishwasher because they'll unglue rapidly! Finally, I advise users to re-oil boards occasionally to make them a little more water and stain repellent.

A well-made wooden board offers several advantages over a plastic one: they've been proven to be more hygienic, are knife friendly, will last for years if treated properly, and can be made to look as good as new with a quick re-sand of the surface. ✕



8 It's better to machine the ends as one piece; this saves time and, also, bigger pieces are easier to handle on the router table as they keep hands well away from the cutter. Use a push stick to finish off the final inches through the cutter



9 Use a push stick and keep fingers well clear



10 If your cutter settings are correct, the tenon will fit into the slot firmly but without forcing it



11 The slotted piece will have to be cut in half to make the board's other end



12 There should be a gap-free fit between the parts; when glued this'll make it harder for water to enter the end-grain



13 Use a waterproof and food-safe glue and clamp the ends securely until it sets; once dried, cut the ends level with the board's sides and given a thorough sanding

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The mortise & tenon started in Egypt

JOIN TOGETHER

Continuing with this series, **Phil Whitfeld** explores the point at which woodworkers started to be divided along craft lines

In the John Prine song quoted last month – see *WW* Sept – you’ll remember that his carpenter grandfather “hammered nails in planks.” We noted that this practice remains one of the most common dictionary definitions of carpentry used today.

This time round, we’re taking a step forward and considering the joiner’s work and skills. *The Cambridge Dictionary* suggests that a joiner is a skilled worker who makes the wooden structures inside buildings, such as doors and window frames. A more explicit distinction between the two seems to be in use today:



These great halls testify to the guilds’ power

a site carpenter deals with the woodwork prior to the plasterer, the joiner afterwards. There’s a historical precedent for this; traditionally a carpenter was the structural specialist for building and the joiner concerned himself with the fitments and furnishings within. This meant that as there were no specialist furniture makers, any work that could be considered as furniture was undertaken by the joiner.

What’s interesting is how this separation took place and how joinery developed as a distinct craft alongside carpentry. We’ll consider how the construction methods used – the so called ‘Joiner’s Mystery’ – informed the developing aesthetic of the day and provided for the longevity of many pieces of furniture.

Chests or coffers remained an important part of the joiner’s repertoire, but the instability of poorly seasoned wood remained a problem. The solution lay in revisiting and further developing a practice that was thousands of years old. The pegged mortise & tenon joint can be traced back as far as the ancient Egyptians; evidence of them has been discovered in the Great Pyramid of Khufu at Giza. While this was refined and developed for making chests, the problems concerning drying-out still remained. The solution, one we take for granted today, was the development of the tongue & groove panel, which allowed for a solid section of timber to float freely within a frame, expanding and contracting as humidity dictated. The combination of the mortise & tenon frame and free-floating panel revolutionised both furniture and building interiors. It’s really from the period following this development that examples of the joiner’s craft first come to light.

Origin of species

It can’t be stressed highly enough how important the development and refining of the mortise & tenon joint was to furniture construction. The single panelled chest or coffer grew into the box chair, and it was then a simple step towards the mortise & tenon arrangement that resulted in the railed four-legged chair. It must be impressed, however, that chairs were uncommon and reserved for those in positions of power or status. Most people would sit on stools or benches and even if a man had a chair in his own home, he’d resort to a stool or bench in the presence of his superiors.

Tables, which had traditionally been a simple board-on-a-trestle arrangement, benefited from the joiner’s skill and by the 14th century, we begin to see tables as more permanent structures with frames consisting of legs and rails, again using the mortise & tenon, and stopped with a fixed board. The word ‘table’ has its origins in both French and Old English, both traceable back to the Latin *tabula*, meaning ‘board’. This exercise in etymology allows us to see how the trestle arrangement developed in different ways. Think of sideboard and cupboard, and also of words not related to furniture, such as board and lodge, board of directors, chairman of the board...

Throughout the Tudors’ reign and into the Elizabethan era, tables, like most furniture, were as much a testament to the carver’s skill as of the joiner. Legs would be highly decorated with huge bulbous ‘cup and cover’ decorations and the top rail likewise would be intricately decorated.

The saw pit

The continued development of the framed



Saw pits weren't particularly pleasant places in which to work, as you can see

panel itself owed much to timber conversion techniques, as did woodworking in general. Two important elements here are advances in saw making coupled with the saw pit's invention, which allowed for much wider sections of timber to be produced directly from the tree trunk.

The saw pit itself was simply that – a pit in the ground about 2m deep and 1m wide – allowing a man to stand and work. Some would've been lined with posts and shuttering, others lined with brick depending on permanence and location. Trunks were placed over the pit using a system of dogs and two men would cut the tree into planks using a two-handled saw. The man on top was the 'top-sawyer' and the poor man down in the pit was, unsurprisingly, the 'bottom-sawyer'. The saw was designed to cut in both directions and there were advantages and disadvantages for both men. The under-sawyer, while having the advantage of gravity on the down-stroke, had to contend with a continuous cloud of dust and would often work knee-deep in water. The top-sawyer, while working out in the elements and not in a hot, damp confined space, would also have the back-breaking task of pulling the saw up as well as maintaining a line. It was long held that the term top-dog and under-dog originates from this, but has now been disputed by other historians suggesting links with dog fighting.

To avoid the cut closing up and binding on the saw, wedges were used to keep the cut open and dogs had to be continually repositioned or the log turned. The pit filled with both dust and

- All sorts of Bedsteads whatsoever (onlie except Boarded Bedsteads and nayled together)
- All sorts of Chayres and Stools which are made with mortesses or mor tesses tennants
- All tables of wainscotte wallnut or other stuffe glewed with frames mortesses or tennants
- All sorts of formes framed made sorts of boards with the sides pinned or glewed
- All sorts of chests being framed dufftailed pynned or glued
- All sorts of cabinets or boxes dufftailed pynned or glued

water, which had to be removed by bucket. This was long, arduous work but sawyers were held in great esteem as timber was a principle construction material.

Join the club

Apart from such technical developments, arguably the most important issue to affect the woodworker in the Middle Ages was the development of the craft guilds. Records show a guild of turners existed as early as the 14th century. By the end of the 15th, they'd developed into a powerful organisation, setting the precedent for many of the craft guilds that followed. Turners' goods were examined in detail by the masters and wardens at Turners' Hall and certain tests had to be passed and specific standards reached before a worker could call himself a master craftsman.

Although each had to pay a subscription, guild membership meant better social standing and a guarantee to customers that work was of excellent quality.

Joiners – or joyners – were becoming ever more powerful themselves, and in 1440 their guild was permitted by the City of London to elect two wardens, quickly followed by similar charters in York and Chester. In 1447, the Carpenters' Guild was reduced to a 'Lesser Company', reflecting the reduction in esteem for the carpenter.

There followed a dispute over what work could be carried out by the turners, carpenters and joiners, especially in the major cities as in

the provinces, a woodworker was still expected to turn his hand to most tasks. A battle ensued which wasn't to be resolved until 1632 when demarcation lines were drawn up by the Court of Aldermen. This decreed the work that could only be produced by joiners...

The guilds ensured that their craft or trade effectively became a 'closed shop' or monopoly preventing any outside competition, in many senses a forerunner of what were to become the unions. Prices were fixed and the craft guilds ensured through rigorous examination of work that high standards of quality were maintained – one of the reasons that so many pieces of quality from this period remain in circulation today.

Membership was also regulated and restricted in order to ensure that the numbers of guilds and the work produced didn't outstrip demand, which of course also had the effect of regulating prices. The guilds became as important in the medieval towns and cities as the merchant guilds had already become, and the members demanded parity in their eligibility for civic duties and leadership.

To become a craft guild member, a man would have to work through two preliminary stages before being recognised as proficient enough to become a Master. First, an apprenticeship – an apprentice was sent to work for a Master during his early teens and this service was often bought or paid for by the lad's family. His apprenticeship lasted between 5-9 years depending on the trade and during



By the 14th century, tables were being built as more permanent structures than they'd been before

EXPLAINING THE FRAME & PANEL

Though we don't wish to teach one's granny to suck eggs, perhaps it'd be fitting to briefly elucidate how the 'Joiner's Mystery' works. The basic idea is to fit a floating panel within a frame. Normally the panel wouldn't be glued in place as this is contrary to the whole point – it's left to float, expanding and contracting, mainly across the grain, thus putting no stress on the frame, which could cause distortion.

The simplest frame and panels consist of five pieces: the panel itself and four sections that complete the frame. The vertical members referred to as stiles and the horizontal as rails. A frame therefore consists of a top rail, bottom rail, two stiles and a panel. Initially, framed panels were relatively small, the size dictated by the riven oak segments from which boards were adzed. Panels increased in size as sawing and seasoning developed and it was possible to produce broader, more stable boards.

The panel either sits in a groove on the frame's inside edge or is mounted on an edge rabbet on the rear inside edge. A flat panel has its visible face flush with the groove's front in the frame.

From an aesthetic perspective, the decoration of choice for panels from around the 14th

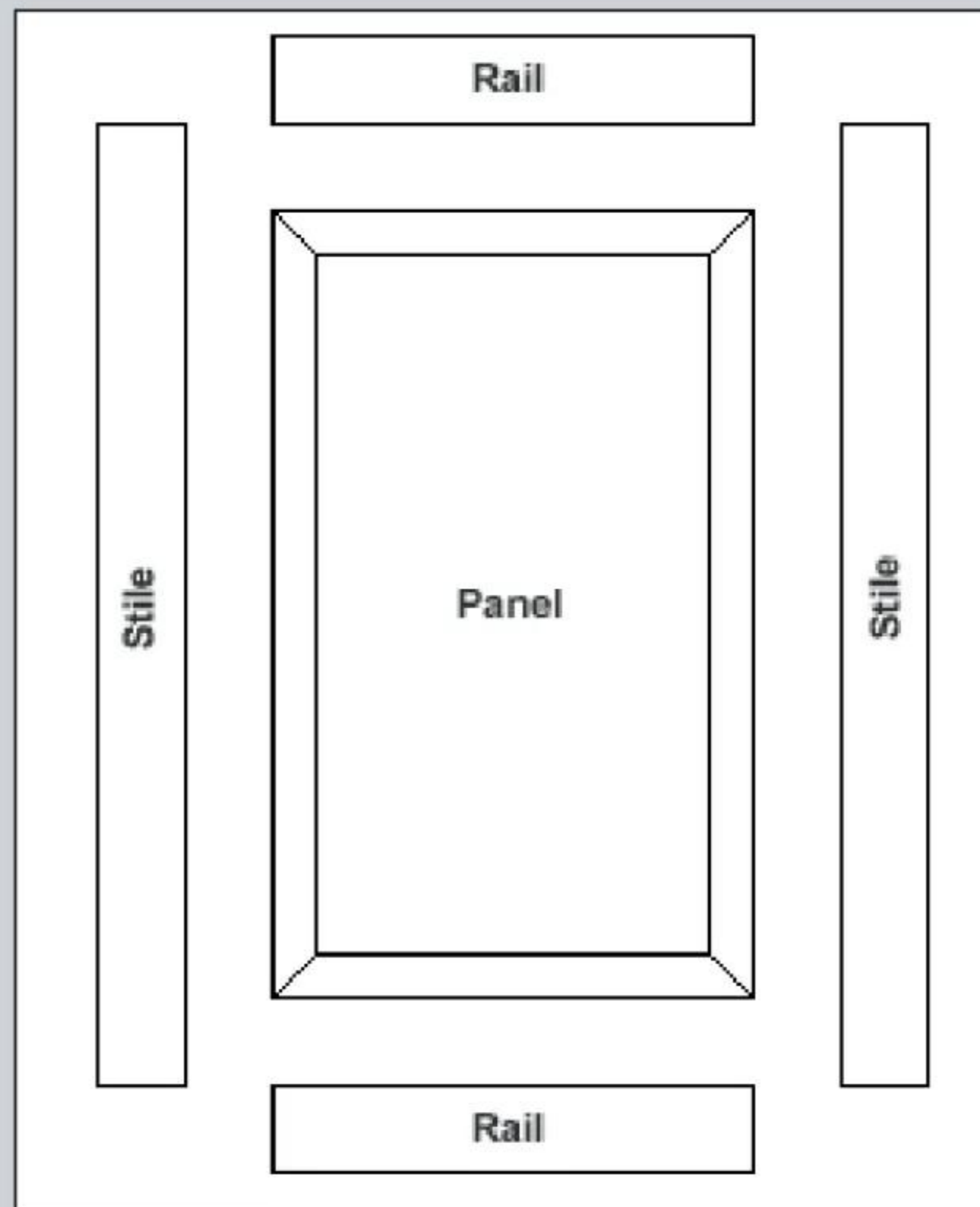


Fig.1 Panel stiles

century onwards was the linenfold, which as the name suggests mimics the folds in hanging textiles, a testament to the fact that textiles were held in much greater esteem than furniture. Techniques for panelling walls in this way had also developed and here the relevance

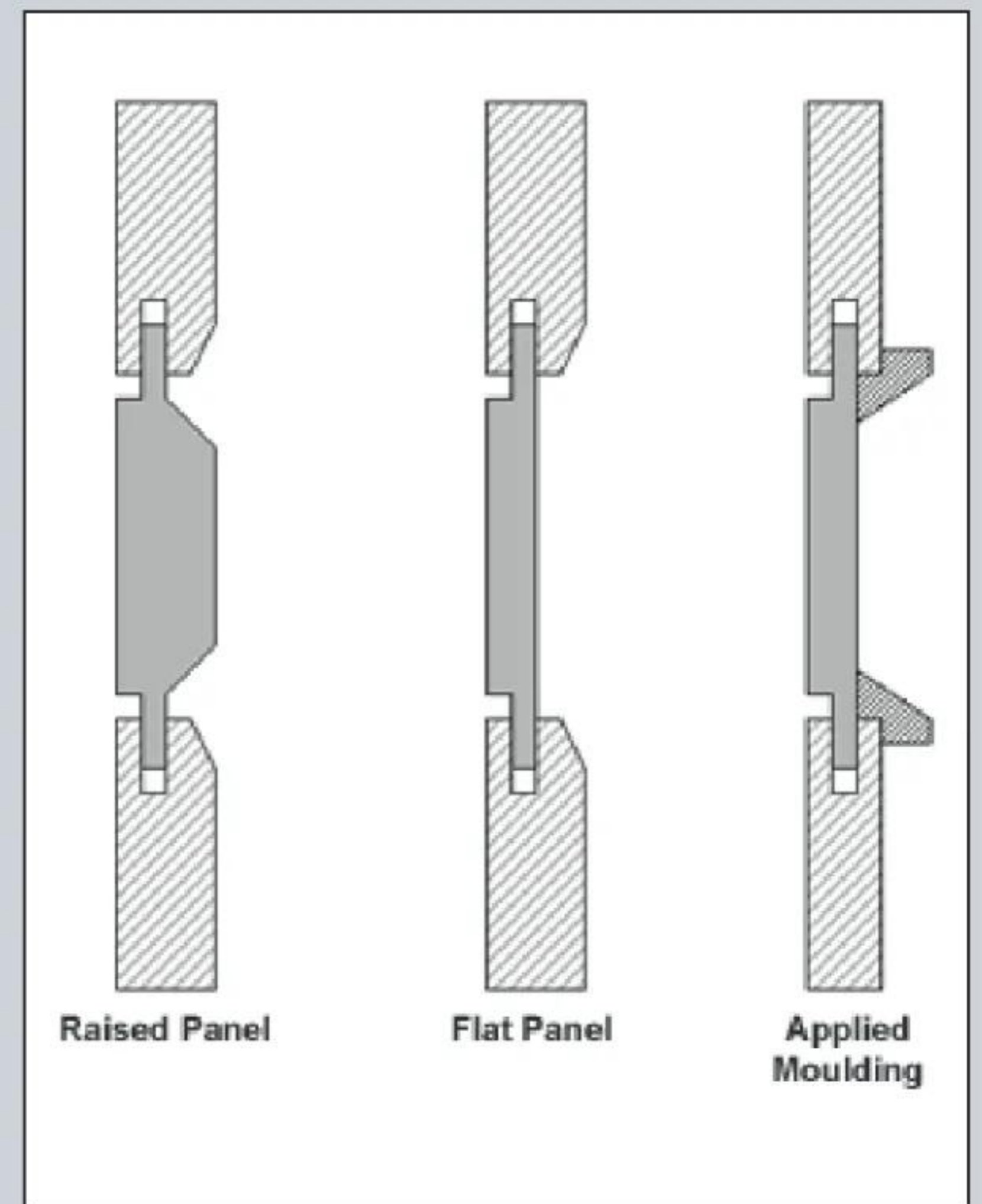


Fig.2 Frame and panel

of the linen-fold can be seen as a reference to wall hangings and tapestries that'd previously been used. A further decorative motif to be employed was the medallion head – a carved head in profile – which was derived from Italian carving. In England, it was known as 'Romaine'

this time he received only his board, lodging and training. While apprenticed, he wasn't allowed to marry. He'd have to wait until he reached the status of 'Journeyman' for that.

A craft guild Journeyman was paid for his labour on a daily basis – hence Journeyman, derived from the French 'jour'. During this period he'd create, in his own time, a 'Master-piece', which would be presented to the craft guild as evidence of his craftsmanship, in the hope of being accepted as a craft guild master. It was difficult to reach this status; much depended on his standing and acceptance by the hierarchy within the craft guild. Once achieved, however, his business and social standing were assured.

RULES OF ENGAGEMENT

Membership of a craft guild meant adhering to a strict set of rules and guidelines that dictated how trade could be conducted during the Middle Ages. These rules were included in the guilds' charters and referred to such things as a ban on, or fines imposed, on any illicit trading by non-craft guild members, and fines for any craft guild members who violated the charter of their particular craft guild.

There was also protection for members of craft guilds – any member who fell sick was cared for by the guild. Burials of guild members were arranged and the craft guilds undertook to care for any orphans. Members of craft guilds also provided protection of their horses, wagons and goods when moving about the land, as travelling during the Middle Ages was rather dangerous

Contributing factors

So the focus this time has been on three major factors that impacted the development of English furniture. Firstly, the evolution of joinery as a skill in its own right and, through that process, the parallel development of the mortise & tenon joint, which allowed for framed structures ranging from simple furniture to architecture. It can't be stressed how important this was in terms of construction, aesthetics and the overall quality of work.

Advances in toolmaking – especially the saw and the subsequent saw pit – led to increased quality in the raw material. Being able to produce boards of larger sizes meant an increase in the size of panels that could be framed – as an example, this impacted directly on the look and method of wainscoting in medieval houses, much of which survives today.

The craft guilds' influence was profound in its effect on the quality of work produced during the medieval period and its legacy has been the survival of a vast array of work from this period, by craftsmen whose skill and integrity we can still appreciate today.

Next time, we'll look at the advent of the



Journeymen had to complete a 'Master-piece' before they could be part of a craft guild

cabinetmaker, a craftsman who'd come to specialise in the production of fine furniture.

Through looking at the changing political and religious landscape from Elizabeth I through to Cromwell, we'll find that profound changes occurred in the approaches to the decorative elements of furniture as subsequent monarchs rose and fell – not least the new designs and skills of craftsmen from the Low Countries and the Iberian Peninsula brought to England with the demise of the Commonwealth and restoration of the monarchy. ✂

NEXT MONTH

In the November issue, Phil will examine how the cabinetmaker came into being

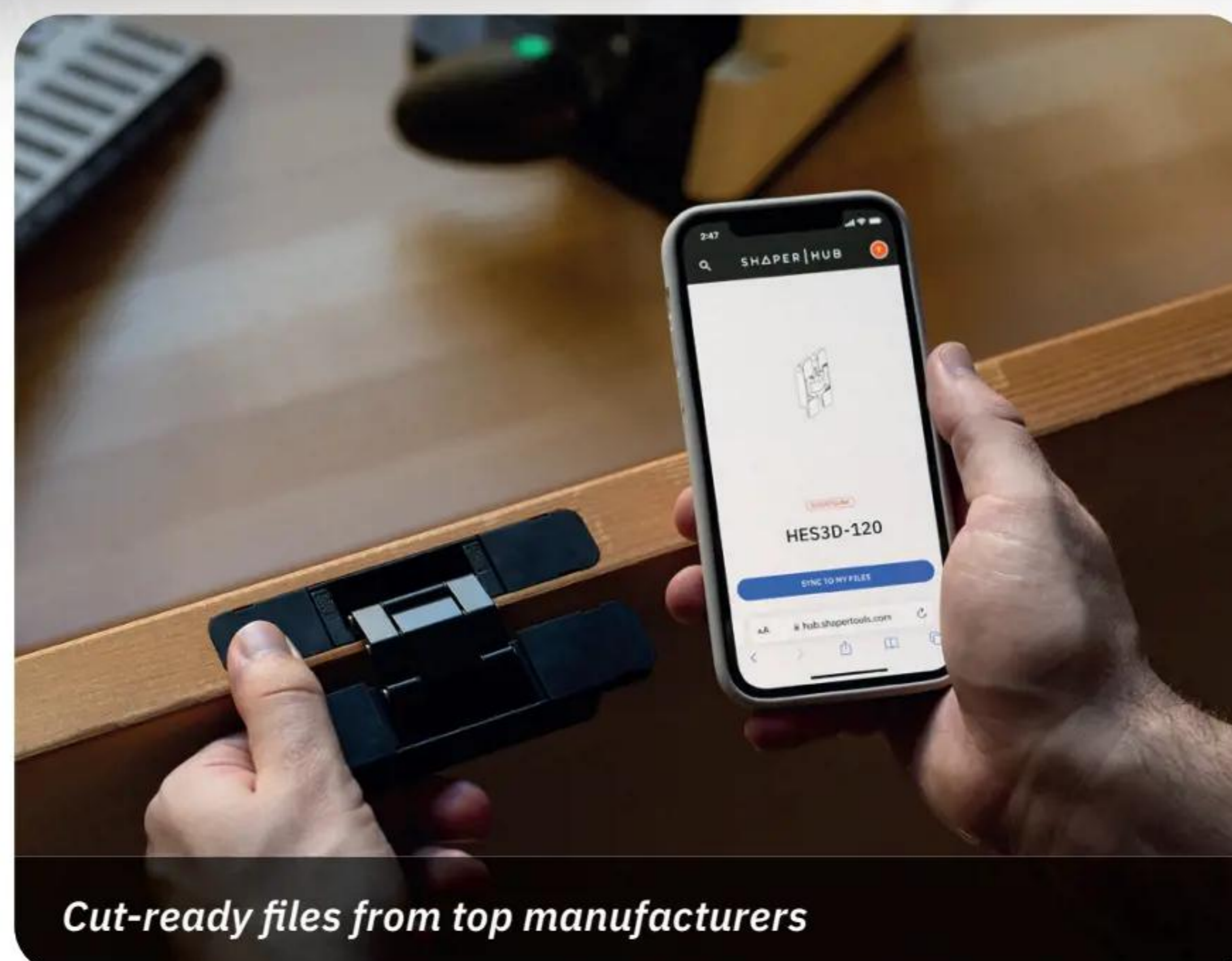


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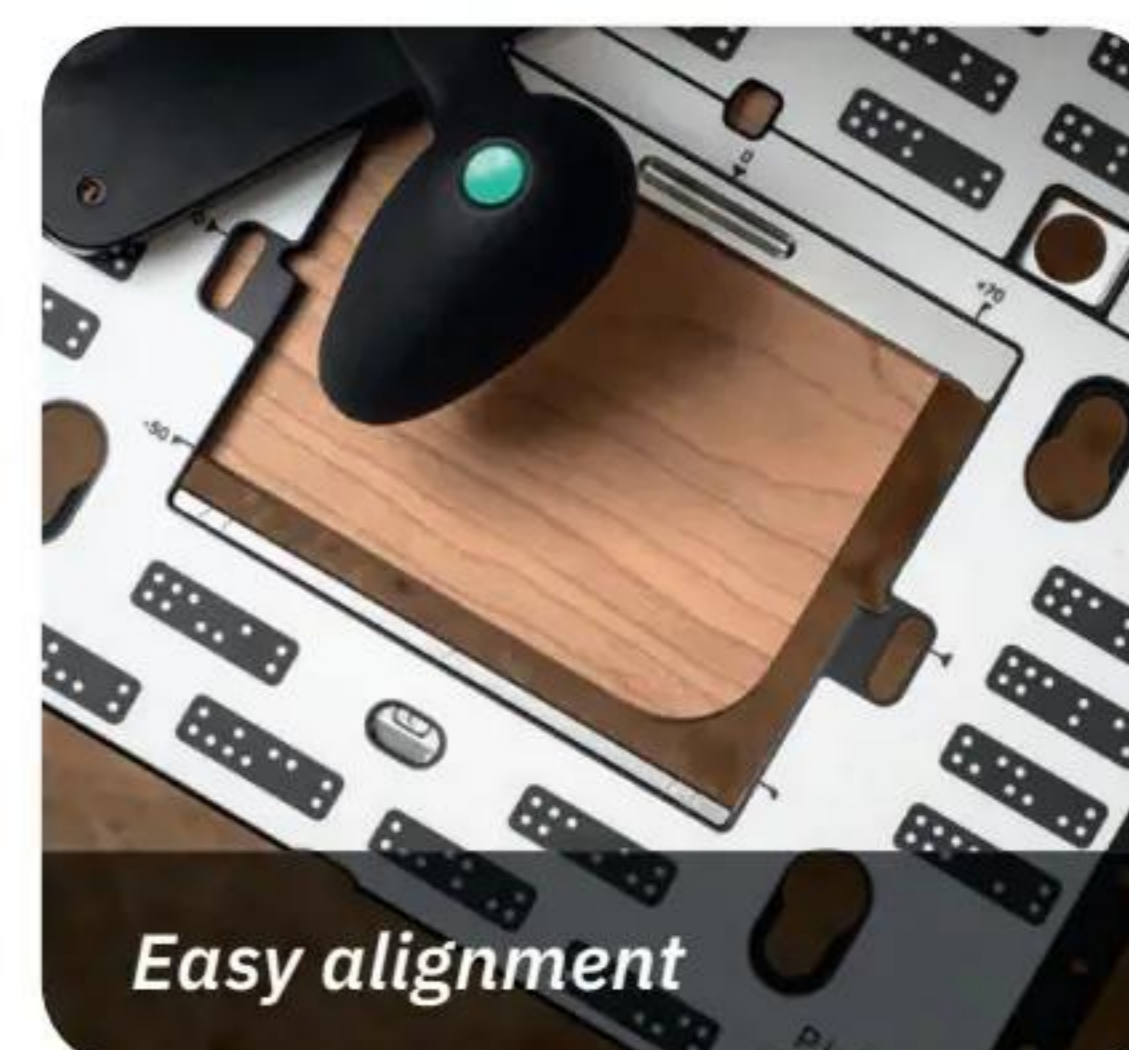
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Master Thatcher
Steven Hewlett
at work



THE TIMELESS THATCH

Knowing little about thatching, **Len Markham** arranged a visit to meet one of the leading craftsmen in the South of England, Master Thatcher **Steven Hewlett** and his apprentice son, **Rudy**

In 1189, the first Lord Mayor of London – Henry Fitz-Alwin – outlawed thatched properties as a consequence of the inherent fire risks, decreeing that: 'No houses should be built in the city but of stone and then be covered with slate or burnt lime.' But, over 800 years on, the timeless thatch endures despite its continued combustibility, relatively short life span, and the excessive costs of house insurance. I've often wondered why? The answer lies in perception.

