

Woodworking

CRAFTS

NEW!

HAND, POWER & GREEN WOODWORKING • TURNING • RESTORATION • DIY

Issue 1 June 2015

BRAND NEW!
For *all* your
woodworking
needs

THE ART OF
TOPIARY

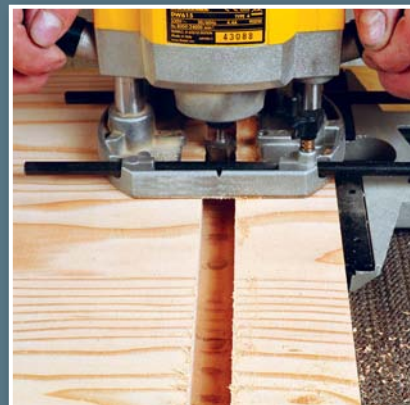
SMALL SPACE
WOODWORKING

DIY STARTER
TOOLKIT

*Introduction to
green woodworking*

Projects, techniques, tips

product news, features & more...



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Battery Capacity (Ah)	-	4Ah
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Gear Box Head Height (mm)	80	80
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Tool Holder	QuickIN	QuickIN

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Welcome

to the June issue of
Woodworking Crafts



Hello everyone and welcome to the very first issue of *Woodworking Crafts*.

If you were expecting to find *Woodworking Plans & Projects* magazine on the newsagent's shelf – well this is it, in a brand-new guise. We felt, based on readers' comments and the changes in peoples' lives, that we needed to create a new flavour of magazine for today. It not only looks different, but it has a far wider range of content, with subject experts giving their advice and knowledge. We cover everything from green woodworking and cabinetmaking, to DIY and wood-based crafts of all sorts. There is less emphasis on projects and more on techniques and, of course, some fascinating features. In short, there should be something for everyone: male, female, young and old.

It reflects peoples' changing lives and aspirations. Not everyone has a big, well setup workshop or a depth of knowledge, so we are here to help you make the most of all the woodworking crafts, whatever your situation or level of skill. We do hope you will find the changes positive and we welcome readers' interaction, so please get in touch, let us know what you think of our new magazine as well as telling us what you would like to see featured in future issues.

Anthony Bailey, Editor

Email: anthonyb@thegmcgroup.com



Woodwork on the web

To find more great projects, tests and techniques like these, visit our fantastic website at: www.woodworkersinstitute.com

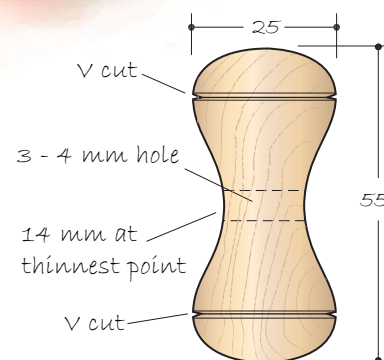


What you will need:

- PPE – facemask/respirator
- Spindle roughing gouge
- Spindle gouge
- Thin parting tool
- Beading & parting tool
- Pillar drill
- 15mm drill bit
- Clamp for pillar drill
- Cordless drill
- 3 or 4mm drill bit
- Disc/belt
- Hand-held rotary carving tool
- 13mm drum sander
- Abrasives from 120-400 grit
- Finish/colours of your choice

Make a whip-cord spinning top

Mark Baker takes this old-favourite toy and brings it into the 21st century



Mark Baker

Mark Baker is Group Editor for all four of our woodworking magazines and directly edits both *Woodturning* and *Woodcarving* magazines. Mark loves working with shapes, exploring form and seeing what can be done with them. The classical and ancient forms feature heavily in Mark's work but he always tries to develop and tweak things further.