Rustic simplicity & contentment

The image of the thatched cottage is seared into the English psyche denoting rustic simplicity and contentment, the *Lark Rise* idyll of tales by the fireside on grandmother's knee, poetry, books on art and chocolate box imagery stoking



Rudy has embarked on a five-year apprenticeship, which will see him working alongside his father

the ancestral memories of a defined rural Englishness that, despite all the assaults of modernity, endures.

Knowing little about thatching, I arranged a visit to meet one of the leading craftsmen in the South of England who operates from Little Dale Farm in East Gomeldon near Salisbury, my journey taking me high above Salisbury Plain past Ludgershall and into Hampshire, a country lane delivering me to the Redenham Park Estate where I met Master Thatcher Steven Hewlett and his apprentice son, Rudy, who were already high aloft.

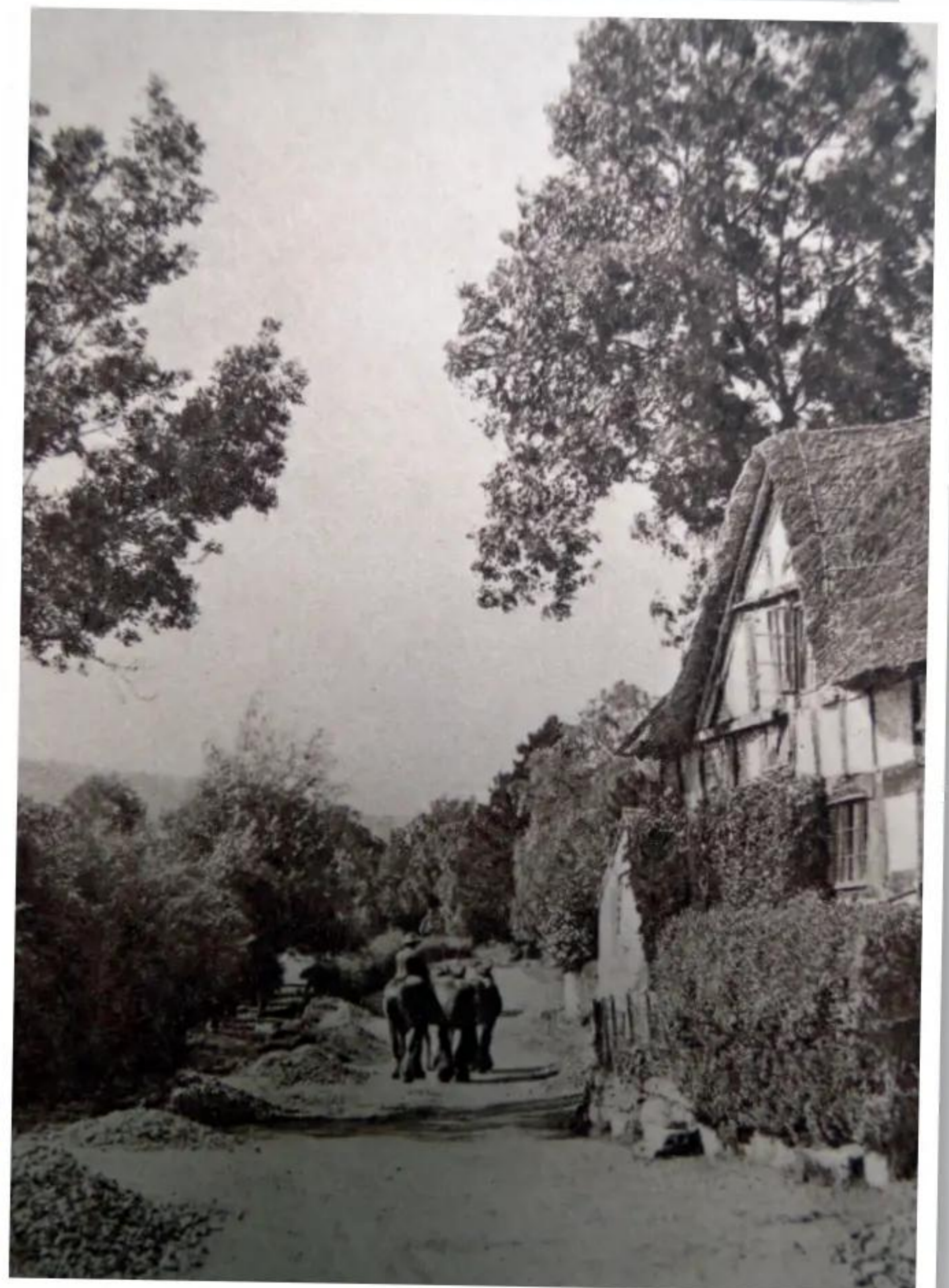
In consulting records going back around 50 years, I read it was estimated that there were around 500 thatchers in business across England. According to Steven Hewlett, that figure is now around 1,000.

The Hewletts have been in the profession for



The Hewletts work with long straw, combed wheat straw, water reed and Norfolk reed

A LANE IN ENGLAND



'I took a vow that I would go through the lanes in England and the little thatched villages of England, and I would lean over English bridges and lie on English grass watching an English sky'

H.V.Morton

In Search of England, 1927



The straw and reed are laid on carpenter-installed roof timbers

almost a century, four generations carrying on the tradition now enthusiastically embraced by young Rudy who eagerly left school at the tender age of 15 to begin his five-year apprenticeship and work alongside his father. I talked to both thatchers and watched them work on a new project alongside the estate swimming pool, their dedication to absolute quality, our conversations and my close inspections of the precision and pride in the ongoing work arousing in me a deep and nostalgic appreciation of the precious traditions that have sadly been lost to soulless mass production and foreign imports.



Nearly all thatchers, including Steven, add characteristic woven decorations to roof lines with trade mark straw icons of animals and birds atop



Various examples of Steven Hewlett's thatched work

The National Council of Master Thatchers Association & Wiltshire Master Thatchers Association

The family company is a member of the National Council of Master Thatchers Association and the Wiltshire Master Thatchers Association and in recent years, has been nominated as a finalist in the 'National Best Thatched House' competition.

As I gingerly ascended a roof ladder and braced myself against one of the few modern pieces of equipment used in the thatching process – scaffolding – I realised that local thatching can be one of the most environmentally friendly processes in existence. The straw that I examined was grown locally under a long standing arrangement with a farmer in nearby Patney; both the 8ft across, 1in width hazel sways that are laid across the first course of thatching and attached to the rafters below with hooks, the dampened, bent and twisted hazel binding staves that secure the second layer of thatch to the roof coming from a similar source. In addition, the thermal insulation properties of completed roofs are very high even compared with solar panel installations, which have a high carbon footprint and long-term disposal consequences. And, at the end of their life, thatched roofing materials can be returned to the soil, even the lead flashing preventing the ingress of water around chimney stacks being reused.

Universal pride

The Hewletts work with long straw, combed wheat straw, water reed and Norfolk reed, their wide portfolio of work encompassing historic listed buildings including ancient churches and chapels, rural cottages, cherished public houses, belvederes and barns. The straw and reed are laid on carpenter-installed roof timbers constructed



to allow a fairly steep pitch of at least 50° so that rainwater will run off satisfactorily. Such are the steep overhangs that gutters aren't usually fitted.

In olden days, carpenters would use whatever local timbers were available nearby from local copses and forests. Roughly hewn with knots and twists, these formed the A-frames' basis. Sometimes, and I've encountered this myself, oak beams from redundant wooden warships were used, their surfaces colourfully inscribed with carvings and graffiti made by sailors.

Life as a thatcher involves constant climbing, balancing and stretching, which means that knee pads and stout boots are essential, only severe weather disrupting the process. There's universal great pride in the work, nearly all thatchers adding characteristic woven decorations to roof lines with trade mark straw icons of animals and birds atop.

Beguiling imagery and sentiment

I prefaced this article by including a century old photograph that forms the frontispiece illustration in one of my favourite books, *In Search of England*, its author accompanying the image with a quoted caption. Such was, and still is, the book's beguiling imagery and sentiment that at the time of the narrative's publication, it sold over 1,000,000 copies and ran to 11 editions. Now, nearly 100 years on, it resonates still.

Rain drops come heavy on a house unthatched
Old Gaelic Proverb ✂

FURTHER INFORMATION

For more information on Steven Hewlett & Brothers, fourth-generation Master Thatchers, visit the website: www.stevenhewlett.co.uk



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CHISEL
RATING

ROUTING ON THE LATHE

PART 1



Colin Simpson likes to add carving and texturing to some of his pieces, such as using a hand-held angle grinder to apply carved decoration to a platter rim, but here, he looks at a different way of working

Freehand carving allows you to create a more random texture (photo 1), but there are times when I want a regimented, exact pattern or texture – for example, when flutes or reeds are required on spindle work (photo 2).

Jig design

Some years ago, I bought a Trend router lathe. These are no longer manufactured, but it was useful for routing flutes and reeds on spindle work. It also allowed barley twists to be routed on spindles. However, I found it somewhat inflexible and time-consuming to set up and work with. I also wanted to be able to use my router on faceplate work as well as on spindles, and I needed the set-up to be quicker and more flexible.



1 Where an abstract texture is desired, freehand carving is the preferred method

So with some thought and a little research into the subject, I came up with this simple and inexpensive home-made jig.

Starting from scratch

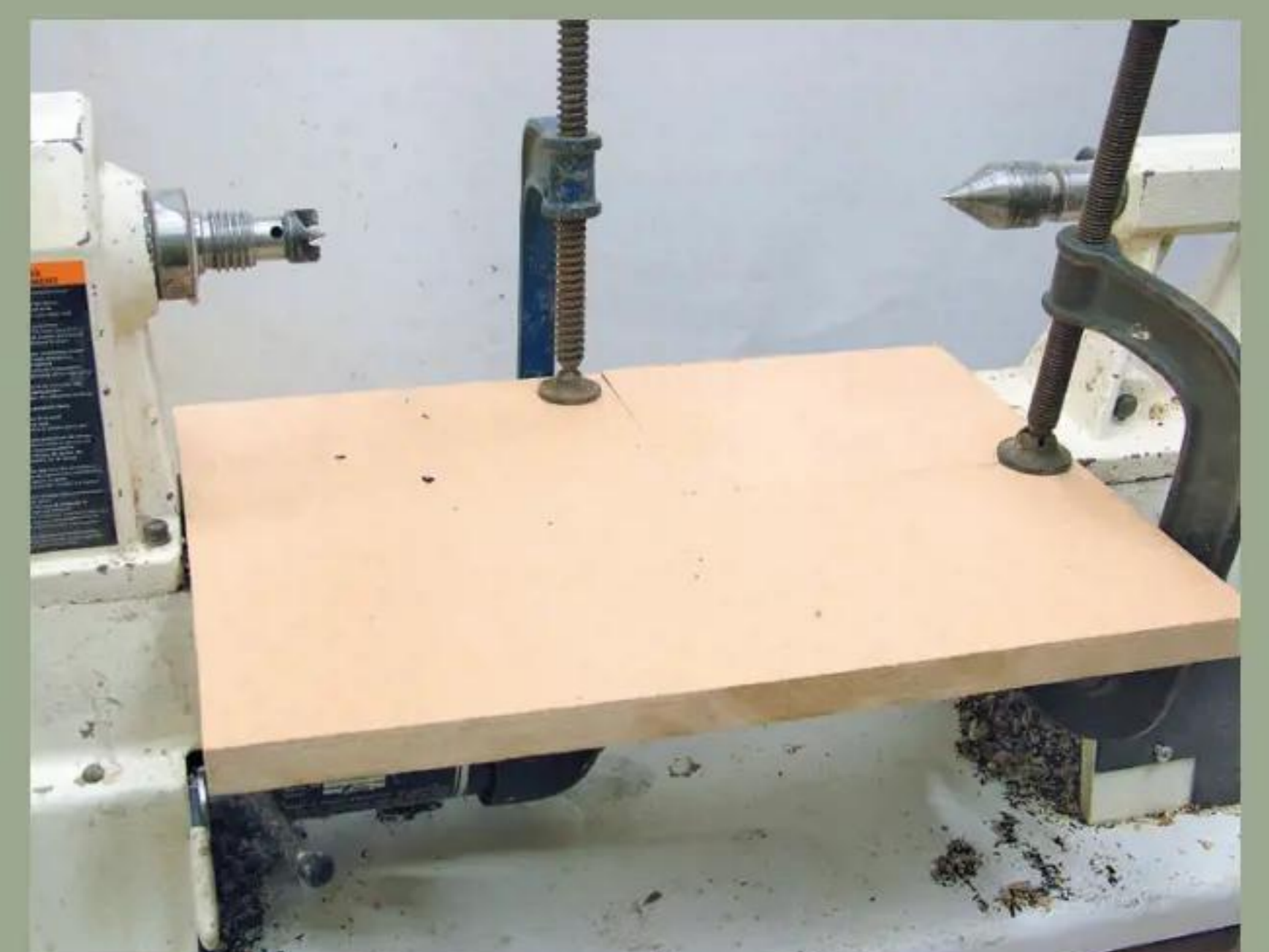
This jig is designed for use with smaller routers, such as my Trend T4EK, which has a 43mm collar. Ideally the jig should be made from metal



2 It'll also allow you to create other more regimented effects such as these flutes

– such as aluminium – for strength, but I've found my wooden one to be quite satisfactory.

The first step requires making the baseplate, which will be cramped securely to the lathe's bed bars. If your lathe has twin bars, as is most common, this is quite a simple matter (photo 3). You can just see the cut-out area at the rear right-hand corner, which can be removed if the tailstock needs to be moved closer to the headstock. However, I wanted to use my jig in conjunction with my big old VB36 lathe, which has completely non-standard bed bars – they were an optional extra when I bought it. I therefore decided to construct a floor-standing platform from chipboard, and cramp it to the lathe's base. I used a kitchen worktop offcut to



3 It's easy to cramp a suitable baseplate to a lathe that has twin bed bars



4 A floor-standing platform such as this is a better bet for non-standard lathes



5 Use a revolving centre in the headstock to mark the cradle upright



6 A hole saw is the best tool for cutting a hole for the router collar



7 Draw the top bracket's shape on the front upright and cut it out

form the baseplate (**photo 4**), but 18mm MDF or ply would do just as well.

Accurate centres

Constructing the cradle – the box that holds the router – is a simple process. The jig's actual size – or more specifically the height – will depend on the lathe and router you're using. The router needs to work along the lathe's centre height, so ensure to measure this carefully.

To avoid errors in this measurement, fit a revolving centre in the headstock spindle, then position the cradle's front upright on its baseplate and offer up to the revolving centre (**photo 5**).

Make an indentation in the upright by pushing it against the centre point. This can then be used as a location point for the 43mm diameter hole that needs to be drilled for holding the router collar.

Cutting a hole

I used a hole saw in my pillar drill to make the 43mm hole (**photo 6**); however, a saw-toothed or Forstner bit would do the job just as well if



8 Drill pilot holes in the bracket, deep enough to run on into the upright

you have the right size. Next, draw the shape of the top bracket and cut this out on a bandsaw (**photo 7**). Alternatively, you could also use a coping saw.

Before separating the bracket from the cradle's front upright, drill two pilot holes in the bracket and check that they're deep enough to run on into the upright part (**photo 8**). These pilot holes will ensure alignment of the bracket and upright when they're cut apart and reassembled. Now it's back to the bandsaw to cut across the hole's diameter and separate bracket from front upright (**photo 9**).

Bolting through

Enlarge the bracket pilot holes to accept two bolts – I'm using the M6 size – and drill a larger hole in each of the front upright's top end sections to accept a matching captive nut. I used epoxy resin adhesive to stick these nuts in place. A good tip here is to use a piece of cling film to keep the glue from contaminating the thread inside (**photo 10**). The rest of the cradle is made from 18mm plywood, cut to appropriate sizes



9 Cut across the hole diameter in order to separate bracket from upright

to suit your router, then glued and screwed together (**photo 11**).

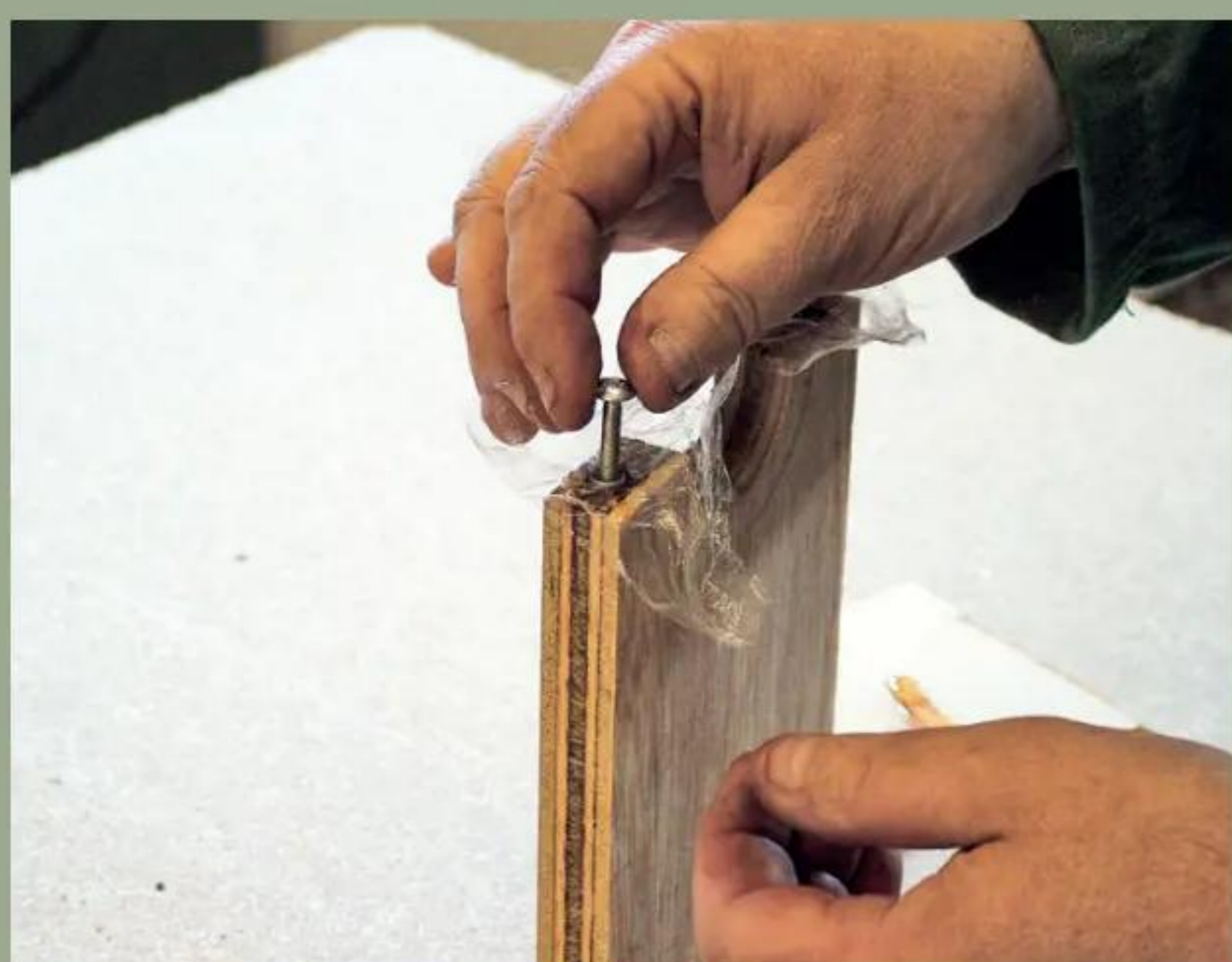
Depth-of-cut control: method 1

With the cradle made, I needed a method of controlling the depth of cut, and I've come up with three ideas. The first is to drive two screws to the cradle base's bottom edge (**photo 12**). When the cradle is in use, these screws will run up against a template cramped to the baseplate (**photo 13**). The screws can be turned in or out of the cradle base to act as a fine depth control.

By the way, the template doesn't have to be the same shape as the turned work; in fact, I think it's better if it isn't, which allows the routed grooves to taper (**photo 14**).

Depth-of-cut control: method 2

The second method of controlling the depth of cut is similar to the first, but this time the turning itself acts as a template. Cut and fix two small plywood strips to the cradle's front face as shown in **photo 15**. The bottom bolts



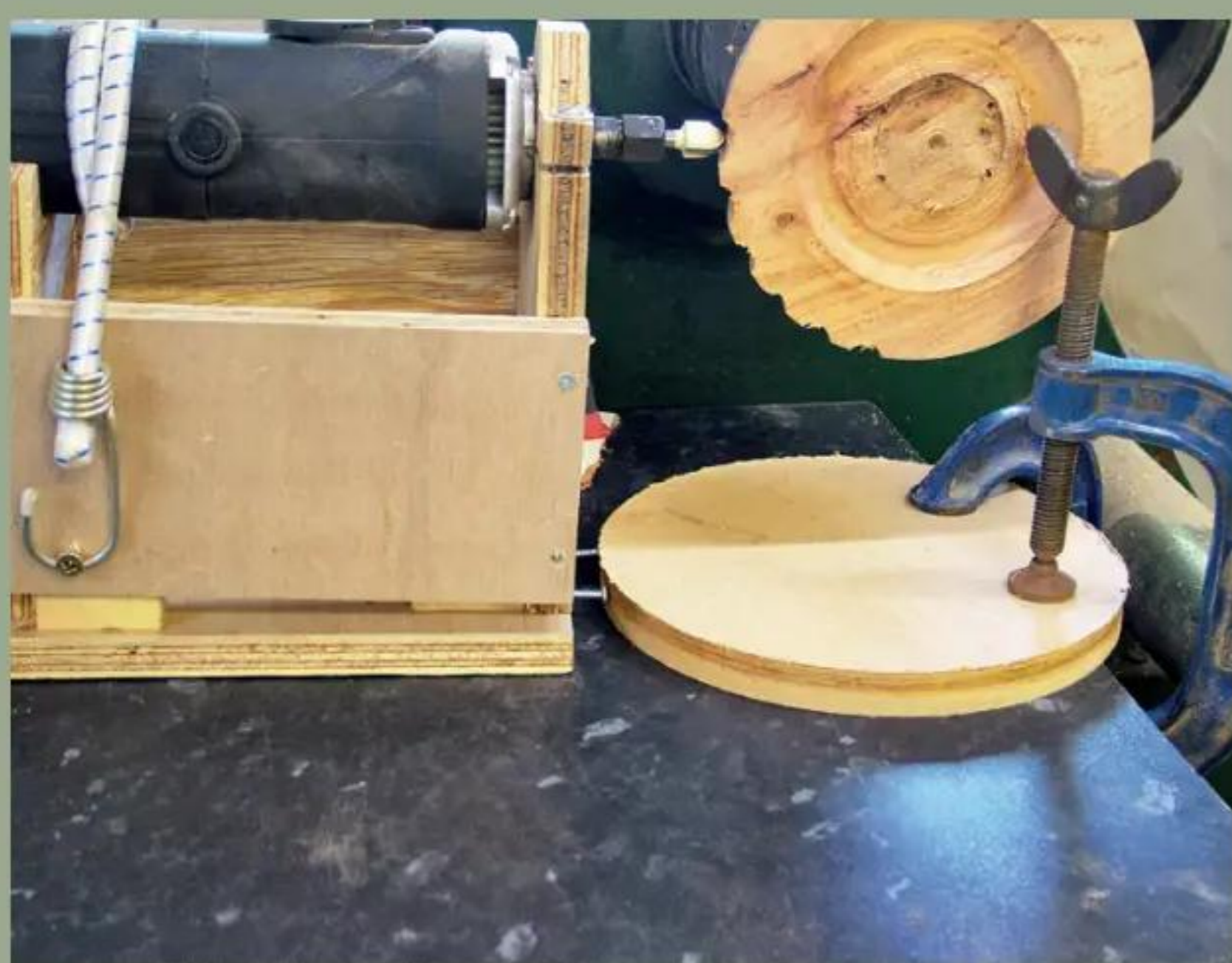
10 Use cling film to prevent the glue from contaminating the nut's thread



11 Make up the remaining cradle from 18mm plywood, glued and screwed together



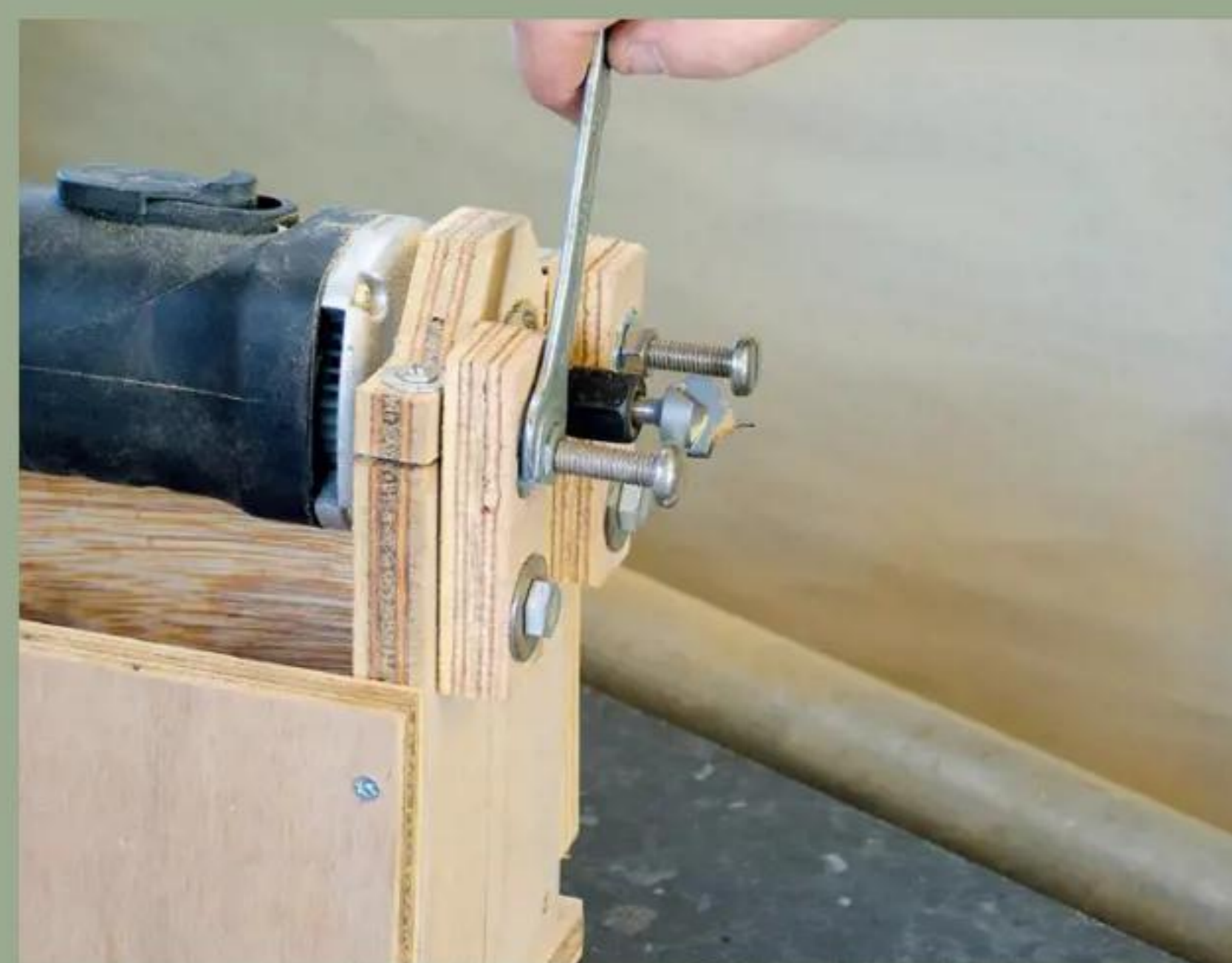
12 Drive two roundhead screws part-way into the cradle base's bottom edge



13 Cramp a template to the baseplate and run the two screw heads against it



14 If using a different-shaped template, you can create tapered grooves



15 Mount plywood strips containing follower bolts to the cradle's front face



16 Use T-nuts to accept all the bolts you want to be able to remove

fix the strips to the cradle and the top bolts act as the followers, running against the turned piece.

I used a bolt to fix each strip to the cradle as I wanted them to be removable. These bolts screw into T-nuts set into holes drilled in the cradle's front (photo 16). The top 'follower' bolts also screw into T-nuts, this time set into holes in the plywood strips. A hex nut locks each bolt in place (photo 15) allowing it to operate as a fine depth stop. The complete cradle works as shown in photo 17, to produce a series of parallel flutes as the blank is rotated from index point to index point (photo 18).

Depth-of-cut control: method 3

The third control method is to attach an outrigger to the cradle, as shown in photo 19. This is used to pivot the cradle. The series of small holes drilled into the outrigger's side pieces are used to set the arc's radius, and the hole in the cross member's centre is the pivot point. Again, I used T-nuts in the cradle's side to bolt on the outrigger (photo 20). With the outrigger attached to the cradle's



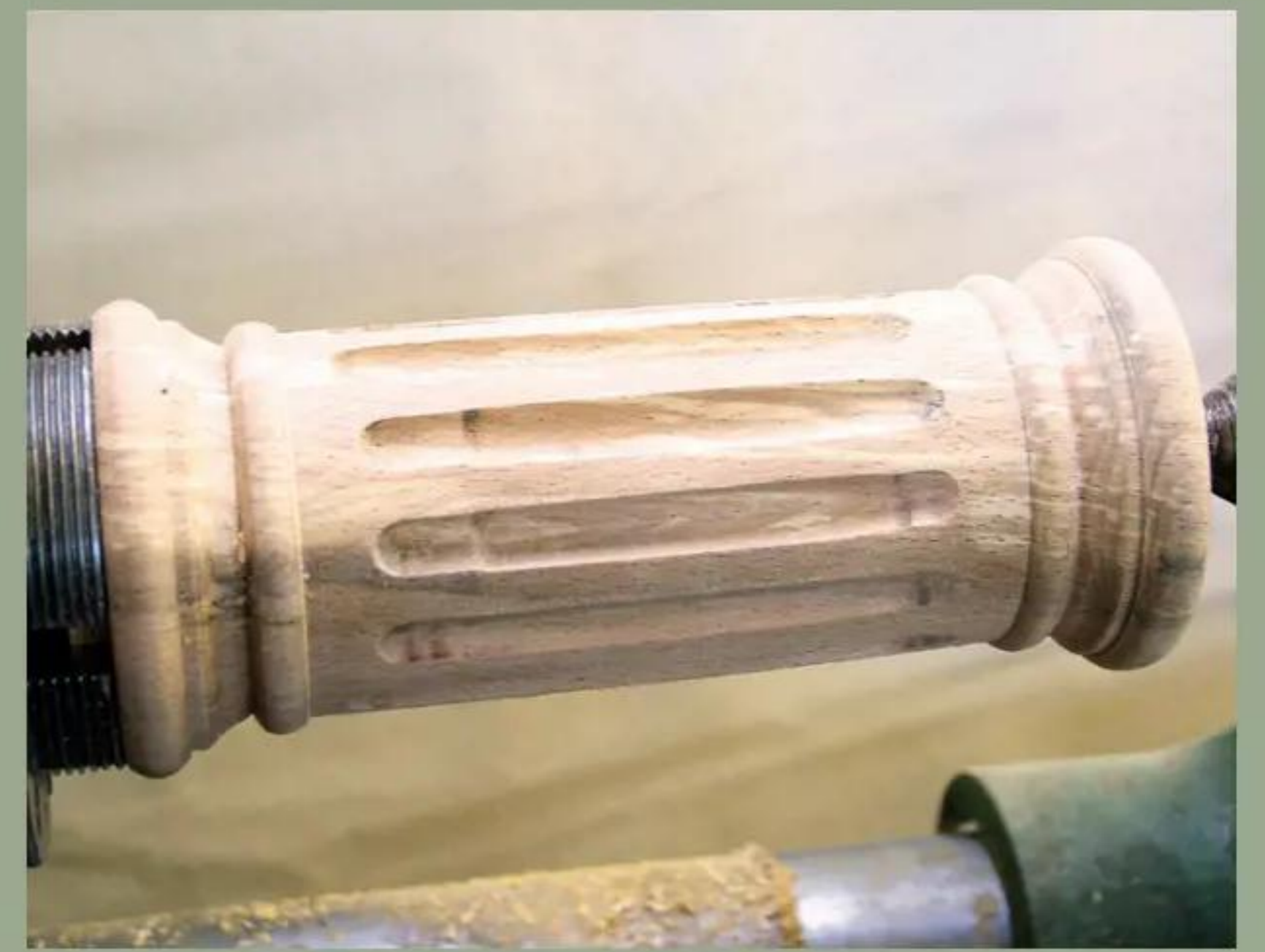
22 As the cradle rotates, the router cuts elegant grooves in the work



23 The finished work is ready to be turned into a decorative box lid



17 The completed cradle runs along the workpiece's centre...



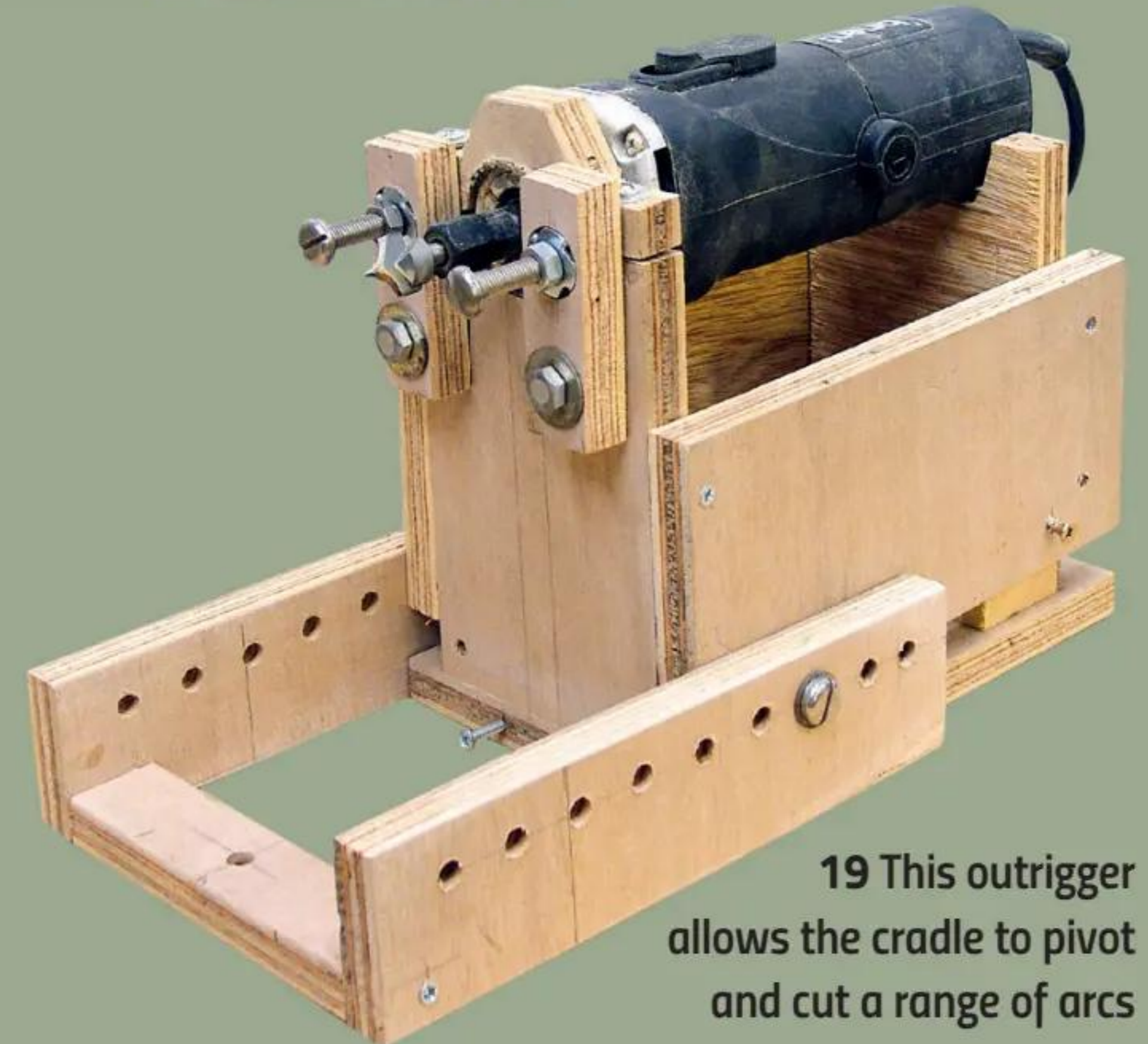
18 ... to create a series of parallel flutes as the blank is rotated on the lathe

front, you're then able to cut convex curves; it can also be attached behind the cradle so that the cuts will be concave.

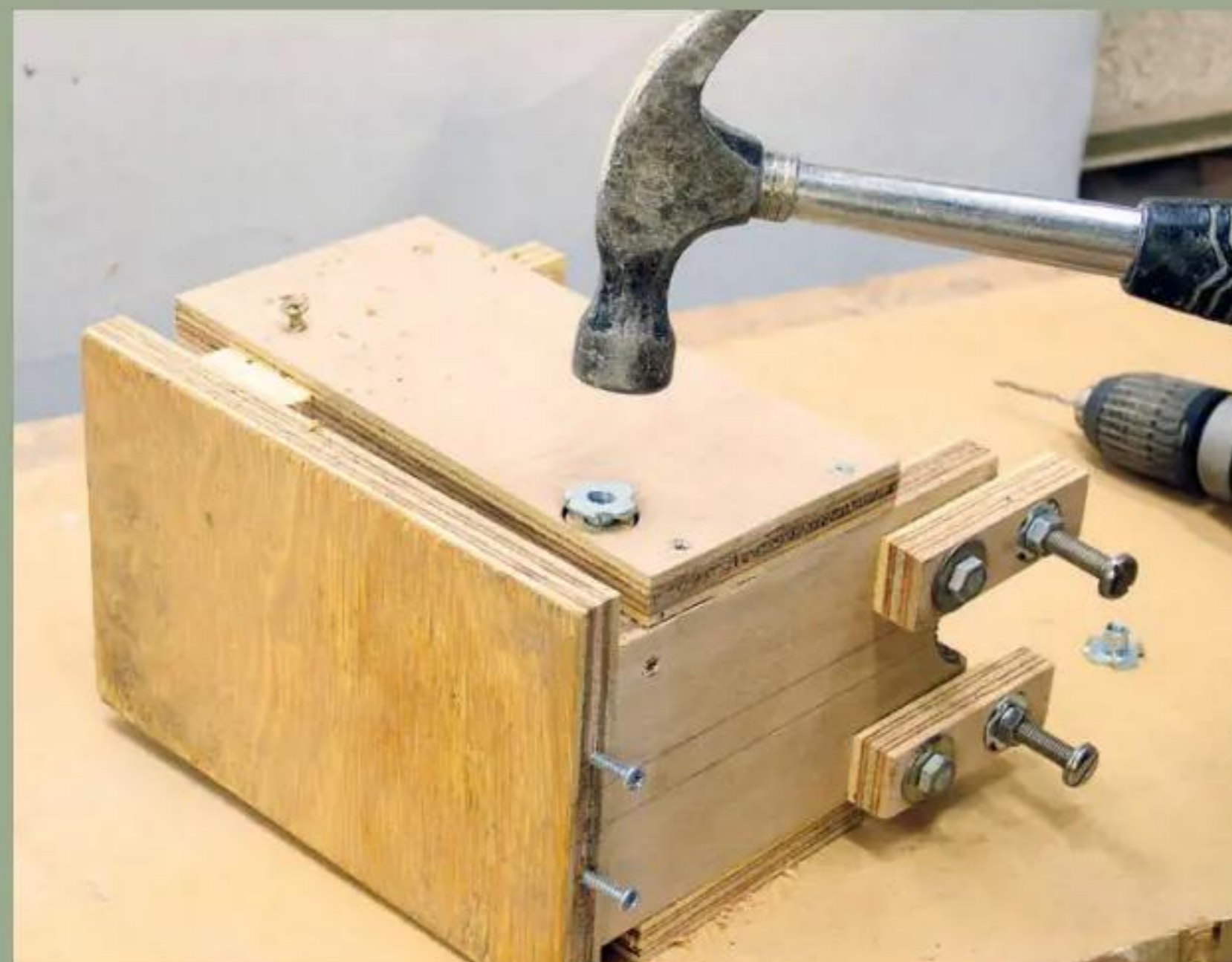
The pivot point needs to be secured to the baseplate, and I used T-nuts again for this (photo 21). Photo 22 shows the outrigger in use, this time cutting end-grain for a box lid, and photo 23 shows the completed item.

Part 2 – next month

So that's my router jig. During the course of construction, I've shown you a few examples of what's possible using it. Next month I'll use it to make some proper projects, as shown in photo 24. ✂



19 This outrigger allows the cradle to pivot and cut a range of arcs



20 Use T-nuts driven into holes in the cradle's sides to bolt the outrigger on



21 Drill a hole for a T-nut in the baseplate to secure the pivot point

24 A few examples of projects that can be made using a router lathe



CHISEL
RATING

SAFES & SECRET DRAWERS



Peter Bishop puts his restoration hat on once again to bring this mahogany cased, brass-bound campaign safe back to its former glory



When this mahogany cased, brass-bound campaign safe came up for auction a few months ago, I just couldn't resist. I've since realised that I seem to have a distinct liking for safes and secret drawers!

Hidden within the wooden façade, behind a pair of doors, is a tiny cast-iron safe. This has a lovely little dedication plaque on it that reads 'Maude, January 4 1894, with love from Arthur'. One of my Granddads was an Arthur but he was married to a

Gladys, so that couldn't have been the attraction! Inside there's a red velvet lined compartment with a little drawer underneath. Within this there are two spaces, an open one to the left and, on the right, one to house a pocket watch. This has a further velvet lined space below. Cute. The two doors are also lined with some rather worn velvet.

Safety warning: Note that although many of the photos show machines unguarded for clarity, you should *ALWAYS* ensure that when operating equipment, the appropriate guards are in place.

Assessing the job

The whole cabinet was a bit tired and worn, which wasn't really surprising considering its age (**photo 1**). No keys came with it, so I hunted through my stock and found two that fitted the interior drawer and one for the right-hand door. There's a drop bolt on the left, but try as I might, I couldn't find one for the safe itself (**photo 2**).

With these jobs, it's always difficult to know where to start and stop. Having removed the doors, I could see that one had some internal veneer losses (**photo 3**). Like most woodworkers, I have stash of useful bits and bobs that I've saved over the years – after all, they might come in handy some day! Owing to its age,



1 The cabinet as it arrived in the workshop



2 Doors off and interior exposed



3 I found a couple of old keys for the interior drawer



4 One of the doors had losses to the interior veneers – here are some old bits that were cut to fit

the veneer was quite thick. A hunt around found some that'd be suitable; just enough with care. This was sliced and diced to fit nice and snugly along the areas of loss (**photo 4**). A wee bit of PVA and some masking tape to hold it all in place and I could then leave it to cure (**photo 5**).

Carrying out repairs

The top had been covered in veneer after it'd been screwed to the carcass. On one corner, a mitre joint had opened up so this therefore needed attention (**photo 6**).

I cut 9mm plugs from some gash sapele stock. I only wanted one but popped the rest into my 'stock pot'. I had to use a drill with a power cable as all my cordless ones weren't up to the job. A bit of a mess, but I got there in the end!

I bored the plug socket out first, then drilled a pilot screw hole at a bit of an angle (**photo 7**); I wanted it to bite and not come out in future. After setting the cramps and finding some packing, I worked the adhesive well into the open joint (**photo 8**). With cramps in place, screw driven in and the plug fitted, this was also then left to cure (**photo 9**).