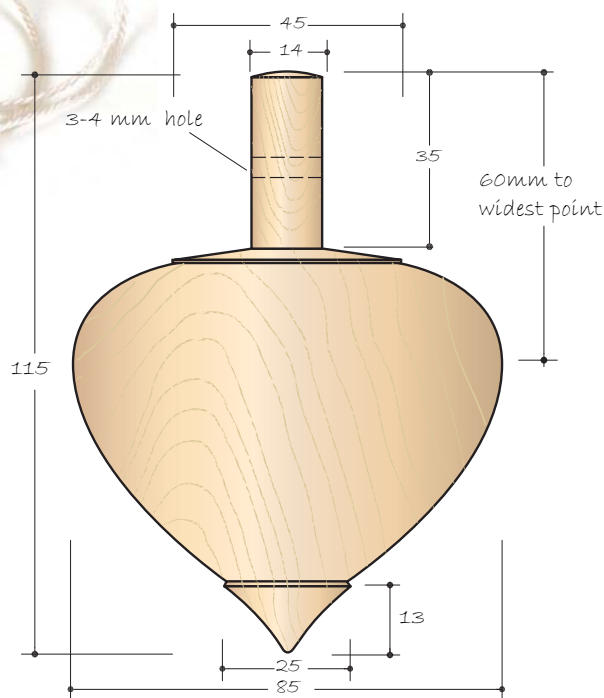
Spinning tops date back centuries and have been a constant source of fun for many generations of children, and dare I say it – adults alike. Over the years there have been many designs and styles and this gives the turner a chance to experiment with shape, proportions and tool control. If you want to colour the item, or, better still, let your children or friends personalise their own, then you can introduce a whole new aspect of fun.

For this project I have chosen to show how to make a variant of the old traditional whip-spinning top. It is a nice spindle turning project, which comprises three parts and each piece has the grain running parallel to the bed bars. Of course, you can make large or small versions of this to suit your space. However, I have chosen to create quite a large one for use on a floor or patio.

Traditionally, you would have had a handle to which was attached a length of string/cord, which in turn was wound round the main body of

the top. You held the handle and top usually in one hand – or that was the case when I was a child – and you then threw the top at the same time as whipping the handle away from the direction of the top, which caused it to gain the spinning momentum before touching the ground. You could make a two-handed gentle version of this closer to the ground but the rough and tumble of this process was fun. However, at times not everything went to plan with it knocking into things and people!

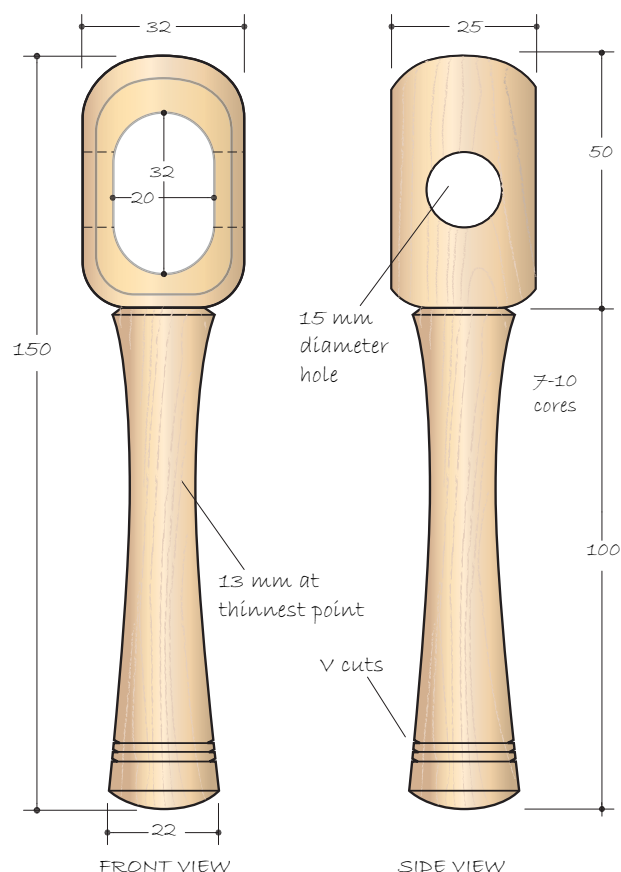
The version shown here has the handle slide onto the main shaft of the top. There is a separate cord – with toggle handle – which is threaded into the main shaft and wound round it. You then place the top on the floor so only the balancing point of the spinning top is touching – yes, you can launch these from higher but it is not so predictable as to where the top will end up – then you pull the wound cord, which releases from the main shaft and then slide the handle off –