There were other losses and loose bits, one



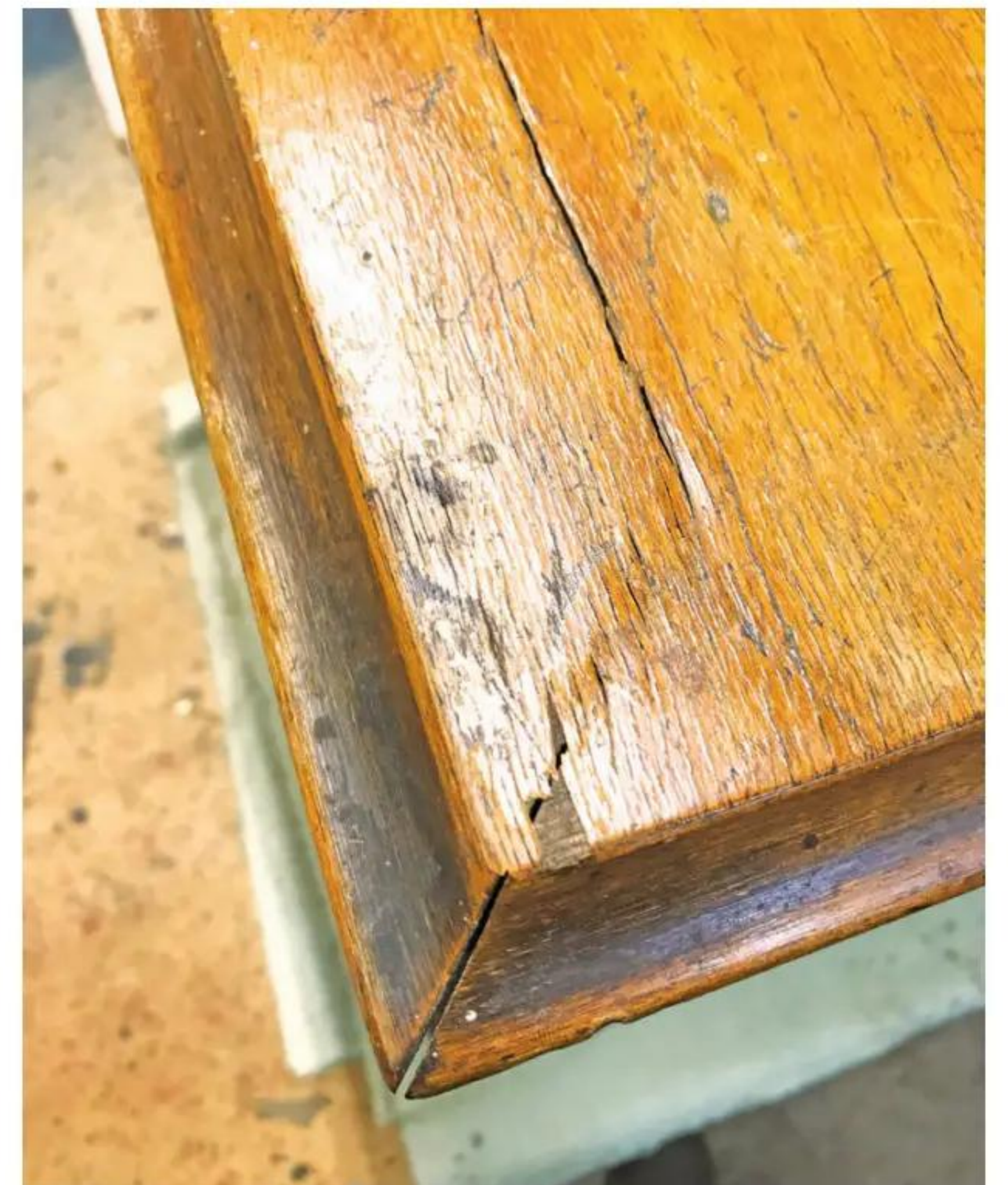
5 PVA and marking tape are used to fix the strips in place



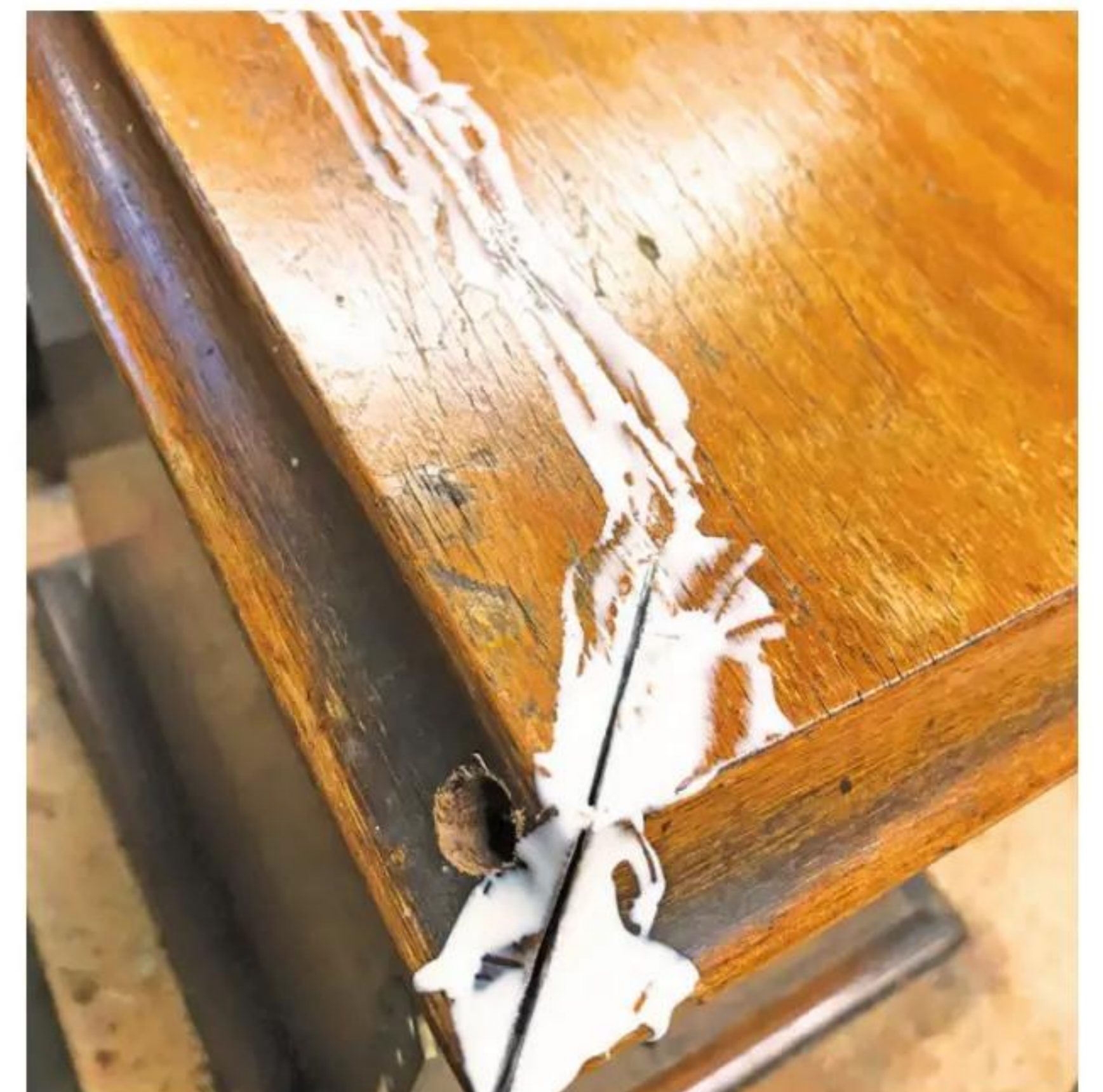
7 Small plugs were cut out of a piece of gash stock

of which was at the carcass' bottom next to the safe door hinge (**photo 10**). I could sort this at the same time as fixing some of the loose veneer facing strips that ran down the edges (**photo 11**).

I mentioned earlier that the top had been screwed down onto the carcass, then veneered. This was all a bit disappointing because the veneer wasn't attractive and very thin to boot.



6 The top was shot and one of the corner joints opened up



8 Prior to fixing, I worked lots of PVA into the joint

In fact, you could see where the securing screws had worn through (**photo 12**).

Now I could simply have patched or stripped the old veneer off, but didn't fancy that. The top was dished anyway so I took it right off and planed it flat. I had a lovely big sheet of thick burlwood veneer saved from another job years before; I knew I'd eventually find a use for it! ▶



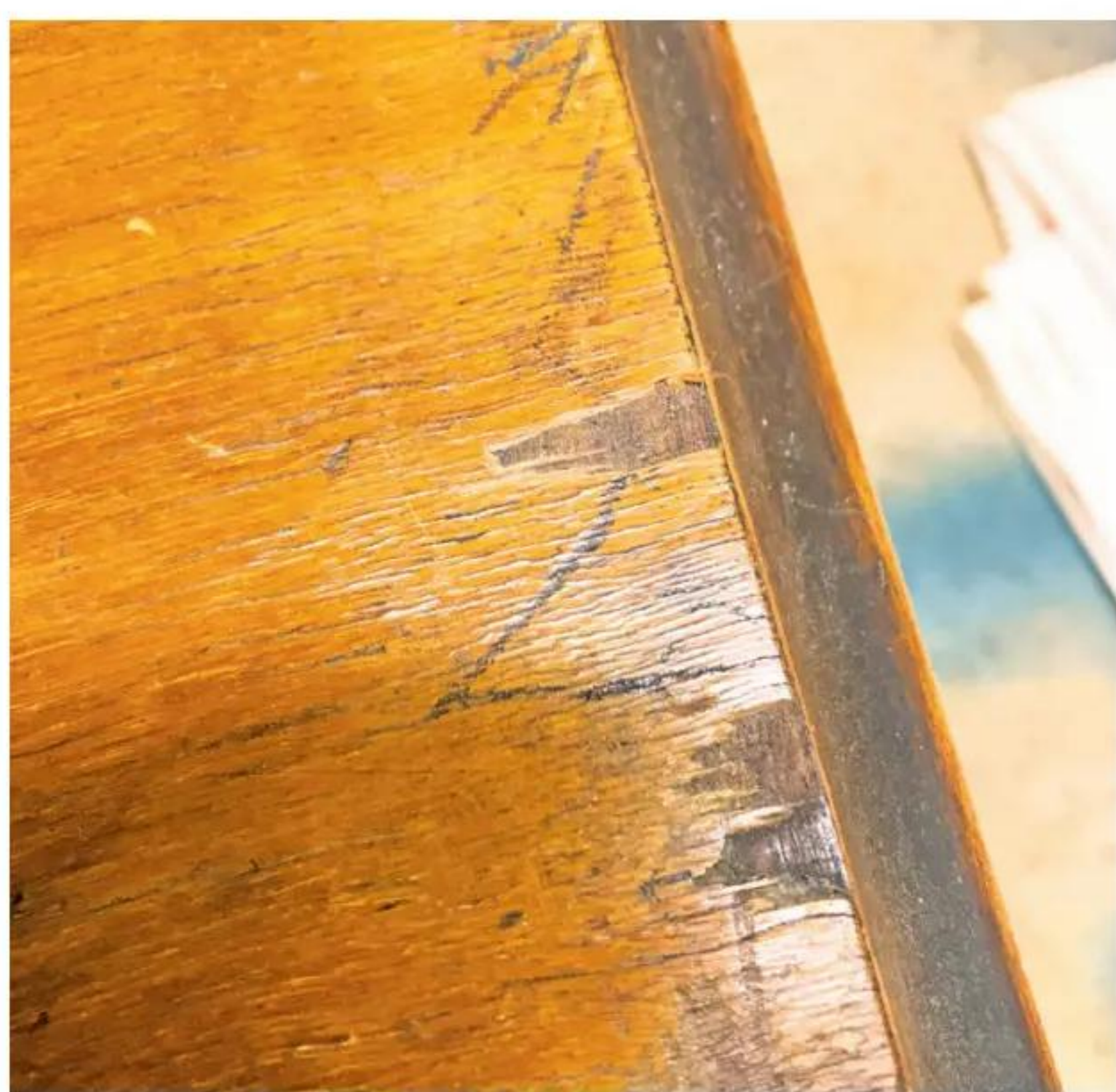
9 Clamps, an angled screw and a plug sorted out the joint



10 This tiny piece was broken away at the cabinet's bottom and some of the facing veneers were loose

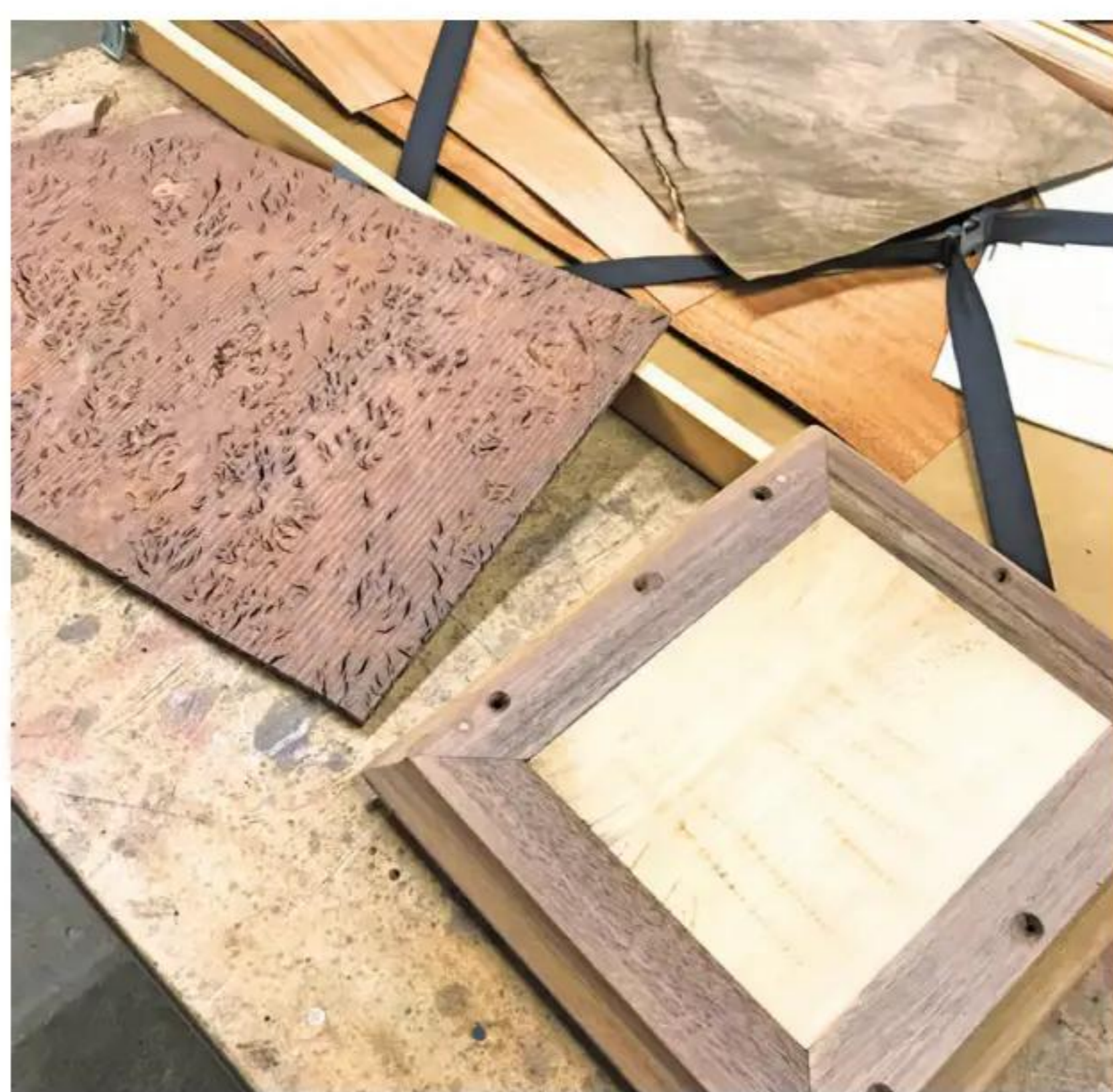


11 A complicated array of cramps fixed the loose bits back in place



12 Not only had the top split, but a very thin layer of plain veneer had chipped away. It was so thin that you could see the fixing screws coming through

It was stashed away in my veneer case and more than large enough for the job (**photo 13**). I aimed to use this to make a panel, which I'd then plant onto the now flat top once it'd been fixed back on. The edges of this burlwood were going to be tatty, so I decided to frame it in some thin strips of American black walnut. I thought this'd look nice, provide a bit of contrast and, once stained, all would blend in. So I mitred the corners and made up the framed panel (**photo 14**).



13 Having planed the top flat, I was in two minds as to what to put back on

Further inspection

With the top to one side, I could scrutinise the remaining carcass in more detail. This inspection revealed that the cabinet wasn't wonderfully made, but I could beef it up a bit and make some improvements.

Loose joints, extra glue and screws sorted this out (**photo 15**). I then decided that the whole cabinet would benefit from having some little bun feet fitted. Unending the whole thing,

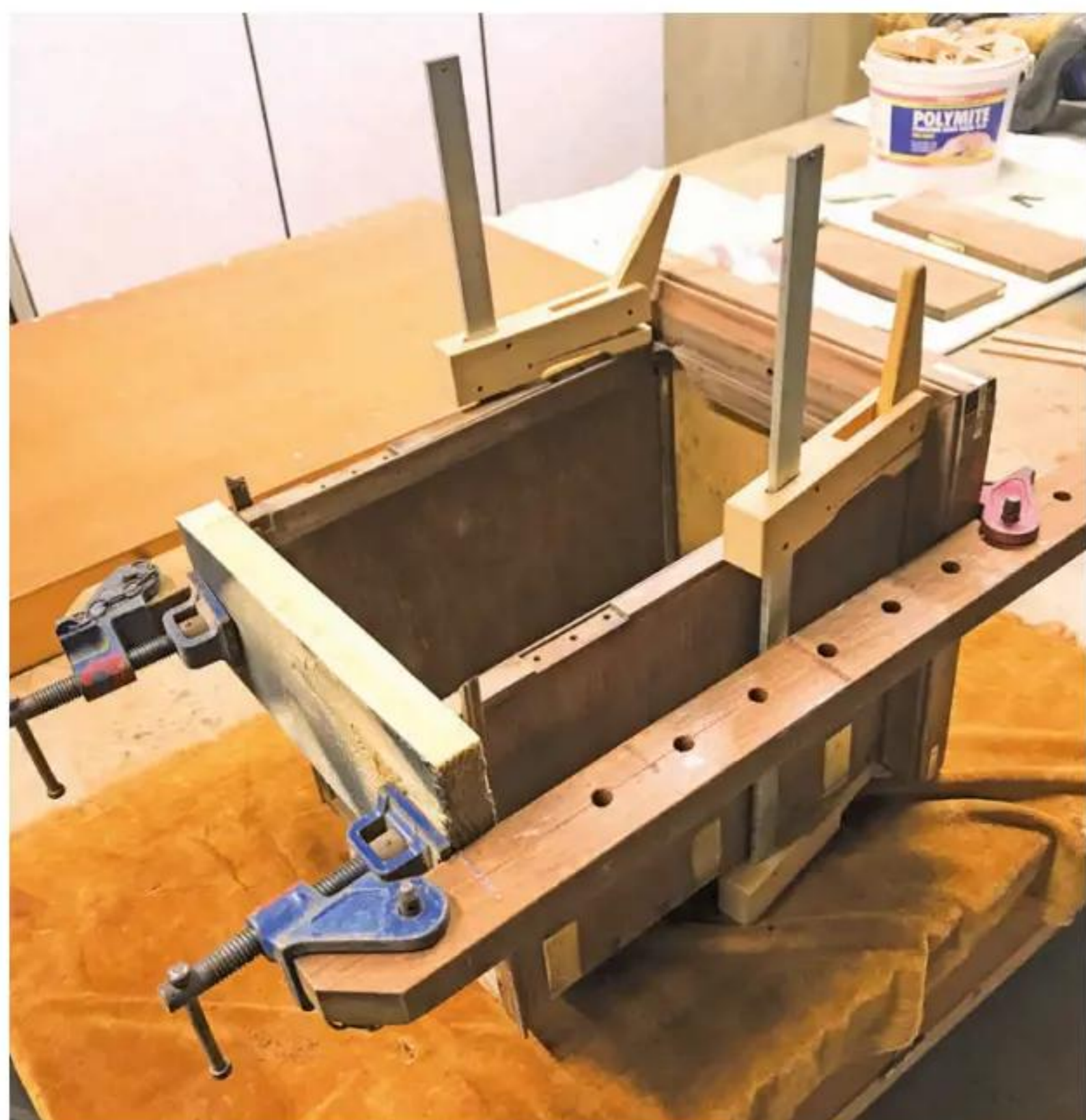


14 This gorgeous piece of thick burlwood veneer was framed with black walnut

I fixed corner braces to accommodate the feet and also strengthen the cabinet's bottom, thus removing any movement (**photo 16**).

I popped a length of sapele onto the lathe, turned this to a cylinder, then marked out for the feet (**photo 17**). These are easy enough to make providing they're all turned to the same thickness to begin with. That measurement wasn't critical as it was for all four feet.

Each section was rounded and turned into



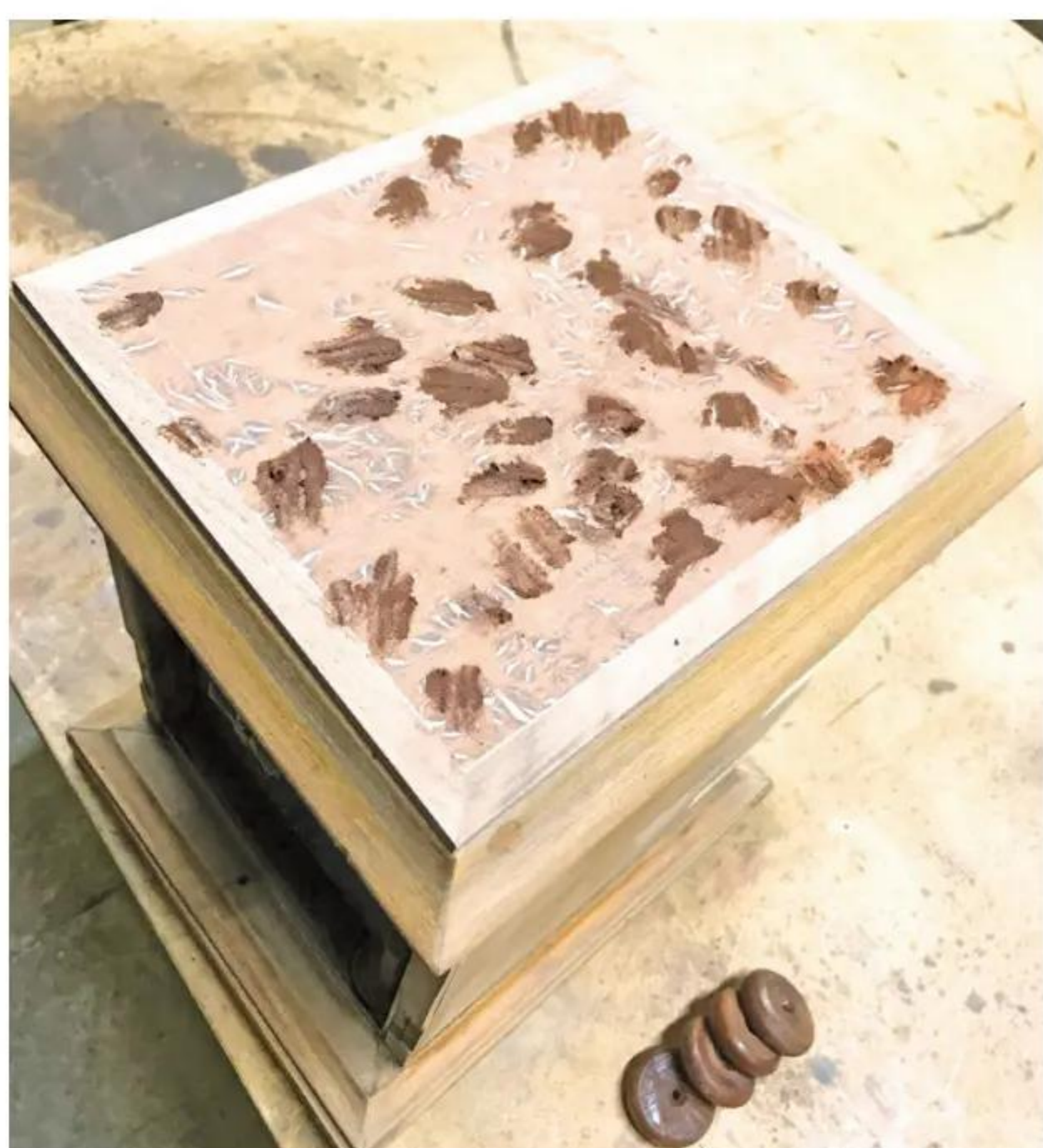
15 The cabinet's main carcass had to be made sound



16 On the bottom diagonal, brackets were fitted for the new bun feet



17 The four bun feet were turned from one length of sapele



18 With the new top fixed on, the burlwood now required filling



19 All new and cleaned back wood was treated to a coat of stain



20 This was followed up by lacquer, then, eventually, cut back and waxed

the buns, sanded and stained before being parted off the lathe. I then went back to the top, fixing it securely onto the carcass with screws well driven in below any surfaces. The top panel was then glued on with PVA and a few small pins; the pin heads would be lost and filled when the rest was dealt with.

Clean up & finishing

I used a two-part filler to remedy all those nooks and crannies across the burlwood's

surface (photo 18). Once this had cured, which didn't take long, I worked the surface back, firstly with a belt sander, then a disc sander, and finally by hand reducing the grit size as I went. By now I'd also cleaned off all the original surface finish. Yes, I know some will say that I'd destroyed the 'patina' but, frankly, it would've looked a mess had I left it as it was.

Next, I stained all the woodwork with one of my favourite products: Fiddes' Old Mahogany (photo 19). It's nice and dark with a deep red

brown – not too bright a finish. Later on, I treated everything to a few coats of lacquer, which was cut back in-between with fine steel wool. The whole lot then had a good wax using another Fiddes product, mellow wax in 'Mahogany'. I have to say that it looked gorgeous (photo 20).

Finally, I put the doors back on, tidied up the red velvet a little, then the job was done.

21 & 22 The completed campaign safe restoration



SHIPPING OUT

It was my intention all along to keep this campaign safe for my own use and pleasure. However, as things turned out, I found someone who really, really wanted to own it. We have too much 'stuff' as it is, so I let it go. The trouble was that it was going half way across the country and needed to be couriered there.

For ease of transportation, a bespoke crate was therefore required (photo 1). To make this, I started out with a couple of battens and a thick

piece of ply for the base. With the safe on top of this, I could then build the purpose-made crate around it. I had some 25mm thick polystyrene sheets that are easily cut to size on the bandsaw. These were cut to fit snugly all round (photo 2).

Then with more ply and battens, I fitted the sides. A bit of gaffer tape was helpful here and could be left in place for added security. The top made use of a few more battens screwed on from above, then it was ready for delivery (photo 3). ✂



1 So, I'd sold the cabinet and a bespoke crate was required for transporting it



2 I made a dedicated, small pallet and placed polystyrene panels all round



3 The polystyrene was covered in ply and outer battens, then it was ready to send



HIDDEN STRENGTH

“Wotsit all about?” **Phil Davy** examines the uses and value of torsion box construction

You’ve probably heard the term, but just what do we mean by torsion box construction? Well, simply put, it’s when two thin outer skins are sandwiched together with an inner core consisting of a light framework. This core is usually a grid or lattice formation and can be metal, wood, plastic – even cardboard. Glued together, the resultant structure resists any twisting action, known as torsion. The thicker the torsion box, the more rigid it becomes. The same principle is used for building aircraft wings, which are designed to withstand all kinds of forces when attached to a fuselage in the air.

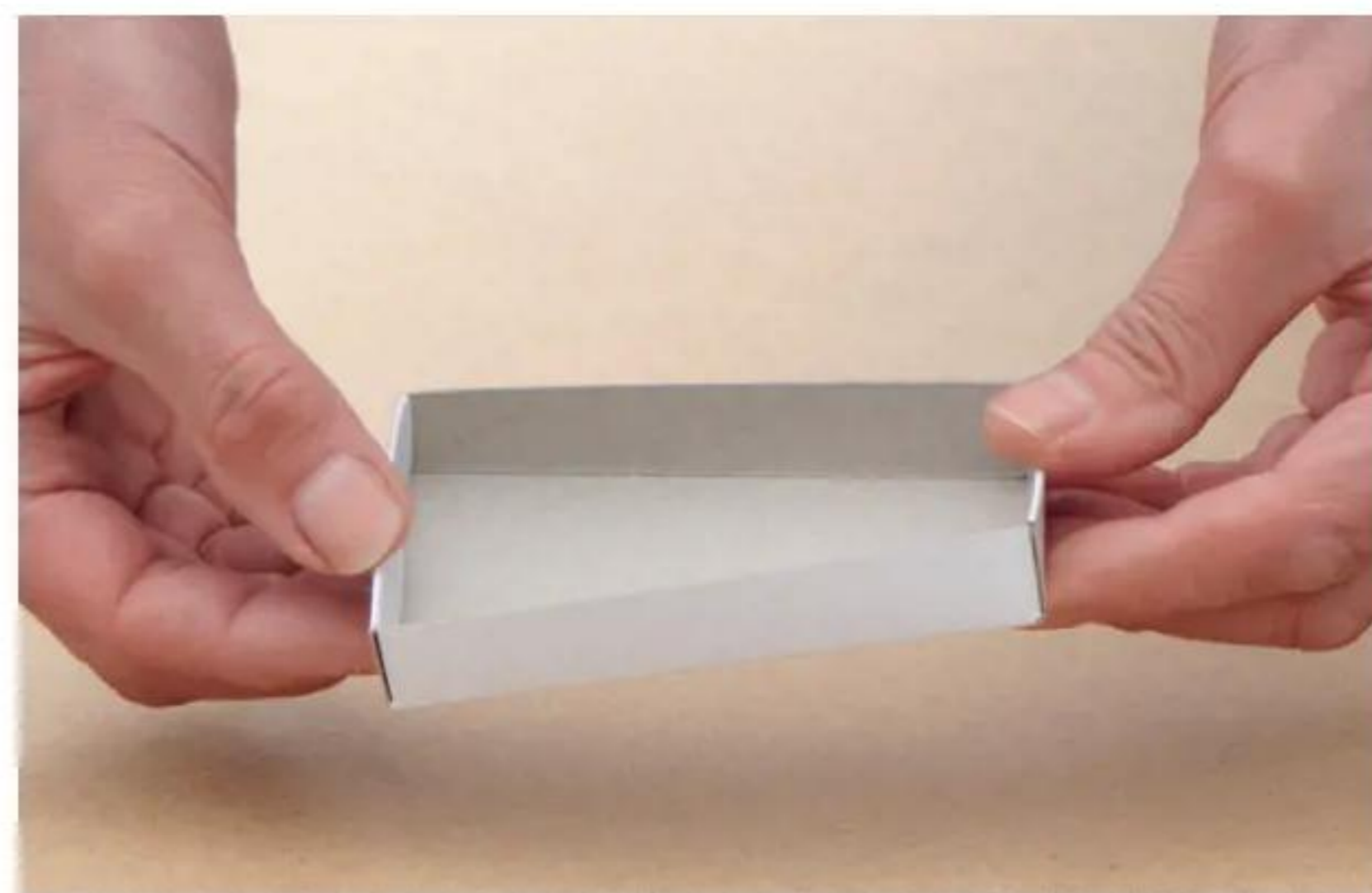
Probably the easiest way to explain the concept is with a matchbox. Empty out the contents and close the box; although the materials – either cardboard or really thin wood – are flimsy, the closed box is quite rigid, yet lightweight. Remove the inner drawer and this can be twisted very easily on its own, as can the outer box. Combine the two and the twisting is virtually eliminated, creating a sturdy structure.

Perhaps the most common use of the

torsion box principle is found in basic internal door design. If you think about the size and thickness – around 35mm – of a typical interior door, it’d take an enormous amount of timber to build one of the same thickness from solid wood. Not only would you struggle to lift the thing, but the material would cost a fortune, even using low grade softwood.

Think about the hinges you’d need and an alternative construction method becomes more attractive. Most interior flush doors

will have a rigid skin on either side, whether hardboard, plywood or a veneered board. With solid wood glued down each long edge for attaching hinges, latch and handles, it doesn’t really matter what’s inside the sandwich, as long as the thickness is consistent. Most doors have an inner cardboard core, which sounds incredibly flimsy. On edge and glued to the outer skins, though, a strong, rigid structure is produced that’ll withstand a considerable amount of abuse, but is lightweight at the same time.



The easiest way to explain the torsion concept is probably with a matchbox



Empty out the contents and close the box; although the materials – either cardboard or really thin wood – are flimsy, the closed box is actually quite rigid, yet lightweight



Torsion talk

So what are the advantages of the torsion box in woodworking? Firstly, there's the lightweight construction. How often have you been in someone's home and noticed a bookshelf sagging under the weight of hard- and paperbacks? Of course, there are several ways to beef up a shelf to prevent this sag, the most obvious being to increase the timber's thickness, but if you have a number of shelves to make, this could easily escalate the cost substantially. And if the timber is a decent hardwood, costs could soar.

Then there's the shelf's bulk. For example, a deep, wide shelf, 25mm thick, is pretty heavy, so you'll need substantial battens and fixings to support it adequately. Over about a metre or more, even this thickness could start to sag if loaded with too much weight. A simple example is a shelf extending across a wide alcove, which has to support a full row of large hardback books.



A shelf built using the torsion box principle overcomes the problem of sagging under weight

And how many of us will stop overloading a shelf when we're short of space, I wonder?

A shelf built using the torsion box principle overcomes this problem, also allowing you to conceal a rear support batten if you wish.

Floating shelves are popular due to their minimalist appearance, and work well in an alcove because you can hide both rear and side battens, as shown in the project. It pays to make a full-size cardboard template before you start cutting any sheet material, though. Alcoves rarely have side walls that are dead parallel!

Where there's no alcove but you still want a floating shelf you can use steel shelf brackets, which are inserted from the back. Again, the torsion box principle works just as well here, with an inner core of thin softwood battens drilled to accept the steel rods.

But it's not just shelving that benefits from this type of construction. Think of any large, flat surface and you may well be able to use the torsion box principle. Many large boardroom tables are built this way where weight and stability are major criteria, not to mention cost. It means that the furniture maker can use exotic veneers to great effect, with bookmatching often

a feature. Table edges can be lipped in solid wood, while overall weight is far less than it would be if built from solid timber.

If you have available workshop space, an assembly table can be a very useful addition. This frees up the main bench and provides a perfect surface for building a project, but it must be flat. A torsion box table makes a lot of sense, as it can be lifted off supporting legs and stored vertically when not required. A cheap solution – especially if rescued from a skip – is to use a hollow door, mentioned previously. Placed horizontally, this gives you a good secondary surface. If your workshop has a small table or circular saw, a torsion box extension table could be a handy accessory when dealing with sheet materials.

Some woodworkers build their main workbench using torsion box construction, simply cramping the structure to a pair of trestles or building it with a permanent supporting framework. Don't be tempted to use a hollow door as your main bench top, though, unless you only do very lightweight work! The cardboard infill isn't really substantial enough to withstand heavy blows from a mallet. ▶

HOW TO BUILD A BOX

The step-by-step photos below show both a veneered torsion box and shelf being built. Construction is the same for each apart from adding the veneer and lipping the shelf's front edge.



1 Decide on the layout of framework cross-pieces. These are spaced about 200mm apart



2 Glue the ends of rails and nail the framework together, checking geometry with a square



3 Measure accurately and saw cross-pieces so they're a perfect fit between longer rails



4 Glue ends and slide into place. Nail diagonally down from the adjacent rail where necessary



5 When the glue has dried, carefully plane the framework edges flush if required



6 With top and bottom panels cut over-size, apply glue to the framework's upper surface



7 Position the MDF and pin to the framework, using either a nail gun or hammer and oval nails



8 Trim MDF edges flush when dry. Cut veneer slightly over-size and apply glue to the top



9 With newspaper under the veneer, cramp box to a flat board and leave to dry



10 Trim the veneer edges flush with a router or use a finely-set block plane

BUILDING A BOX

To illustrate the principle, I built a couple of torsion boxes, both of which were straightforward to make but quite time-consuming. The first one is veneered in bubinga on one side to show how it's possible to make a tabletop or similar look fairly exotic. I've cut away the reverse face to reveal the inner core construction. Both top and bottom are 6mm MDF while the inner core is poplar, which is lightweight, inexpensive and easy to work. I had a couple of lengths already thickened to 8mm, so this was a good opportunity to use it up. You could use 6mm MDF for the framework, but whatever the material, ensure that each piece is finished to exactly the same width as the next. If not, the box's top and bottom won't be parallel, with sags and bumps visible.

I found that it's something of a fine line between weight and thickness. Obviously the thinner the framework, the lighter the completed box, but too thin and nails or pins could split the wood. Butt joints are all that's needed here; there's no need for elaborate halving joints, but do ensure that cross-pieces are a snug fit between the longer rails. Any gaps could reduce the box's rigidity and stiffness.

Making a torsion box is the perfect

project for a nail gun, though you don't need a heavy, compressed air job. I used a basic 18V cordless tool that worked fairly well. You could use panel pins or oval nails, but unless you work rapidly the glue will start going off before you've reached the box's end. Make sure you build it on a completely level surface, and don't assume your bench top is dead flat. If in doubt, use winding sticks to check. Before gluing, draw the core frame-work's centrelines on the outer surfaces of both skins. This will give you an accurate guide when it comes to nailing.

If building a large torsion box, you need to use an adhesive that has sufficient open time, especially in warm conditions. I find it's better to use white PVA rather than yellow aliphatic resin glue, which grabs more quickly. On a large area, the fastest way to spread it evenly is with a foam roller, which can be purchased cheaply from DIY stores. For a small box, use a brush or simply squeeze a zig-zag bead of glue straight from the bottle.

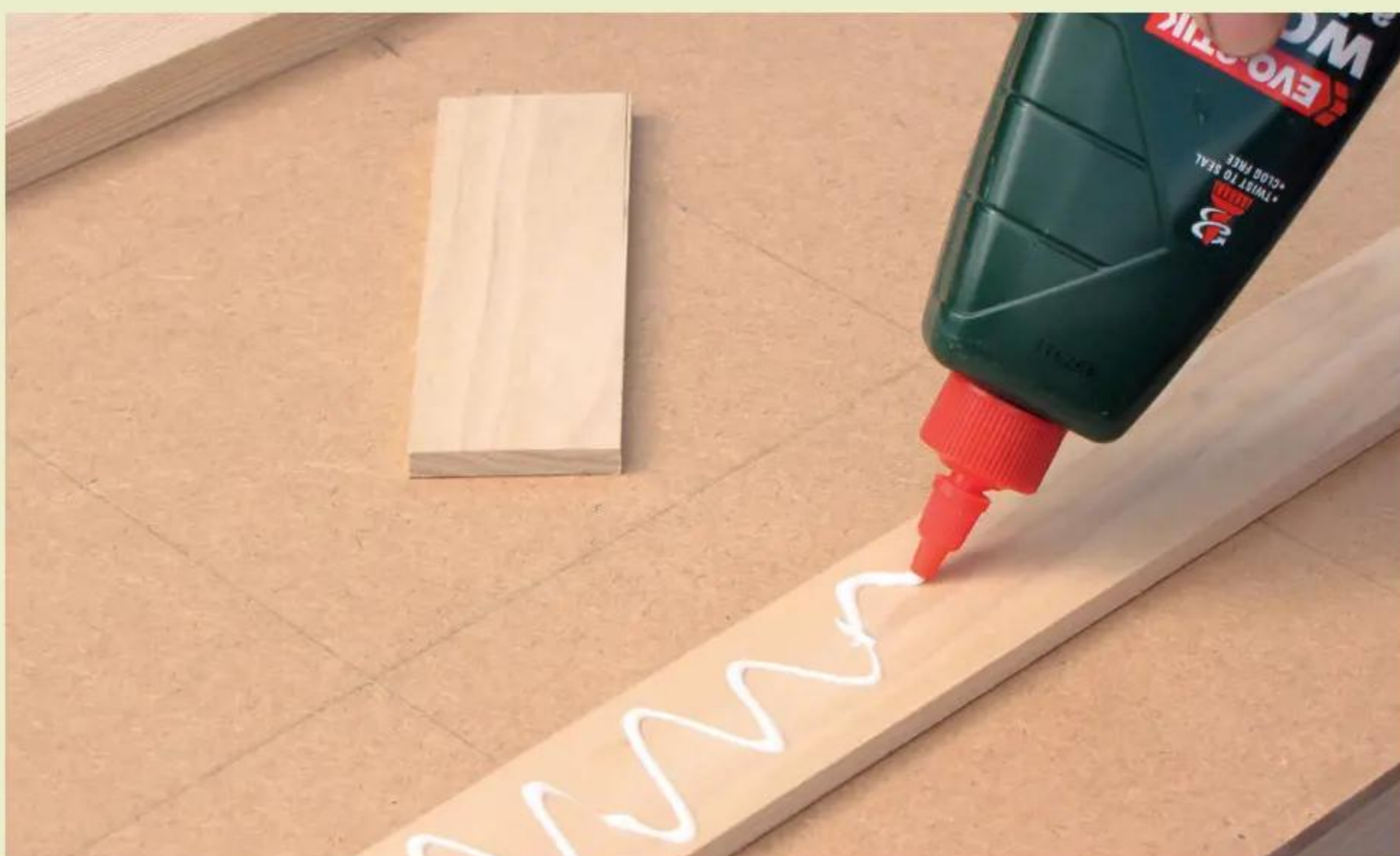
For the alcove shelf, I decided to use PAR softwood for the framework. Sold as a door-stop, it finishes at 14mm thick, which could be thickened to 10 or 12mm in order to reduce weight. I ripped this down to 38mm wide, making an overall shelf height of 50mm with the MDF panels added. ❌



When applying glue to a large area, it's best to use a foam roller



Despite the lightweight construction, torsion boxes are remarkably strong and durable



11 The shelf is lipped along the front. Cut wood over-size and plane edges once the glue is dry



12 Ensure the support battens will slide inside the box's ends



13 Fix battens to the alcove's rear and sides, checking they're level. Slide the shelf into place



14 The completed shelf should be able to withstand a considerable amount of weight

GOOD SOLID WORK



CHISEL
RATING



David Oldfield eschews his usual veneer work to make cabinets in ash and cherry

Have you ever worked with fine straight-grained English or European ash? I had an opportunity to use the timber when clients asked me to make a bathroom cabinet in a pale timber. The bathroom interior was white and minimalist, and they liked the Shaker style. What could be done?

Admirably, the Shakers only ever did just enough, never any more than was necessary. They got it right and that's why their individual style has prevailed for so long, so I was pleased that the customers had chosen it.

The timber, however, was another matter, and I had a job finding some until I spied a large packet of pale 25mm ash at Sydenhams in Wiltshire. Untouched – they had to break the bandings for me – I had first choice. 50% of the boards had a tight, straight grain, all chalky white in colour – absolute dreamland! I drew up the piece, showing sample and drawings, in effect an unarguable *fait accompli*. The clients didn't argue. I'd won the day, but only because I'd put a lot of thought into the project. What I'm really saying is, if you want to win points, you've got to do the homework.

Note: Something I discovered as I developed the drawing was the similarity in part that the Shaker style has to Egyptian line and form. I also wanted to put my own stamp on the work, so my idea was to do an impression of the style, adding a contemporary touch to it. When I skimmed the boards on the planer to have a better look at them, oh joy! They were wonderful. I was looking forward to making a piece in the solid.

Taking stock

The cabinet had to look crisp, indicating much attention to workmanship. Although not consecutive, the timber was easy to match when selecting boards for sides and top. Drawer fronts and doors got the same treatment. The drawer fronts all came from the same board, so the grain would follow through, and the door stiles and rails were from two identical 'sister' boards.

Mitring the sides to the raked front pillars caused some head scratching and table saw work; I'm too lazy to draw the method but it's not rocket science. The drawers, however, were a different kettle of fish. How do you get three in a row running on a conventional framework to have



no visible division? This isn't the easiest thing to do because in order for the drawers to slide perfectly, the framework has to be made with great accuracy. I wanted a touch of the Arts and Crafts about the cabinet, so the decision to show through-mortises where the base is supported by the sides was a good one; you get so used to your machines solving everything that doing the angled mortise & tenons by hand was sobering.

Decisions, decisions

I had to decide on a raked or curved moulding where the base connects to the top. Raked is

Shaker; curved is Egyptian. I thought my choice was a bit naughty and much more difficult to resist. When all was put together and nicely polished – I used a water-based lacquer so as not to darken the ash – I was pleased with the result and so were the clients.

It had to be delivered to their flat in Covent Garden, London, but I blanched when they told me it was a third floor apartment in a narrow one-way street with a traffic warden lurking on every corner. Not only that but I had to do the deed on a Friday evening.

A week later, with my Mercedes Estate

I was in dreamland when sourcing the tight straight-grained boards for this beautifully simple Shaker cabinet



FURTHER INFORMATION

Sydenhams – www.sydenhamstimmer.co.uk
Turnstyle design – www.turnstyledesigns.com

completely blocking the street, hazard lights going and surrounded by drunken revellers, myself and a friend hastily removed the cabinet and lugged it up three flights of tortuous stairs while my daughter guarded the car. On returning, we found her blasting the ears of a white van driver who'd made the mistake of moaning about "women and cars." The episode ended in our triumphant laughter.

So, working in the solid? It was an enjoyable departure from my usual methods and now I'm looking for another bite at the cherry – see sidebar opposite.

CHERRY WOOD DIGRESSION

While I was busy with this commission, another came in for a dressing room cabinet, and I wanted to make it in English cherry. Unsuccessfully looking for this, by chance I came across an American cherry log, sawn and stacked consecutively, which was pale, with no sap wood, and untouched.

The reason I mention this is because for the previous four to five months, I'd been doing saw-cut veneer work. Saw-cut work has a different feel about it because you're making or inventing your own timber. The ash and cherry boards laid out in my workshop had a rather more rudimentary quality.

Because the drawers are large, the selection of boards was therefore important, the grain having to follow through from one front to another. The cabinet's 45mm leading edge was mitred onto the planked sides for the sake of clean uniformity.

Making the pigeonhole framework for shoes wasn't much fun; all those stopped housings did my head in, and I quickly discovered the importance of accurate marking up. Once again, polishing with a water-based lacquer helped the piece retain its natural colour.

The drawer handles in stainless steel and stitched leather came from Devon-based company, Turnstyle Design. The piece was only 50mm shorter than the dressing room ceiling, and without the brawn and intuition of a decorator who happened to be working at the house, it'd not have fitted into the space. A salutary lesson learned. ✕



Dressing room cabinet in cherry



LETTERS

★ LETTER OF THE MONTH

MINER'S SAFETY LAMP REPLICATED IN WOOD

Hi Tegan,

For me, one of the main reasons for purchasing your magazine is getting inspiration for things to make, so I thought the attached might be of interest to others.

I purchased the miner's safety lamp shown here with a view to converting it to operate with an LED lamp and battery. However, having dismantled it, I thought it'd make a nice project to replicate in wood, perhaps as a gift. The finished project is shown alongside the original (photo 1).

Battery compartment

To get the colour contrast of the original, the main body and cap are made from sycamore and the remainder in European walnut. I tried to make it as dimensionally identical as possible, which made the battery compartment quite snug, but succeeded by hot-gluing the battery into place, offset from centre to create space for the switch (photo 2). The lamp is a 12Vdc 1.5W G4 warm white LED, which works quite happily with the 9Vdc PP3 battery.

The original's lamp housing bottom section is secured with a screw thread – I used a reasonably snug fit and magnets, also as shown.

Perspex tube & rivets

The overlapping seam on the back of the main body is simulated by scoring a line along the body using the lathe toolrest and a knife, and hand-chiselling a recess from one side of the scored line.

The 'glass' is made from 50mm diameter Perspex tube, which I

purchased online. The lamp can be swapped out to achieve the desired level of brightness, but the 1.5W provides a garden night light that's atmospheric but not too bright.

Making all the rivets identical first time round was tricky, so I made a few more than required, so I could use those that were equal in size and shape.

Anniversary gift

The whole piece is finished with three coats of tung oil, which provides good protection and a nice satin finish. As you can see from the brass plate, I did gift it to a fellow woodworker, to mark his anniversary.

Kind regards, **John Packer**

Hi John, it's good to hear from you and I'm glad to hear that the magazine has been able to inspire you with its various content over the years. We featured your spaceship pepper mill in the July 2023 issue, so know your woodturning skills are very proficient. We love your wooden replica of the miner's lamp and the way in which you were able to simulate features such as the overlapping seam on the back of the main body, not to mention developing your own design for the lamp and battery holder, which is very clever. This is definitely a worthy anniversary gift for a fellow woodworker, and no doubt the recipient appreciated your efforts and skill involved. Great work! Best wishes, Tegan



1 The original miner's lamp (left) alongside John's wooden version (right)



2 The battery was hot-glued into place, offset from centre to create space for the switch



3 The original's lamp housing bottom section is secured with a screw thread – John relied on a fairly snug fit and magnets

ANDREW WHATELEY: 1952–2024 A GENIUS WITH WOOD, FONDLY REMEMBERED & CELEBRATED

Dear Tegan,

I worked for *The Woodworker* a very long time ago – the editor at the time was Zachary Taylor.

I thought that magazine readers may be interested to know of the death of Andrew Whateley in May this year – he was 71.

Andrew was the craftsman who interpreted/crafted many of John Makepeace's works in the 1970s; he was the one who insisted that the maker's name appeared alongside that of Makepeace's.

A profile piece on Andrew's life and career was published in *The Woodworker* of June 1987. Additional details include the fact he left the Royal College of Art in 1989 to set up and renovate a workshop in North Oxfordshire. During this time, he worked for Andrew Varah at his workshops in Pailton, Rugby until 1994.

I was his partner until 1998. We did a lot of experimental steam-bending work together.

Best regards, **Rebecca Myram**

Hi Rebecca, thank you for bringing this sad news regarding Andrew's passing to our attention. He leaves behind an amazingly rich legacy of incredibly fine craftsmanship and was an inspiration to many other furniture designer-makers. Andrew created truly magnificent work using the medium of wood and developed a number of highly skilled techniques, such as those in kerf lamination, for example. He worked with some of the most iconic and visionary names, including John Makepeace OBE and Andrew Varah, and his talents were recognised by the Worshipful Company of Furniture Makers in 1987, which saw him being presented with the Designer Craftsman Award and going on to pursue



Andrew Whateley in the workshop practising his highly developed kerf lamination techniques

The Natural

Making the finest furniture comes deceptively easily to Andrew Whateley. Aidan Walker looks at the work of an important but unsung figure who's about to take his last breath.

The woodworker's life is a long one, and it's often a life of quiet struggle. Andrew Whateley, a furniture designer and maker, has spent his life in the workshop, creating some of the most beautiful and functional pieces of furniture in the world. His work is a testament to his skill, his passion, and his dedication to his craft.



A wooden chair, likely one of Andrew Whateley's creations.



This profile piece on Andrew Whateley was featured in the June 1987 issue

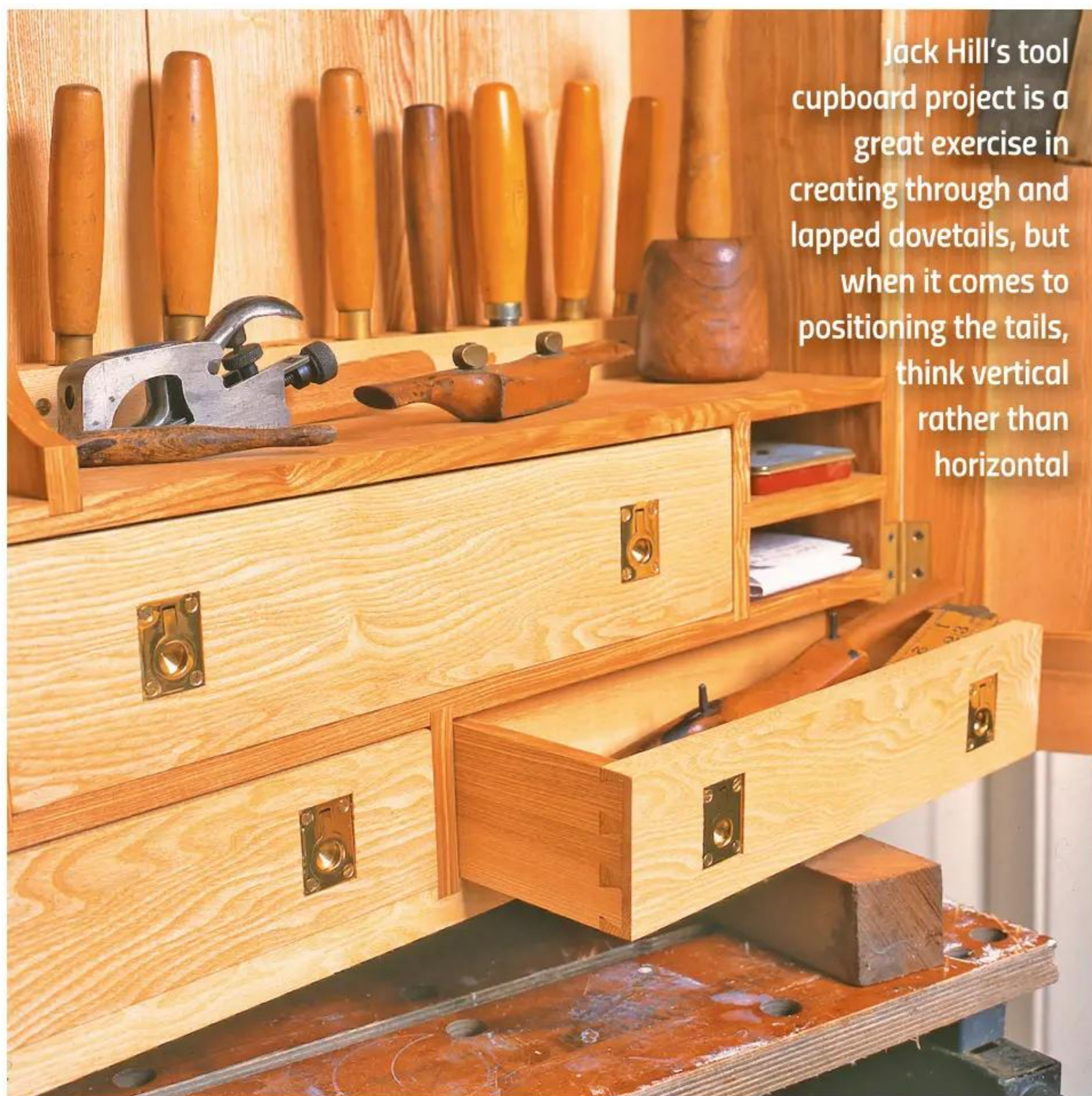


Carved cutlery case, specially commissioned from the RCA

revolutionary ideas such as those of experimental steam-bending.