or if launched from above the floor, the top will slide off from the handle – and watch the top go on its journey. With four or more people doing this with their tops you can end up with great battles to see whose stays up the longest!

1 For my project, I chose to use an offcut of padauk (*Pterocarpus spp.*) for the handle. It was a piece left over from another project and already round so I could mount it straight in the chuck and bring up the tailstock for support. If you start with a rectangular section, drill out the head and stem holes shown in step four first, as any splintering or breakout of the wood is often removed in the turning process of making a cylinder. Next, mount your wood between centres and create a cylinder using a spindle roughing gouge. Then, if you choose, mount one end in the chuck and bring up the tailstock for support, or keep it between centres before shaping the head using a spindle gouge. It is important to remember the speed charts – select the appropriate speeds for the size and condition of the piece you are working on. If in doubt, always slow things down.

2 After you have created the head profile, use a spindle roughing gouge or spindle gouge to shape the main handle. Remember to always work downhill to ensure you are cutting cleanly with the grain. ➤



Toy safety

There is much written and legislated for on the subject of toy safety. The European standard is EN 71 and covers all toys for use by children up to the age of 14. This is for those who make and sell toys and they must comply with all the relevant legislation. Homemade toys for personal use are not subject to the legislation, but there is advice and information that we should all follow and be aware of. For example, what is the age of the child the toy is being made for? Are there choke hazards such as those posed by small parts, etc.? If, as in this case, you are using a string cord and small handles, there is a strangulation and choke hazard that should be considered, making it not suitable for children under three years of age. Materials used should be suitable and finishes used should be toy safe. Common sense and a bit of research helps no end. Searching the internet for 'toy safety legislation' will help you find lots of helpful information.

Web: www.legislation.gov.uk/ukxi/2011/1881/introduction/made
www.toysadvice.co.uk/toy-safety-standards-uk.html



3 Once you have shaped the handle, use a skew chisel to cut three small V-cuts on the lower end of the handle. You then need to sand this down to 320 grit. Using the skew chisel again, shape the lower handle end and then part it through, ensuring to support the work while doing so. A note of warning here – ensure to keep all parts of the body and clothing well away from the spinning chuck.

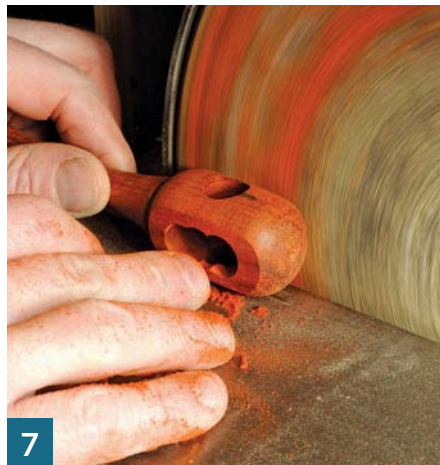
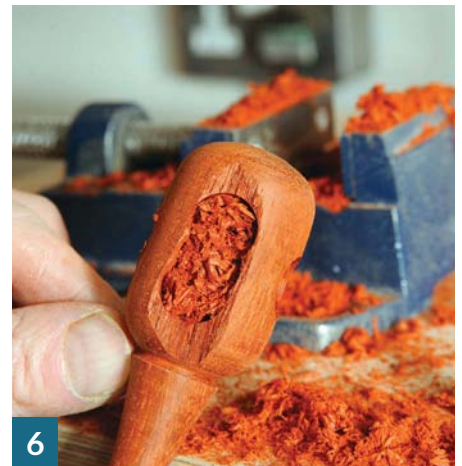
4 Once removed, use the skew chisel to remove the tiny pip left on the head of the handle, then, this section can be sanded over until it is smooth. The next step is to place the head in a drill clamp to keep it secure while drilling on the pillar drill – yes, you can do this by hand using a cordless drill and a vice, but it is easier and more accurate if you use a pillar drill for this step. Using a 15mm sawtooth bit in the drill, drill a series of interlocking holes to create the elongated side window of the side of the handle and once these are cut...

5 ... unclamp the piece and rotate by 90°; this will allow you to access what will be the top of the head in which you can then drill a hole centrally. This will be the one that fits onto the main shaft of the spinning top. If drilling square sections, placing sacrificial wood under the handle head while drilling minimises breakout and is also much safer. Because I had a round section to start with, the last part of the cut was done very slowly with minimum pressure, which allowed me to minimise the chances of breakout.

6 My plan didn't wholly work and there was a small amount of breakout on the lower section.

7 Thankfully, my design calls for the sides of the window to be sanded flat so this will remove the breakout. Warning – go gently and be careful here. Using either a disc sander or a made-up version on your lathe with a suitable stable rest, flatten each side of the window but don't touch the small fillet detail at the lower head section.

8 Now, either using a hand rasp or similar, or a hand-held rotary carving tool fitted with a 13mm drum sander, smooth out the window section. Once done, use some abrasive to soften all the sharp edges.



Experimentation: *Don't be afraid to experiment with shape. Create hand-spinning tops first to get the hang of things and also see what shapes you like. The cost is lower too material-wise if you choose this option. You can also sand the edges to create hexagonal, octagonal and such shapes of the main body, which is especially good if you want to create spinning top dice. However, you have to be accurate or you will alter the centre of balance.*

9 Now to shape the spinning top. Create a cylinder of timber – I chose ash (*Fraxinus excelsior*) for this as it is dense and withstands a lot of bashing about. Once the cylinder is created, cut a spigot or a section of the timber so it can be held in your chuck jaws and bring up the tailstock for support. Using a spindle gouge, start to shape the lower 'pointy' section leaving a small waste section of wood where the tailstock is for the moment.

10 The body shape I chose is almost beetroot-like but you can vary the shape. Some will spin longer and more stably than others, but this one is a shape I know runs for a long while when spinning. Don't make them too tall as this increases the risk of wobble. Here you can see that I left a small fillet on the lower section. Next, shape the top section – which has a quicker return down to what will be the main stem – and leave a step fillet about 45mm wide and a maximum of 3mm deep.

11 Always cut downhill to ensure the cleanest cut. Stopping just short of the main stem section, go back to the tailstock end and refine the point, gradually removing enough so the tailstock can be removed so you can refine the point.

12 Sand down to about 320 grit, then decide how you want to decorate it. I went for rings of different colours and used a skew placed flat on the rest to create a series of grooves, more or less evenly spaced.

13 Use fibre-tipped pens to colour the rings – the groove helps prevent colour bleed. You may end up with an indistinct transition from one colour to the next, so burn the lines using either wire held between two handles, or a thin piece of Formica or similar kitchen-top surface laminate to burn the V-grooves. Sand the edge of the laminate to a V-shape, hold the piece firmly and press it hard against the groove while the piece is rotating.

14 Keep creating a new edge on the laminate as the old one breaks down and then move on to using the pens. With the lathe speed at about 300-500rpm or slower, place the fibre-tipped pens against the rotating work and colour in one of the bands. I chose a series of contrasting colours here. ➤



15 After colouring in the bands, use a combination of spindle gouge and beading & parting tool to shape the top curve of the main body of the spinning top. A tip here is to remember to clean it up and colour this part before moving on to the parallel main stem section.