Andrew touched the lives of many fellow furniture makers and craftspeople, and will undoubtedly go on to be discovered by those of the future. His legacy lives on as do his pieces, which showcase his incredible eye for detail, and the fact he was a true perfectionist.

Thank you again, Rebecca, for sharing your story and bringing this original feature to our attention. RIP, Andrew. Best wishes, Tegan



Jack Hill's tool cupboard project is a great exercise in creating through and lapped dovetails, but when it comes to positioning the tails, think vertical rather than horizontal

TOOL CABINET DOVETAIL QUERY

Dear Tegan,

May I compliment you and the team for another excellent magazine – in this case, the August 2024 edition.

Jack Hill's traditional woodworker's cupboard was particularly interesting and timely as I'm hoping to soon build such a cupboard for my own workshop.

I have a query regarding the diagram, which shows dovetails for the top and sides, and am wondering if this is in fact correct as I would've expected the tails to be on the upright sections and the pins on the cross-piece for strength, particularly given the weight of the contents.

I accept the joints would be glued but the mechanical strength of the tail portions would be better used to give added strength to the joint. I'd welcome your comments.

Keep up the good work; I look forward to every edition each month.
Kind regards, **Len Aspell**

Hi Len, thanks for spotting this and yes, I do agree with your observations regarding the project. If I were building a similar tool cabinet, I'd certainly position the dovetails so that the tails were on the vertical boards, as opposed to the horizontal ones. Even a few hand tools are going to add considerable weight to what's already quite a heavy hardwood cabinet, so the joints will need all the help they can get! I can only assume that the drawing error wasn't spotted prior to print, so apologies that this crept in without either party spotting it. I hope this helps!

Regards, **Phil Davy**

WRITE & WIN! **trend** tool technology

We always love hearing about your projects, ideas, hints and tips, and/or like to receive feedback about the magazine's features, so do drop us a line – you never know, you might win our great new 'Letter of the Month' prize – a Trend T8EK 240V 2,200W 1/2in dual-mode plunge router, worth £349.99! Engineered for both hand-held and router table use, it comes with a host of accessories, all supplied in a moulded carry case to ensure safe storage. Simply email tegan.foley@dhp.co.uk for a chance to get your hands on this fantastic prize



Good luck!

READERS' HINTS & TIPS

veritas

In conjunction with Veritas and Axminster Tools, we're giving one lucky reader per month the chance to get their hands on a fantastic Veritas apron plane with PM-V11 blade. Ideal for trim carpentry and featuring a ductile cast-iron body, its unique side wings allow for a comfortable, firm grip. To be in with a chance of winning this great piece of kit, just send your top workshop hints, tips or pointers – indeed anything that other readers may find useful in their woodworking journeys – to tegan.foley@dhp.co.uk, along with a photo(s) illustrating your tip in action. To find out more about Veritas tools, see www.axminstertools.com



HANDY HINT: CUSTOM LATHE TOOL RACK

My lathe tool rack is based on a similar one for fishing rods, which I made some years ago. You'll need 20mm thick walnut, which measures 79 x 254 x 762mm. I made the matching front and back tool supports by ripping a 79mm wide board in half after drilling centred 38mm



This custom rack allows my lathe tools to rest firmly in place, while being easy to remove and replace

diameter holes on 48mm centres. I installed the 68mm wide bottom board at a 45° angle, in order to gently wedge the long handles between the bottom and two supports. This system accommodates different handle styles by allowing each tool to find its natural resting point. Now my lathe tools rest firmly in place, yet are easy to remove and replace.

Dick West

I installed the 68mm wide bottom board at a 45° angle, in order to gently wedge the long handles between the bottom and two supports



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TIME SAVING SOLUTIONS FOR THE TRADE

THINKING WITH

pencil & paper



Mark Griffiths looks at the basics of sketching by hand and what benefits it offers over CAD

When discussing this article with the network of makers, architects and other designers I know, I found that people fell into two distinct camps. There are those who'll reach for a pencil when a creative idea comes to them, while others will automatically go for the mouse. As much as I love my laptop and am amazed at how indispensable it's become in my working life, when needing to design and produce working drawings, I have to throw my hat in with the pencil and paper users.

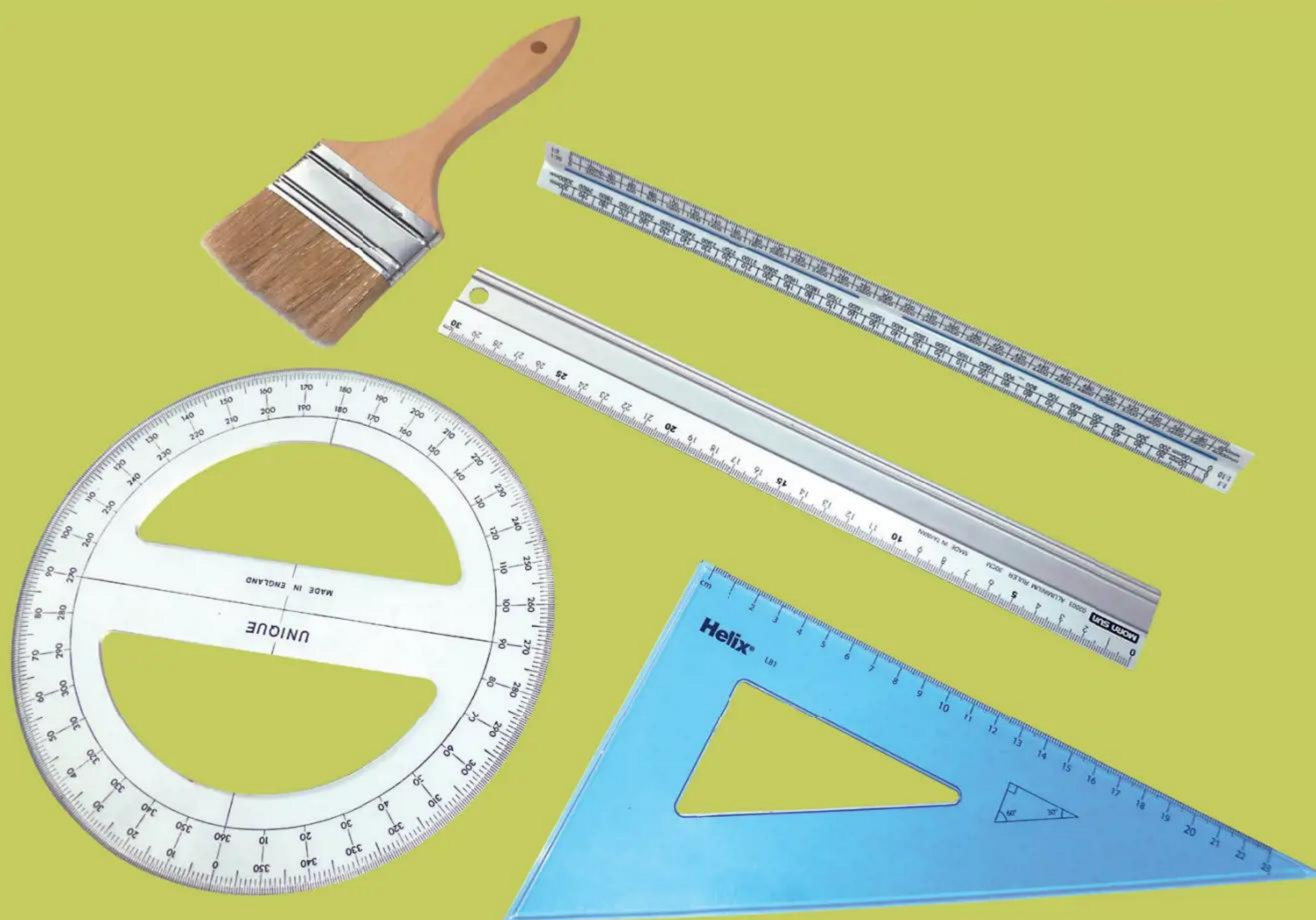
I've heard all of the arguments relating to the flexibility and speed of computer drawing packages, and I can clearly see their point when faced with plotting out a layout with lots of repetition, like a kitchen, or when a client likes the design but wants the whole thing to be 10mm smaller. Two minutes of computer work equates to hours spent on the drawing board.

Fundamentally, there are three reasons why you'll still find me hunched over my much-loved

A1 drawing board. Firstly, to be really good at CAD (Computer Aided Design), you have to use it a lot. I've seen designers do amazing things with it in the blink of an eye, then go on to goad me with unkind names like 'technophobe' and 'Luddite'; they tend to spend most of their lives drawing on computers, and when they do take a break, it's to talk about it on various social media channels.

Only having to draw up plans on average once every three weeks, I'm just not putting in the hours to get any good at drawing on a computer. And all the time I try to struggle through a CAD layout, I'm constantly missing the familiarity of my old A1 board, and thinking how I could have had this finished by now.

The second reason is that I think it can be all too easy to let the computer do the designing for you. As an old friend, who'd been a CAD monkey from the start, told me: "The problem ▶



A decent drawing setup will require little more than some pencils, a few set squares, a ruler, French curves, a pair of compasses and a flexible ruler



TIPS

- A very good practise when dealing with commissioned work is to have yourself and the client sign off on the original and copies of the drawings, just to avoid any later misunderstandings. This is commonly done and goes some way to protecting both parties
- Remember you're working with pencil and ink, so keep hands clean and use a piece of paper between you and detailed sections; this prevents any unwanted smudging
- To keep the page tidy, any eraser particles should be removed with a small paintbrush as opposed to by hand

Sketching calls for a range of pencils to create tone and shading

COMPLETE SETUP

An adequate drawing setup can be put together for very little cash outlay. Even professional A1 architects' adjustable stands can be found on eBay for a reasonable price now that everybody is using computers. However, if space is an issue, a simple 450mm x 600mm board of 18mm smooth melamine MDF and a T-square will be fine. Along with these, you'll need set squares with the angles of 90°, 45°, 30° and 60°, a good quality ruler, pair of compasses and a set of French curves, or a flexible ruler for creating irregular shaped work. There's no need to go overboard when it comes to pens and pencils – all you require is a standard clutch pencil and a 0.3 fine liner, the latter being used to ink in the finished drawing prior to photocopying.

A quick note on photocopying: due to the slight distortion that can take place in the copying process, it's advisable to never work from an undimensioned photocopied drawing; this can particularly affect accuracy on smaller scale drawings. Always keep your original drawing to work from.

with computers is that we tend to think they're more intelligent than us." My point is that when using a computer to develop a creative idea, can we unwittingly allow its limitations to become our limitations?

This feeds into my third and most important reason: for me the stages of inspiration, designing and making are all part of a craft that relies on a connection between hand and eye. The mind's eye sees the concept and transfers the image to the hand to sketch out; as you perform this act you're already working out construction details and any potential problems that may arise. It's this same hand-eye relationship that'll be used to build in wood what it's made on paper.

I remember seeing Sir Norman Foster's first basic freehand sketches of The Gherkin – 30 St Mary Axe, London – and I was struck by



A freehand sketch is nothing to be afraid of!



It's great to have a professional A1 architects' drawing stand, but a simple board of 18mm smooth melamine MDF will do the job just fine

the thought that all great works of architecture and design have started as a rough sketch on paper no matter how complex the final object.

Drawing is a language for communicating your ideas to others. You owe it to yourself – and to the people you're working with or for – to be able to freehand sketch and draw a layout competently and clearly. No matter how skilled a craftsman you are, if you're unable to successfully illustrate how a project will look to a potential client, then how do you expect them to share your vision, become excited by your ideas, or even hand over a deposit cheque? Of course, the client may just be your partner, but then they can be the toughest of clients to win over!

Beginning with confidence

When starting out, keep the subjects simple and try not to be put off by your first creations. I like to watch my eight-year-old daughter, Amy, drawing and painting, without inhibitions and with total joy she freely expresses her ideas on reams of paper. Look for work by artists that you find interesting and try to copy them, even if using tracing paper; this will help you understand how the works were created.

Always take your sketchbook with you and try to look at objects and places, not just for the first impressions they give, but how the light gives them form, the tones, textures and how they fit in the space around them. Studying the visual world that surrounds us is of the utmost importance to a designer.

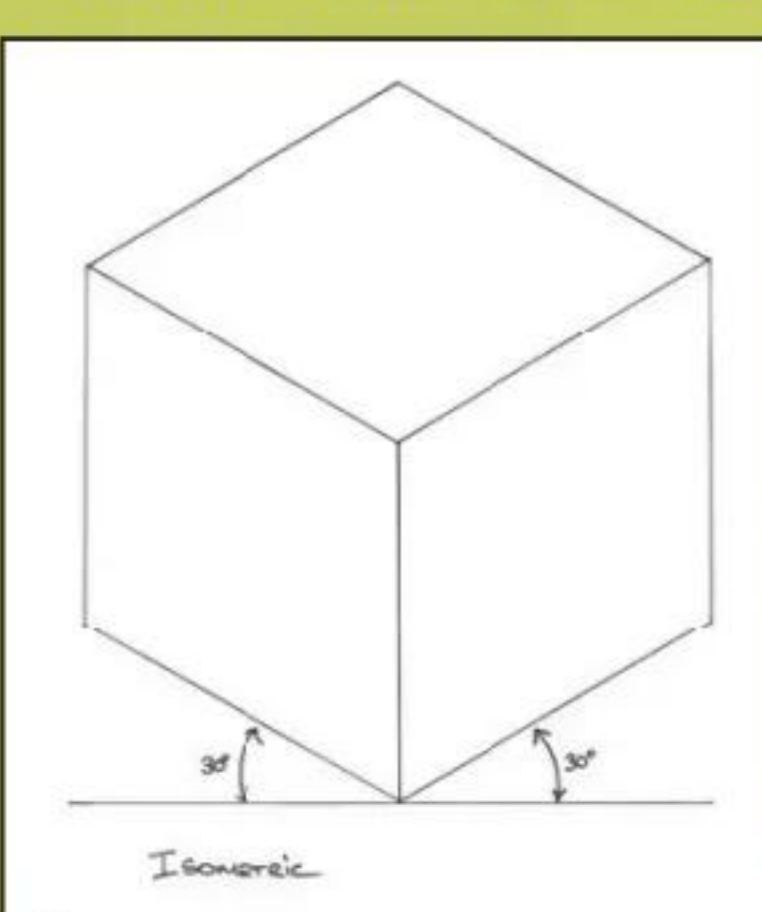
It's worth investing in the best quality

heavy-grade watercolour paper, which will give you the option of adding ink wash or watercolour if you wish to experiment; the paper gives a crisp pencil line and can take lots of rubbing out. You shouldn't be intimidated by the cost and think that such paper only deserves 'good' drawing. If you're nervous, try drawing a line across the middle of the page – you'd be surprised how effective this is at conquering these fears.

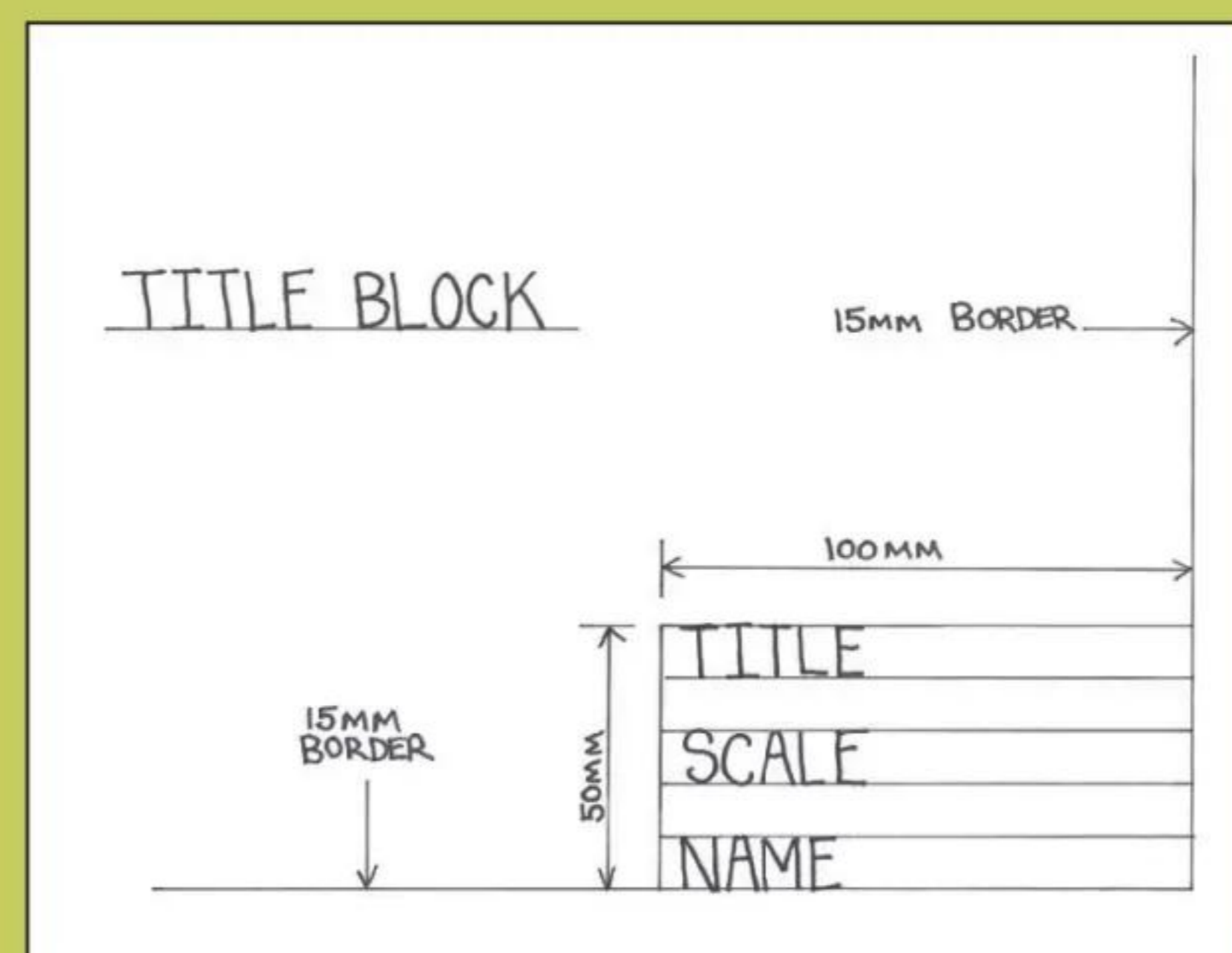
You'll find it more comfortable to mount your sheet of paper on a thin board of ply or MDF just a little bigger than the paper itself, using either clips, or better still, masking tape. A range of pencils will be useful for describing tone and shading work, and as your confidence grows, try experimenting with things like willow charcoal for large shading areas, then adding light to shading with strokes of an eraser or white pastel; it's amazing how simple techniques such as this can give life to a drawing and provide a clearer image of what your final piece will look like when made.

Building a picture

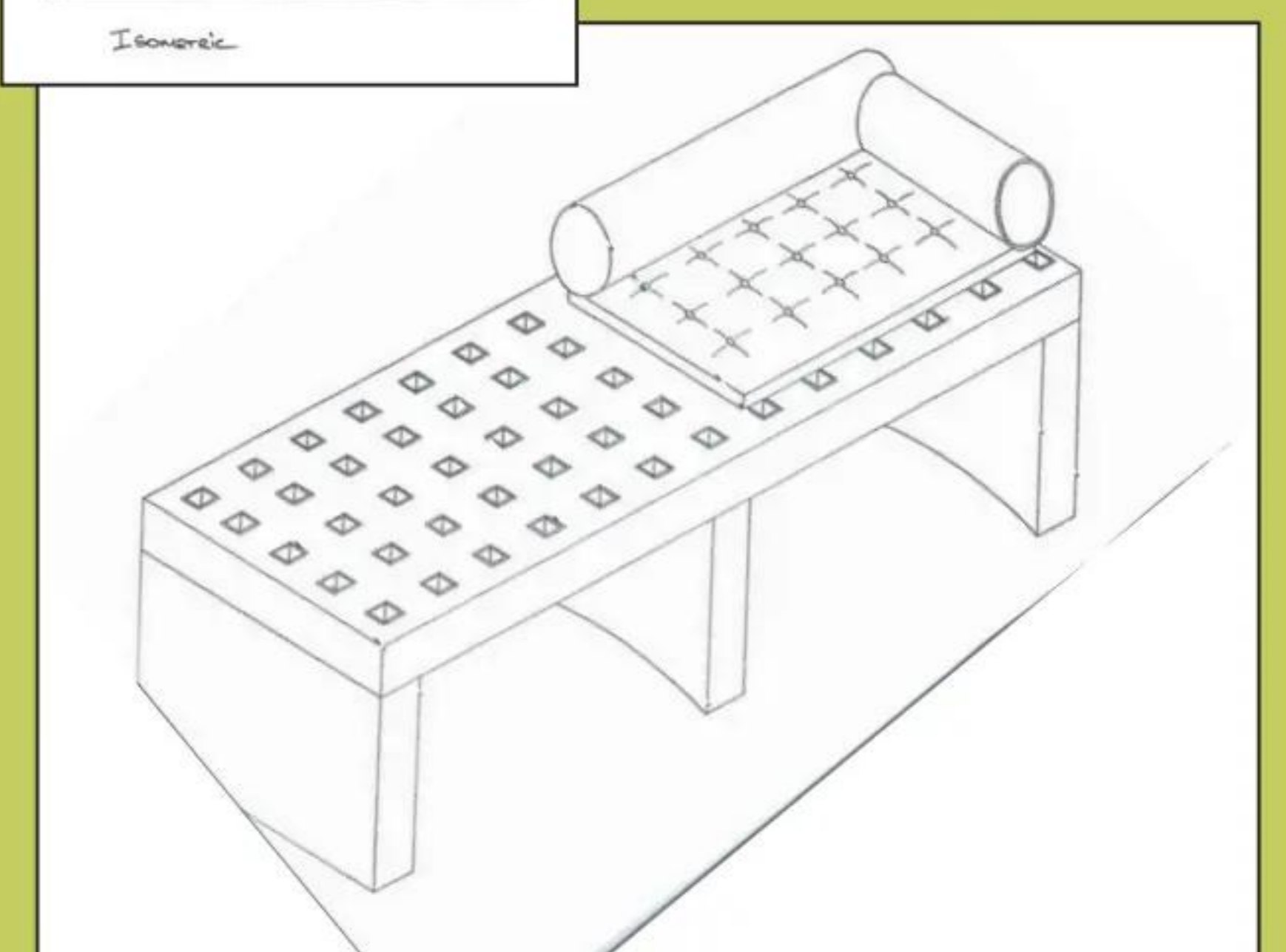
I find it's best to start your sketch with light construction lines, preferably using a 6H pencil, which is one of the hardest. You'll only need



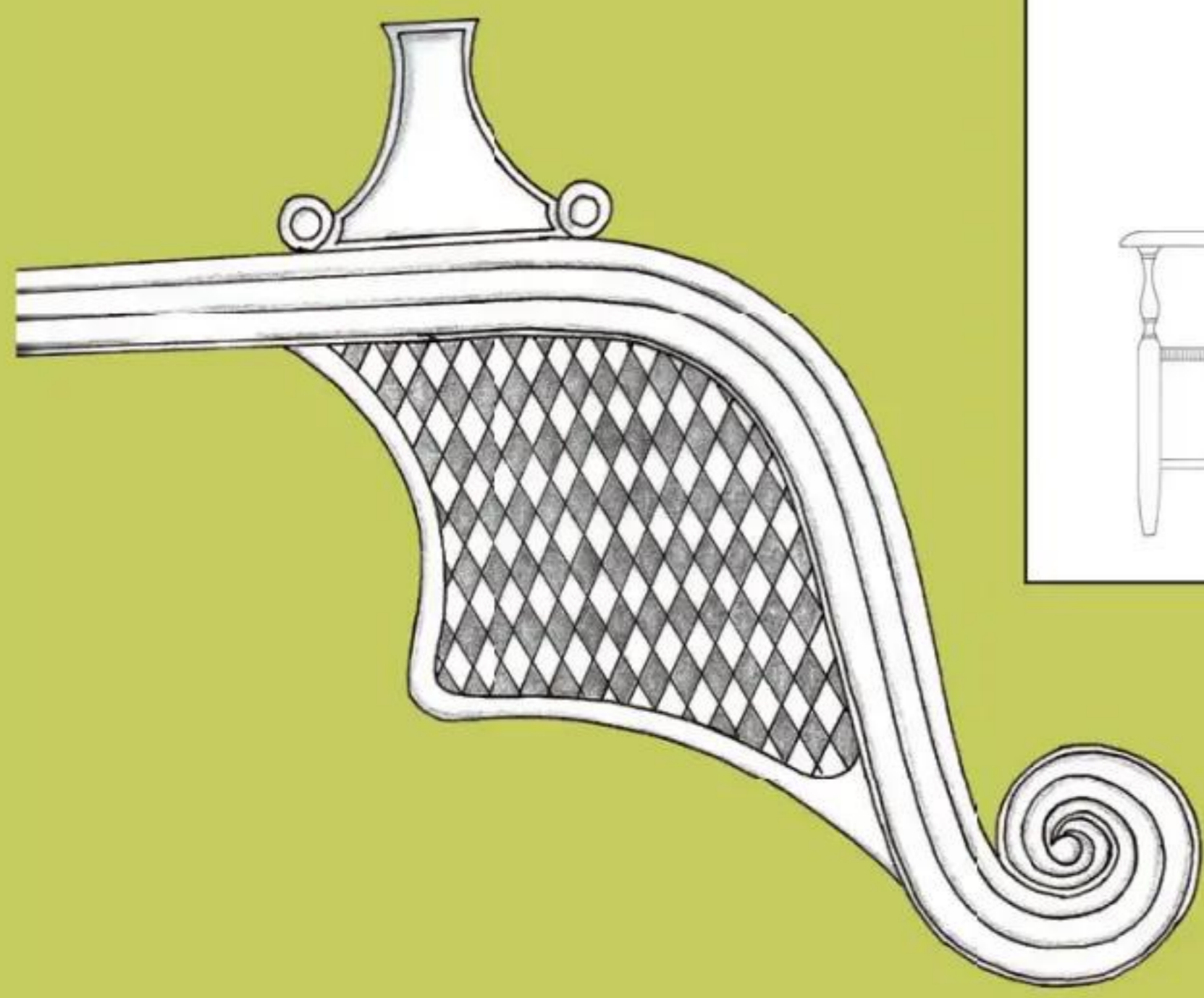
a few lines but make them bold – these are important as they represent the drawing's foundation. Stand back and see how they look proportionally. If your



The page should have a 15mm border running around the four edges, and a title block in the bottom right-hand corner, 100mm wide and 50mm high



To present an idea to a client, I'll tend to sketch in isometric projection



Being able to convey your ideas to a client via a sketch can be the key to winning a commission

drawing is in perspective, set out the lines to describe this viewpoint, remembering to keep it at 30° or below; anything above this and the sense of perspective fails the eye. From this point, you can start to build up the image, switching to a softer pencil.

Most objects around us aren't two-dimensional but have weight, depth and occupy a space, all of which will have to be taken into account in your drawing. With the drawing's framework in place, you can bring it to life by adding form and texture. An object's form is revealed when light strikes it, so try setting out a few still life objects on a table, then light it from different angles and see how the light both reveals and conceals detail.

Adding tone and texture to your sketch by using different hatching and shading techniques will also help give the subject a sense of depth and perspective.

To present a design to a client, I'll tend to sketch in isometric projection, which is great for furniture because it shows the piece in a way that's easy to relate to, and allows you to display the detail of three surfaces. In isometric projection, the axis lines are set at 30° to the horizontal and one axis is vertical from it. To practise this technique, you can get drawing pads marked out with an isometric grid. Alternatively, try slipping a sheet of this paper under a plain sheet to give an isometric ghost line to work to.

From sketches to plans

Keeping all of your early sketchwork and any paper with dimensions or notes on is a great



Finishing a sketch with ink or watercolour makes for a design that'll be all the more attractive to the client



Having laid down a foundation to your sketch, start to build it up with intricate detail

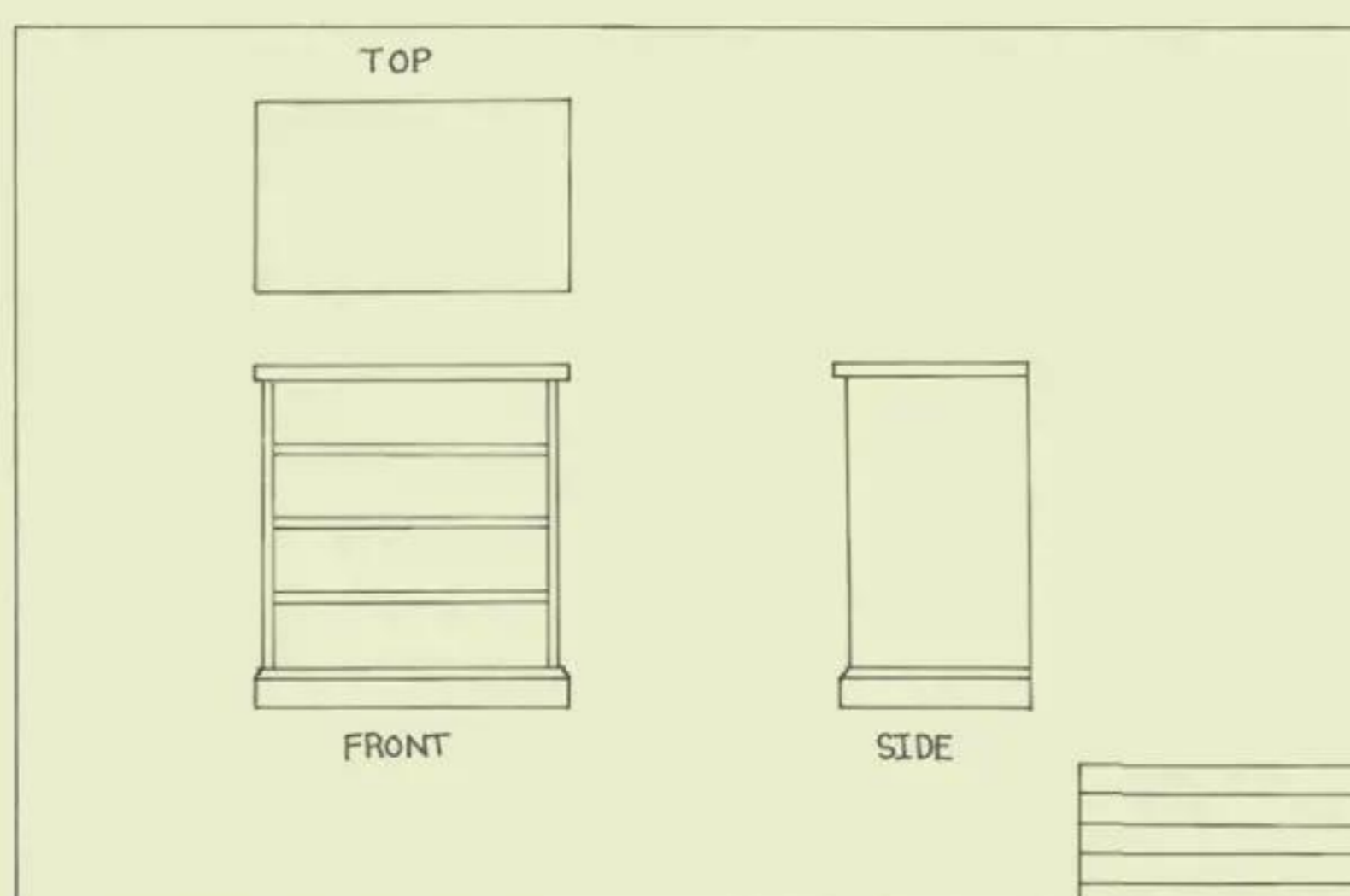
habit to get into – as work progresses on a project, it's good to look back and see where you were coming from. It can also be a useful reference tool for any future work.

Once all initial ideas and possible working issues for a commission are resolved in my sketchpad, I'll progress to the A2 layout drawing. Before drawing up any plans, you need to know who they're for – a client, co-worker, contractor or just yourself – and how much information will need to be detailed. Some clients will just want a clear drawing showing how the piece will look, whereas a contractor will need a millimetre-accurate illustration, with clear construction details and perhaps some separate views of

THE THIRD ANGLE

The best way to illustrate a freestanding piece of work is the good old 'third angle' projection. This will show a front elevation, end elevation and plan. Ideally this should be set out with the end elevation at the bottom right-hand side of the page and front elevation at the bottom left with the plan above, remembering to leave space around for any notes or dimensions you may wish to add.

When possible, I try to scale my drawings 1:20, as this is quick and easy to work out. As a result, messy dimension lines can be dispensed with, leaving a much cleaner uncluttered page.



The 'third angle' projection will show a front elevation, end elevation and plan

more complicated parts shown.

Whoever the drawings are for, it's important to set them out correctly. The page should have a 15mm border running around the four edges, and a title block in the bottom right-hand corner, 100mm wide and 50mm high; in here, information such as the job name or number, the drawing's scale, date and your name can all be added, preferably in upright capital letters.

If you're drawing a kitchen or wardrobe layout, a plan view can be the best option; this will show where the work will be situated and provide an idea of how it's going to work in the space around it. This is particularly helpful to the client when trying to imagine how the room will change and what storage area the furniture will afford. However, a second drawing detailing how the furniture will look will probably also be needed to complete the picture.

Sketching as thinking

Beyond the introduction here, there are many techniques and tricks that can help further your work, which would take many more pages to explain. One technique is to copy your work onto tracing paper, which can not only add a professional quality, but also be used to overlay onto some corresponding drawing – adding more detail but keeping the top drawing simple. When shading your work, blocking out adjoining areas with masking tape will keep shaded parts looking crisp.

In time, sketching will become a part of your thinking process – you'll see an object and know how to translate it onto the page in the same way as a furniture maker will look at a chair or table and instinctively understand how it was constructed. The value of CAD programs is obvious, and it's clear that they have an ever-increasing role in the world of design. But think of CNC machinery: it's undoubtedly fast and accurate, but to see the same job executed by a skilled craftsman is far more inspiring.

When delivering a piece of commissioned furniture, I like to present the owners with a cleaned up copy of the designs. I know of some makers who'll go as far as adding some watercolour and framing them for the client. One thing's for certain, however: it looks much prettier than a framed memory stick. ✂

USEFUL SOURCES

- **A Guide to Drawing**, by Daniel M Mendelowitz, David L Faber and Duane A Wakeham – ISBN-13: 978-0495006947
- **The Artist's Handbook of Materials and Techniques**, by Ralph Mayer – ISBN-13: 978-0571143313
- **Drawing and Designing with Confidence**, by Mike W Lin – ISBN-13: 978-0471283904

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AROUND THE HOUSE WITH PHIL DAVY



Last month, I mentioned that I'd made a new door for the workshop. Like most basic shed doors, the one supplied wasn't really sturdy enough and also needed to be taller. Once built, the replacement measured 80mm thick, as opposed to the more common 44mm found on exterior doors, so almost twice the thickness.

Fitted with a new mortice lock, I realised the handle needed a longer spindle than normal. No problem here, with longer versions easy to find online. What hadn't occurred to me, however, was the key problem: those provided were too short to operate the lock. I toyed with the idea of sawing both keys in half and getting them extended and brazed, but this seemed a lot of hassle and a last resort. Again, the internet came to the rescue with the realisation that extended key blanks are available. Finding a local lock specialist, he cut a couple of new keys on the spot, though these weren't exactly cheap. Problem solved!

Q&A SPIT & POLISH

Q I have a couple of bench planes with brass lever caps, which have become rather dull over several years of use. Can you tell me the best way to restore the finish on these, please?

J Everest, via email

A Of course, many woodworkers would argue that tools are meant to be used and not kept wrapped in cotton wool! When you've paid a small fortune for what are premium products, though, it's understandable to want to keep them looking good, and anyone who spends time restoring old tools will probably want them to look their best with minimal effort.

Applying a suitable metal cleaner product normally does the trick, though you may need to first remove light rusting from ferrous metals with steel wool. I've had great results cleaning up tools with Autosol Metal Polish. At around £6 for a 75g tube it's not cheap, but a little goes a long way. Buy it online from Infinity Wax – www.infinitywax.com. It apparently leaves an invisible wax coating on surfaces to inhibit corrosion, though paste wax or camellia oil on cast-iron surfaces will also prevent tools rusting. Don't forget to keep threads on screw adjusters lightly oiled, too.



Cleaning tools using Autosol Metal Polish yields great results



Autosol Metal Polish is ideal for use on chrome, aluminium and metal

Q&A COMBI CHOICE

Q I want to buy a new drill with hammer action for drilling into brickwork and possibly concrete; however, I'm uncertain whether to choose a mains-powered or cordless tool. I'd prefer the convenience of cordless, but am worried that this version won't have enough guts. Any help would be appreciated.

Tim Carter, Coventry

A Cordless tools these days are comparable with 240V versions in terms of performance, particularly if you go for a decent 18V model. Most major brands such as Makita, Bosch, DeWalt and Festool, for example, have their own battery system, so the same power pack can be used across their own individual cordless tool ranges. Cordless drills are far more convenient and safer than mains-powered versions, especially for outdoor work. You don't really want to be using a 240V tool up a ladder or trailing an extension cable across wet ground.

If choosing cordless make sure it's a combi tool, with hammer action. You'll need at least two batteries, which can get quite pricey if you go for a professional tool. I'd recommend at least one 4Ah Li-ion battery if you're regularly drilling into concrete, though a smaller capacity – 2.0Ah, say – power pack will be OK as a spare and keep costs down. A fast charger is handy, and most brands will recharge in about an hour or less. Industrial tools tend to be faster, though this is reflected in their cost.

A selection of cordless combi drills from leading power tool manufacturers



Most major brands, such as Makita, Bosch, DeWalt and Festool, for example, have their own battery system

Mains power

Of course, you'll never run out of juice with a 240V drill, unless there's a power cut. Performance is consistent and they tend to be cheaper than their cordless cousins – after factoring in battery/charger costs. Although less convenient, they do offer a significant advantage. Most 240V drills have a 43mm diameter collar behind the chuck, which allows them to be fitted into a bench-mounted drillstand. This means you can use them for precision drilling work. A vertical drum sander inserted in the chuck is another bonus, allowing both hands to guide the workpiece.

Whatever format you choose, however, ensure the tool has hammer action and don't forget you'll need TCT masonry bits for drilling into masonry. A frequent problem when drilling this material is that the tool can catch and twist, so a detachable side handle will help here.

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1/2in router, drillstand,
sander, Dremel
multi-tool

Phil Davy makes good use of his router to ensure that the oak is the timeless star in this pair of simple mantle clocks

AUTUMN PROJECT: CONTEMPORARY CLOCK CLOCK THESE

With a couple of chunks of gorgeous figured English oak sitting in the workshop for several years, I'd been thinking of how to get the best from them. One would be ideal for a simple mantle clock, perfect for that special Christmas present. Quartz movements are cheap, easy to fit and fairly reliable, therefore making this a simple project, though ideally you'll need a 1/2in router plus a couple of specialist cutters.

I simply cut a rectangular block for the first clock, relying on the startling grain for impact. With less exciting timber, you can increase interest by shaping the top and adding contrasting sycamore banding, as I did with the oak for the second clock.

The blank should be between 45mm and 50mm thick to accommodate the movement and provide enough depth to recess the dial and clock hands. A disc sander is great for shaping the end-grain of heavy hardwood blocks, particularly convex curves. For taming wild grain, I prefer a finely-tuned, bevel-up jack plane for truing up the surface.

Quartz movements

Quartz movements tend to be a standard size and powered by an AA battery. The plastic box containing the mechanism is 54mm square, so you'll need a hole in the blank's rear about 75mm in diameter, though you could rout a square recess instead. The dial diameter is determined by the hands selected for the movement. I used the shortest possible – 24mm minute hand – so a 60mm diameter dial would be feasible. If you don't have an expansion bit, boring holes of this size is almost impossible, unless you're happy to spend a fortune on over-size Forstner bits.

I bored a hole all the way through both blanks with a 54mm Forstner bit, the largest available that was priced economically. This was enlarged to 60mm by template routing – see sidebar overleaf. The same technique was also used for the rear 75mm hole.

My quartz movements were supplied by C & L Clocks – www.clockparts.co.uk – which provides a rapid service. As well as selling several movements, there's a wide range of metal and plastic hands to choose from. You need to decide on dial thickness before ordering a movement as shafts are produced in three lengths. Clock hands are a press fit on the shaft and easy to fit. ▶

TEMPLATE ROUTING



This project calls for a flush-trim bit with top roller bearing



I removed waste with an Axcalibur 16mm twin-flute bit

For this project, you'll need a flush-trim bit with top roller bearing, so the template is fixed to the timber's upper surface. A bottom-bearing bit will work for the 60mm hole, but not the 75mm one, which doesn't extend to full depth. I used several 1/2in bits from Axminster's Axcalibur range, primarily the down-shear flush-trim cutter, which gives a really clean finish. It's important that timber is no more than 50mm thick, as maximum depth of cut is 50.8mm. When template routing, it's often a good idea to use a regular straight bit to remove the majority of waste first. For this I used an Axcalibur 16mm twin-flute bit.

To cut the recess for the clock's cover plate at the back, a rebate cutter is perfect. The Axcalibur set has four bearings, producing rebates from 8-12.7mm deep, available in 1/4in and 1/2in shanks. For details of the Axcaliber range and other items from Axminster Tools, see www.axminstertools.com.



The Axcalibur set is available in 1/4 and 1/2in shank variants



1 Thickness timber to around 50mm, then saw to length; overall clock blank size isn't too important



2 Wild grain is more difficult to tame, though a low-angle jack plane will help; alternatively, use a belt sander



3 For a curved-top clock, it's easiest to make a template from 6mm MDF; draw a 70mm radius with a pair of compasses



4 Cut out the template curve with a Dremel tool or router and trammel arm; alternatively, use a jigsaw and clean up



5 Draw around the template and onto the blank; cut with a jigsaw or bandsaw, keeping to within 3mm of the pencil line



6 The template needs to be accurately made for routing; stick this to the clock blank with double-sided tape



7 Carefully position the blank onto the template and press down firmly; you could fix with panel pins if preferred



8 Secure timber to the bench, then using a router, carefully follow the template using a bearing-guided flush-trim cutter



9 Mark the clock movement's centre, then bore all the way through the blank with a large-diameter – 54mm – Forstner bit



10 Rout a hole in the template with a Dremel tool to suit the clock dial – this is 60mm diameter on both clock designs



11 Carefully position the template on the blank's front; rout around the inside at full depth using a flush-trim cutter



12 Now use a template with a 75mm-diameter hole to rout from the back; finish with a rebate cutter for the rear plate



13 Check the front hole's depth is sufficient for the clock spindle and hands; quartz movements are available in three sizes



14 Cut a test dial from 6mm MDF and drill an 8mm hole for the spindle; fit the retaining nut and hands to check clearance



15 Make another template with a cut-out to match the dial diameter, which in this case is 75mm; draw on to the contrasting wood



16 Cut a 8mm sycamore dial with a Dremel tool or flush-trim bit and template; check the movement fits in the recess



17 Hour marker dots on the dial are made from 6mm walnut dowelling; drill a 6.5mm hole to check the dowel fits snugly



18 Saw dots to around 6mm with a fine-tooth saw; sand ends lightly to remove any whiskers



19 Carefully mark 3, 6, 9 and 12 positions on the dial. Drill to half depth, then glue dots in place



20 Once dry, trim away excess with a block plane; sand the dial to 320 grit and seal with lacquer or oil



21 Mount the quartz movement on the dial's reverse and carefully fit metal hour and minute hands – these are 24mm long



22 Cut the rear cover plate from veneered MDF or hardwood; this is fitted in place with two countersunk brass screws



23 Sand the clock blank, finishing with 320 grit abrasive; add a fine chamfer to the straight edges and dial recess



24 Brush on two coats of finishing oil, followed by clear wax, then insert the dial before securing in place with a dab of glue ✂



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JET DC-1100CK-M dust collector – Vortex Cone technology; 230V motor, recently replaced. Collection preferred but can arrange delivery at cost; £500 (OVNO) **07971 214 229** (Chichester)



Trend PRT 240V professional router table – house move forces sale. Light amateur use only and supplied with wooden case. Currently priced at £700+ new; selling for £400 **07719 100 760** (Kent)

Leigh Dovetail Jig – in excellent, like-new condition – supplied with cutters, hand book, screwdriver & guide bush adaptors; £450 (OVNO) **07860 506 040** (Telford)



Router lathe – in good condition, includes router; £190 cash – buyer collects **07966 145 260** (Kent)

Bandsaw – 16in depth of cut; 20in throat depth; compound 30sq.in table; two-speed 3HP motor; £400 – buyer collects **0114 233 4758** (Sheffield)



Startrite Super 310 Universal Woodworker – includes slot mortising attachment, original jigs, guides, handbook & loads of tooling – in superb condition; £4,500 **07890 104 021** (Essex)

Henry Taylor & Marples pairing chisels: 2 × Henry Taylor chisels – 1½in; 1 × Marples pairing chisel – ¾in – good quality tools, made in England. Can post at cost or buyer collects; £80 ONO **07703 290 831**

Draper WTL12 woodturning lathe – on matching stand, with set of six Sorby chisels – in very good condition; £200 ONO – cash on collection **07494 849 598** (Woodbridge)

29 sash clamps – from 2ft 6in-6ft – mainly Record; 46 G & F clamps; 75 clamps in total; £350 – call for details **01422 202 465** (Halifax)

Woodworking planes – Stanley and Record; some boxed, some good collector's items; 26 off; £300 – call for details **01422 202 465** (Halifax)



Boxwood – well seasoned, for over 40 years – various diameters ranging from 20-50mm, of varying lengths; call for details **07449 914 078** (Milton Keynes)

Cherry wood – as advertised in the May 2024 issue – was £800, but price negotiable, or small lots, all for local hospice and for charity **01295 721 201** (Oxon)

Robert Sorby ProEdge sharpening system – never out of the box – buyer collects; £250 **07722 842 547** (Somerset)

Coronet Major saw & lathe with extended bed – 56in centres on a wooden storage base plus other accessories – buyer to collect; £425 **07970 312 532** (Worcestershire)



Elu planer in metal case plus Elu planer thicknesser attachment – both unused; £175 – buyer collects **07864 792 554** (Manchester)



Gifkins dovetail jig with two sizes of cutters – 6 & 10mm. One cutter has a small nick in its wing, but cuts perfectly. Also included is the manual and an instructional DVD. Simple and accurate jig that produces very neat joints; £100 – collection only **01462 676 796** (Letchworth Garden City)

The Woodworker/Good Woodworking magazines 2004–2023; most in binders and in excellent condition; free for collection **07720 537 912** (Derbyshire)

WANTED

Top-loading barrel log burner or similar **01473 658 546** (Ipswich)

Kity combination machine (or similar) – must feature saw, planer, mortiser, spindle moulder, etc. Carriage paid +087 2275266 (Ireland)

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CHISEL
RATING

FEEL THAT FINISH!

Les Thorne stresses the importance of finishing with some tips on using his favourites

The most important aspect of any piece of work is, in my opinion, the quality of its surface finish. When looking at other people's turning, I always forgive a shape that isn't perfect – but I'll never forgive a poor finish! Wood is a tactile medium so its 'feelability' is therefore paramount. The thing that sets it apart from other materials is the fact it just begs to be picked up and caressed – a bit like woodturners!

I'm afraid there are no magic shortcuts to achieving a quality finish. The surface has to be prepared properly and the finish applied correctly. This is because there's no product that can be put onto a rough surface to make it smooth; on the contrary, some finishes will actively accentuate torn grain and scratches.

Finish application takes practice and I'd recommend working on mastering a couple of techniques rather than having a cupboard full of ones you can't use. The type of finish used will quite often depend on the piece's purpose: for example, is it intended to hold food, be decorative, or as a toy?

The plan here is to go through each finish that I use, tell you why I choose it, and how to apply it. However, this is merely what works for me, and if you have a way of doing something that works for you, then there's nothing wrong with that.

Sanding sealer

Wood is porous so any top coating that's applied can penetrate the wood unevenly, which is why you use sanding sealer. I like to use it from an aerosol can (**photo 1**), spraying onto the wood while stationary so that this can be completed off the lathe if required. Leave it



1 I apply the sanding sealer via an aerosol can prior to reaching for the finish

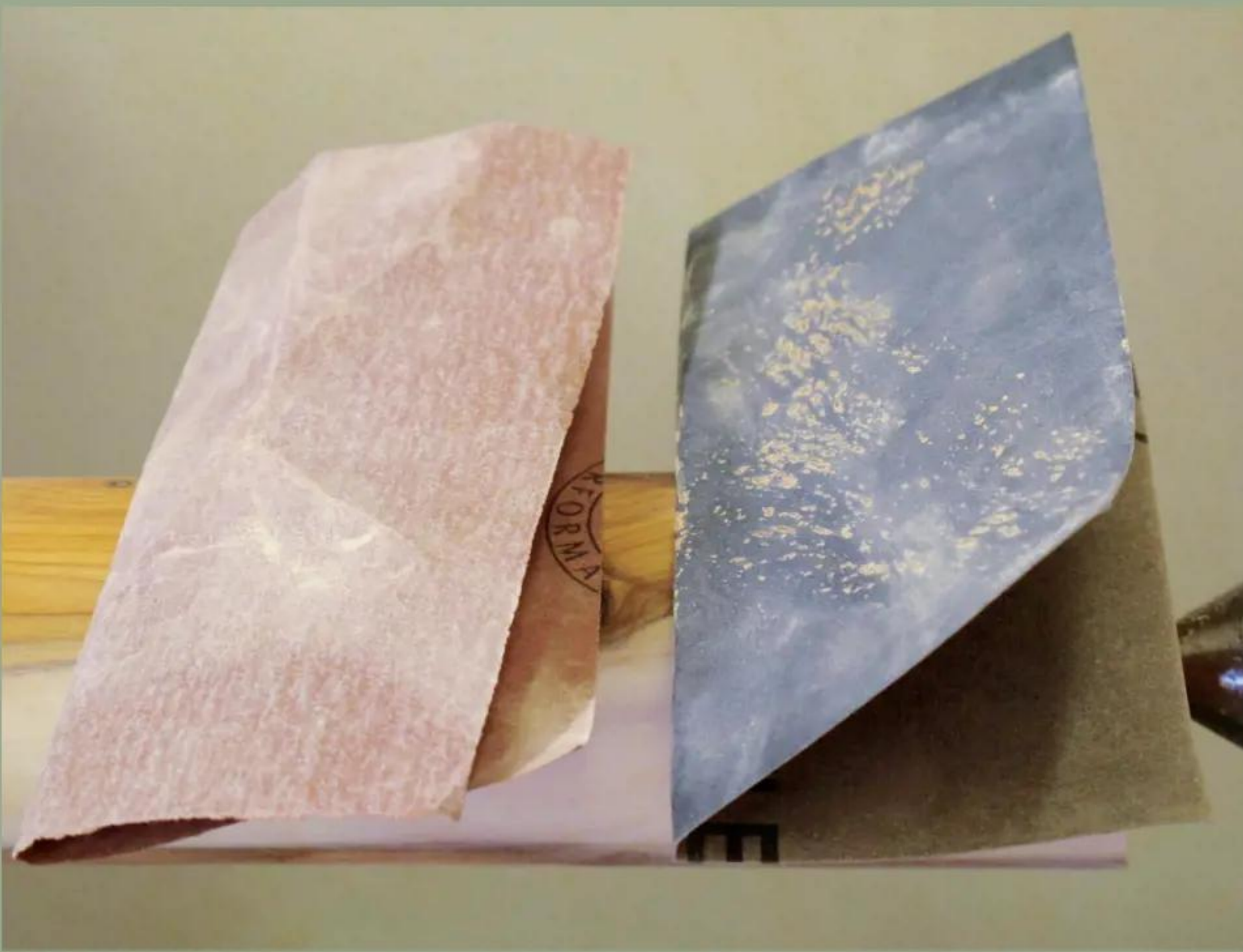
to dry, then cut back with fine 400 grit abrasive. I use a good-quality wet-and-dry as the cheaper versions can clog up (**photo 2**). Cellulose sanding sealer could also be used, but I do try to minimise exposure to those types of products in the workshop, using them only in the spray booth.

Many turners use a brush-on sealer, but I find that when stored in a container, these products can change consistency because the solvent will evaporate throughout its life and will need thinning in order to maintain the workability. I never cut back the sealer

with the lathe running, as it can have a tendency to drag across the surface, especially if the product isn't completely dry. I personally wouldn't recommend sanding sealer as a finish in its own right as, in my experience, the surface will start to look dirty after a while. I use sealer under all of my finishes, apart from when using a finishing or mineral oil.

Waxing glossy

I use three main types of waxes on turned work: carnauba, microcrystalline and paste wax, with each having its own benefits (**photo 3**). Although



2 The right-hand paper has clogged up but the better-quality left-hand one hasn't



3 Horses for courses: there are different benefits to using each of these three waxes, depending on intended purpose and personal preference



4 Slap on the oil – the more the merrier!

not primarily designed for lathe work, paste wax such as Liberon Black Bison and Chestnut's Wood Wax 22 are great for beginners as it's not too difficult to achieve a really good glossy finish with them.

After sealing, just apply the wax straight from the tin, let it dry for a minute, then buff off with the lathe running at about 500-800rpm. To avoid

the wax solidifying on the rag and scratching the work, ensure not to press too hard with the cloth.

Carnauba, or woodturning sticks as they're sometimes known, are generally a mixture of waxes, including carnauba, which are applied to the work while it's revolving. The stick is held against the work so that it melts onto the piece, which is then buffed with the lathe running.

This technique requires using friction to melt the wax on to the work, so may therefore require you to press harder in order to achieve a result. This finish does make the wood shiny very quickly, so I use it for demonstrations when wanting to make something glossy, fast. It's also good for applying with a buffing mop.

One of the main problems with a wax finish is the fact that the melting point of most is very

low, so they therefore tend to dull quickly if handled a lot. The latest generation of these, the microcrystalline waxes, overcome this by having a higher melting point, which means they're not affected so much by constant handling. I like to let them dry for a while before buffing, which in technical terms, is about the amount of time it takes to make a cup of tea! After a time, it may look a little tired and need reapplication. Before doing this, remove the old surface with thinners. Because you'll probably not be able to put the work back on the lathe, unfortunately good old-fashioned elbow grease is required here.

Oiling up

Oil is normally my first choice of finish when it comes to bowls because it's straightforward to use and gives a very hard-wearing result. The two main types of oil that interest turners are finishing/Danish oil and food-safe finish. Preparation is very much key to a good surface finish with oil, so sand the work down to at least 400 grit and remove all the dust either with compressed air or a tack cloth.

Whether I use a finishing or Danish oil depends on what type of timber I'm working with. I find that Danish is slightly darker than finishing oil so is better suited to darker timbers such as oak, elm, olive, ash and walnut, while



5 Friction polish needs, well, a good rub!



6 Achieving shiny results is a rapid process



7 Lacquer gives the best of finishes

the lighter variety is better for maple, beech and sycamore. These are applied with the lathe stationary or even off the lathe completely.

Apply a liberal coating (photo 4), let it soak in, and wipe off the excess. Once the surface is dry, cut back with synthetic wire wool or fine 800-1,200 grit abrasive; this will allow the next coat to key to the surface. For best results, always cut back between applications. I find that two or three coats is sufficient, although a higher gloss can be achieved if the work is buffed afterwards.

If the piece is going to be used for anything food-related, the only type of product to use is a food-safe oil. This is mineral oil and is, as far as I'm aware, pharmaceutical grade, so shouldn't affect your salad! I apply this using the same method, putting a load on, then wiping off any excess. I haven't found the need to cut this oil back between coats, and two or three is about right. Turners sometimes use hard wax or nut oils, but I cover everything that I do with the finishes mentioned.

Friction polish

Friction polish is generally based on shellac/French polish and tends to be the first one that people go for when they start turning. First, seal the wood with a spirit-based, cellulose or acrylic sanding sealer, then – with the lathe running

– apply the polish with a rag (photo 5), using small amounts at a time, and build up the coats.

This will make the wood go very shiny very quickly (photo 6). Remember only to use small amounts at a time because it's easier to put more on than take it off again; apply too much in one go and the finish can appear streaky, leading to lines developing on the surface. If this happens, an application of burnishing cream can 'flatten' the surface back down. This type of finish is best used on smaller work as the polish drying time is very quick, so it's difficult to achieve an even build. It's also better suited to work that's rarely handled.

Spray lacquers

Those of you who read my articles regularly will know that I lacquer most of my work using



8 Two of my favourite cutting compounds



9 It's best to cut back with paste to ensure optimum results

either acrylic gloss or satin, these being hard, durable finishes that'll withstand a lot of abuse. Years ago, to test various finishes, I made up some cord pulls using pieces of wood and finished them using the different product types then available. After this, they were placed in a harsh bathroom environment to see how each performed. The least durable of these were the waxes and friction



10 Wipe-on poly gives great results



11 You should always use a good-quality brush

TIPS

- When I sell a salad bowl, I provide the customer with a bottle of food-safe finish, advising them to give the bowl a wipe over with the oil now and again
- Always try out a technique on a piece of scrap wood first before committing to the final project. Also think about what it'll be used for, especially in the case of coming into contact with food, or whether it'll be handled a lot

polish, and the best by far were the lacquered finishes (**photo 7**), either the brush-on variety or spray types.

Before applying it, seal the wood well, cut back and remove all dust. Always spray in a well-ventilated room and ensure that you've minimised the chances of dust contaminating the surface. To help avoid runs, spray the recommended 250-300mm away; this lacquer dries very hard and trying to get it off again is very difficult – believe me, I know!

After the initial coat, I cut the surface back with 800 grit wet-and-dry. Sometimes I use water as a lubricant. Ensure to not cut through the finish, then spray again. I've given work up to 10 coats of lacquer in order to achieve the glassy covering seen on some of my more decorative items.

If you're looking for the ultimate finish, you could use burnishing cream or T-Cut. I opt for Farécla paste compound (**photo 8**) for the final cutting back (**photo 9**). The satin is applied in the same way and, after about three coats, buffed with a mop.

Brush on/wipe on

One of the products I've been looking at recently is the brush-on polywax sealer range from Woodoc (**photo 10**) – www.woodoc.biz. These high-build finishes are a labour of love, easy to apply and yield the best ever results. Application doesn't require a dedicated sanding sealer first.

Using a good-quality brush (**photo 11**), apply the finish until the surface will no longer soak up

**12** You'll need an assortment of mops

any more. Once it's dry – which can take up to six hours – cut back with synthetic wire wool or wet-and-dry, then apply other coats as necessary.

Woodturners are generally an impatient lot, so a finish that takes a bit of time isn't something that we tend to go for. But trust me when I say that it's well worth it and some fantastic results are achievable if you're willing to put in the effort. These ranges of finishes are also heat and stain resistant, so I can definitely see them taking a larger role in my woodturning.

Buffing up

Using a buffing wheel for the final finishing seems to have come back into fashion over the past couple of years. The use of three different mops, with cutting compounds and waxes, has been championed by Oneway and Beall over in the USA and more recently by Chestnut Products

here in the UK (**photo 12**). They can all be mounted in a row on the lathe at the same time, but I find this awkward when buffing a bowl; instead, I prefer to mount them individually, which provides better access. I run them at approximately 1,000rpm. You must hold on to the workpiece very firmly and work at about 7 o'clock on the wheel (**photo 13**); this will stop the mop grabbing the piece and throwing it on the floor. For the same reason, be really careful when buffing inside a bowl so as not to catch the rim (**photo 14**).

Basically it's a matter of applying the brown Tripoli with the hardest wheel, the white diamond compound with the medium wheel, then the wax with the softest in order to achieve a silky-smooth surface. One thing to remember is that all the wheels will throw fibres into the atmosphere, so at the very least, ensure to wear a face mask and goggles, but preferably use a respirator. ✕

**13** You need to take care when buffing...**14** ... so slow down the lathe and hold on tight



LAND ROVER REMAKE – REVISITED

Peter Dunsmore takes another look at one of the most popular projects featured in *The Woodworker* over recent years

Coming up
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PLUS ▪ Routing wooden signs ▪ Burr oak hollow form ▪ Cross-board door
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English furniture history - the designers

BORING, BRACES & CARDBOARD BOXES

In buying a new drill bit, to his surprise, Peter Scaife found that sometimes there's no tool like an old tool

Don't laugh. I want to show you, for the first time in the magazine's 123-year history, something made from a cereal packet, string and electrician's tape! Let me explain and, later, offer some thanks and a surprise.

For the best part of 50 years, my workshop has been in the cellar, a location which – even if you've never seen it – you'll understand is now impossible to access from my wheelchair. As such, I've ended up either selling or giving away the majority of my tools; I can't use them standing up.

Wheelbrace & carpenter's brace

And now we come to the point. I reckon I could still make a dowelled joint on a portable bench and therefore I've kept hold of a wheelbrace and carpenter's brace. It's quite possible you may not be acquainted with a wheelbrace because these days, most people use an electric drill, but the photo will tell you all you need to know: put a drill bit in the chuck, tighten it, point it in the right direction, and turn the handle. The wheel has the initials 'SIF' in the casting, which I guess stood for 'Suffolk Iron Foundry', and the date 1945, which would be about right. The twist bits for the wheelbrace are pretty obvious



The cardboard box – and I'm not trying to look like the Chancellor on Budget Day

although there are many different metals available today for varying uses.

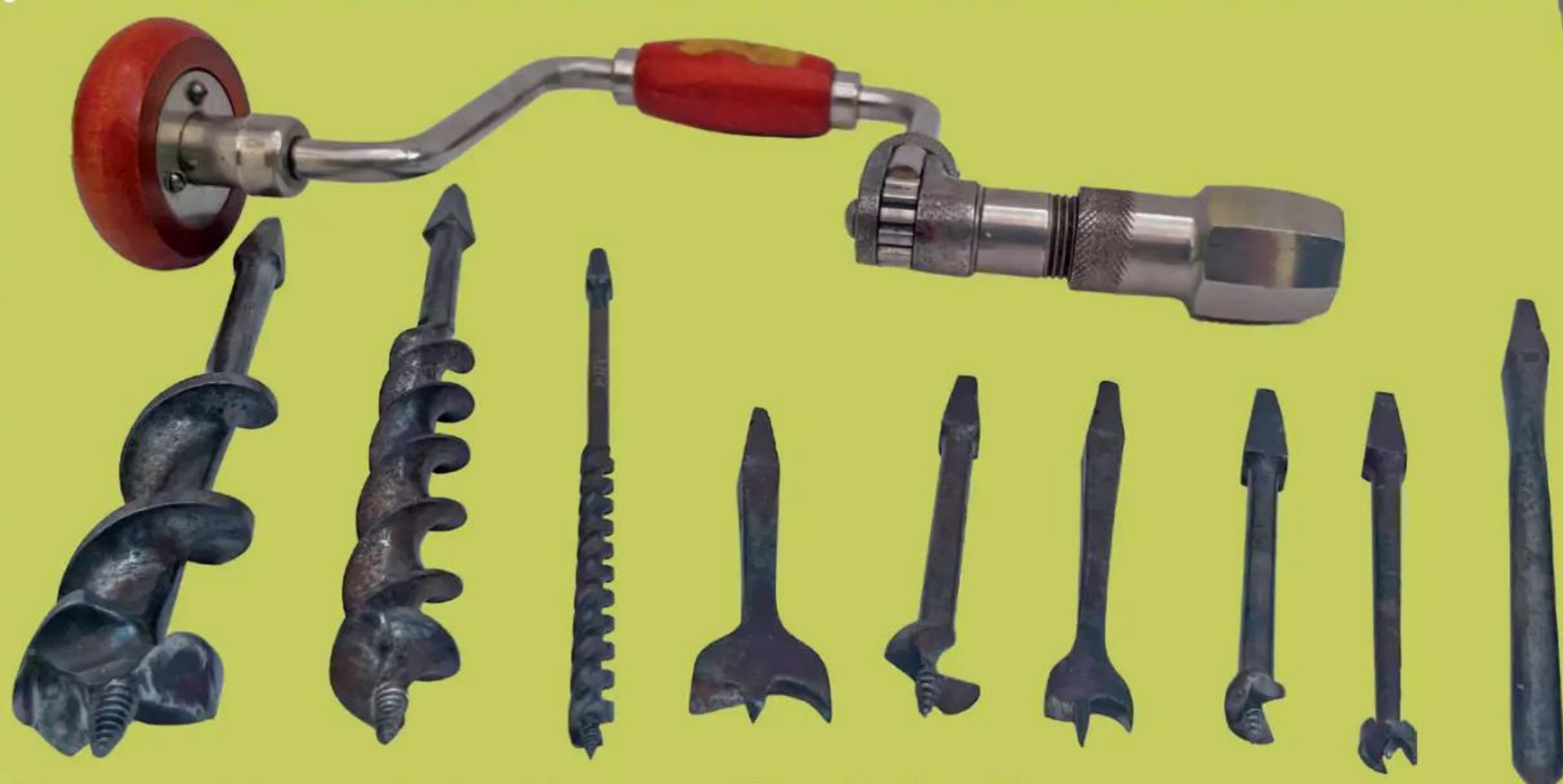
And the carpenter's brace, again pretty much self-explanatory, except to say that if you're not already familiar, the chuck works on a ratchet principle so that you can use it for withdrawing tight screws or when working in tight corners, using half a turn at a time.

Cardboard creation & bit inspection

Now I'll mention my cardboard creation.



I have to ask my wife to bring up tools from the cellar: need a small box for the bits, haven't got one, make it. With the materials to hand. And that's it, so now on to inspecting the bits.



The carpenter's brace and various bits – some old but all still useful



The wheelbrace, with bits – no charging, no cable, and a drop of oil every few years

Favourites include:

- 1½in Irwin, or solid centre, pattern, stamped Gilpin
- 1in Gedge pattern, stamped Howarth
- ¾in screw-point centre bit stamped Ridgway
- ½in screw-point centre bit, also Ridgway, but this time also bearing the '1066' mark, which I assume doesn't refer to the Norman Conquest
- ⅝in stamped Russell Jennings no. 100 RJ, Stanley, 100 plus



My thanks go to Norwich-based Tooltique – www.tooltique.co.uk – for providing the biggest of these. I gave them a call, explained what I wanted and the postman delivered it less than 40 hours later; well wrapped and sharp as new. For only £10. Impressive service. Most have a threaded tip for pulling the drill through the timber.

Also 1in and 5/8in centre bits, quite old; one stamped 'guaranteed', the other possibly Hancock, useful for shallow holes or going through thin workpieces.

Another Ridgway, a 3/8in Forstner bit, useful for when you want a hole with a flat bottom. And all English made; I like that.

To finish off, the surprise I mentioned earlier. One shell bit – picked up cheap decades ago – all now well past its use-by date, or so you'd think, but a few years back, I was helping to fix a fencing post to a brick wall and didn't know what to use for drilling through both materials, so I picked it up and bingo! No problem.

Admittedly, here in Suffolk we have some fairly soft red bricks and it was a softwood post, but I was very surprised. You can re-sharpen these shell bits until they're too short for use.

And a final thought on that cereal packet box: useful though it is, I really wouldn't want to carry it onto a building site... ✕

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Stanley No.5 'before & after' photo courtesy Peter Hemsley – The ToolPost

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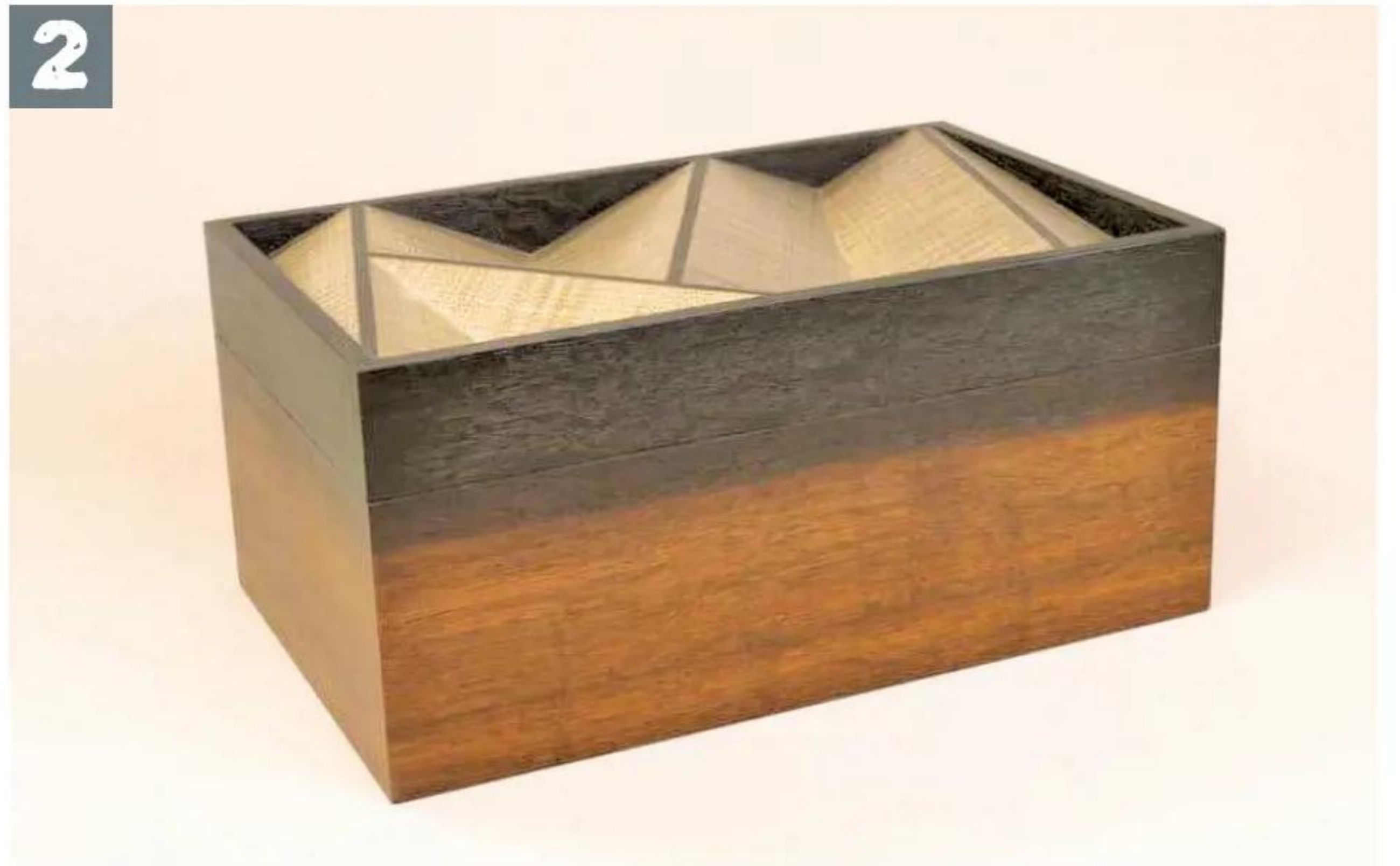
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TAKE

5

This month's selection includes more wonderful work by various furniture making students, as well as a few examples of turning and carving using both hand and power tools to create exceptional results



- 1 Birch bowl, by John at [@ligneuscreations](#) – turned then carved with Saburrtooth Tools – [@saburrtooth](#) – carving burrs and finished with Walrus Oil – [@walrusoil](#) – 216mm diameter x 89mm tall
- 2 'Yotei' cigar box made by [@someset_furniture_design](#) – Somerset Maitland-Robinson – as his first project on Robinson House Studio's – [@robinsonhousestudio](#) – 50-week designer makers course – bog oak, sycamore veneers and Spanish cedar. The use of Spanish cedar not only gives the box an amazing smell but is also functional, due to its ability to resist mould and deter tobacco beetles. It absorbs moisture when humid and releases it when dry
- 3 'Loose Ends', 2021, bubinga, camphor, ebony, brass and glass, 559 x 457 x 1,321mm – Miles Lawton Gracey – [@plays.on.woods](#)
- 4 Wall cabinet by Waters & Acland Furniture School – [@watersandacland](#) – student Studio Fortier – [@studiofortier](#) – one of the term 1 set projects on the designer maker course. Made in maple, with hand-cut mitred dovetails, hand-carved profiles, beautifully fitted frame and panel door with knot handle
- 5 'Little Frog. Big Climb' by Olivia O'Connor Carving – [@oliviaoconnorcarving](#) – carved using traditional gouges, with some gorgeous undercutting fun. "I also used the Japanese ukibori technique for the frog's raised bumps – carve, compress bumps, using a knitting needle, carve flush and steam – which makes the bumps pop up as if by magic!" 360mm high, the piece celebrates the beauty and fragility of our natural world and symbolises hope amid climate crisis

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