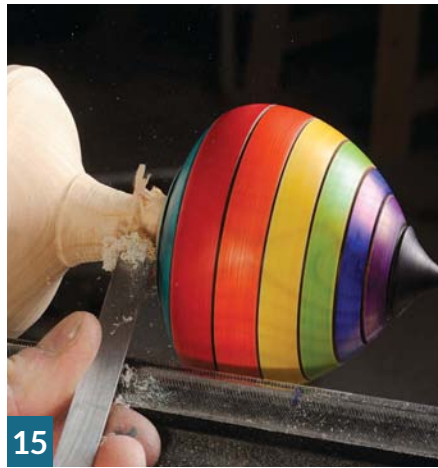
16 The beading & parting tool can be used to create the parallel section. By setting the toolrest parallel, you can use your fingers as depth guides to guide the tool along the work. The stem needs to be just smaller than the 15mm hole created in the handle.

17 Once shaped, sand the stem and either colour it or part off the piece from the lathe using a skew chisel with successive cuts, or you can use a parting tool. The end, once freed, is sanded smooth with a slight dome on it.

18 Now to create the toggle for the whip cord. Use pine (*Pinus spp.*) for this. I had a dowel of pine already, so I mounted it in the chuck and brought up the tailstock for support. Measure and mark the length of the toggle and using the spindle gouge, rough shape it, put a groove on the centreline and drill a 3mm hole through the centre and across the grain – this will be for the cord.

19 Once drilled, shape the toggle with a nice cove and dome the end, which requires the removal of the tailstock to create it. Once shaped, cut a groove on either end of the toggle so you can add some detail, then sand the toggle and refine the end before parting off from the small stub. Next, sand the stub smooth to the shape required. Again, use fibre-tipped pens to colour it.

20 You are now ready to assemble all the components. Firstly, thread a length of cord through the hole in the toggle, then knot it to secure it in place. Place the handle over the main stem, measure the exact centre of the window on the stem and drill a 3mm hole through the stem to accept the cord. You can then colour the main stem black before spraying all the items with a gloss lacquer. Once dry, you are ready to give it a go. Make sure you have plenty of room when you are using the spinning top. ■



Whip cord: *The longer the whip cord, the more speed you generate on the top. The trouble is that it is likely to bounce all over the place before gaining its equilibrium, so it is best to keep it no longer than about 300-400mm.*

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PHOTOGRAPHS BY JOHN BULLAR

A row of DOVETAILS

John Bullar shows you how to make a row of strong dovetails on the corner between boards

Here is a straightforward way to make a row of strong dovetails on the corner between two boards. The idea is to keep the tools and techniques to a basic minimum – and along the way dispel a few myths about what matters and what doesn't when dovetailing. This is not a showy exhibition joint, but it fits well and looks fine for boxes or the backs of thin-sided drawers.

Tools

A knife, a small saw and a couple of chisels – these are the basic tools you will need to mark out and cut a row of

through dovetails. A plane to prepare the wood and a square to check it, complete the kit. The joint is made between boards of walnut (*Juglans regia*) and pine (*Pinus spp.*). The walnut is only about 10mm thick and pine is softwood, so both chop easily with a chisel, not requiring a fretsaw or the like to remove waste.

1 Plane both boards to the same width as each other and make sure their edges are at right angles to the faces. For edge planing, pinch the plane front between finger and thumb, using the fingernail as a guide to keep the plane

centred on the edge. Thicknesses are not important provided each board is an even thickness and not cupped across the width.

2 Use a square to check the ends of the boards are at right angles to their edges and faces. This doesn't affect the fit of the joint but an error here will produce a crooked box or drawer. I use a conventional try square for this method with a wooden stock and steel blade, but metal adjustable types are good. You can even use a plastic set square, or the corner of a sheet of paper at a pinch.



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Marking shoulders

3 Marking the shoulder lines with a chisel is unconventional but simple. It avoids using a marking gauge, which can often be awkward and introduce errors. Simply lay the chisel flat across the face of the thicker board at an angle. Hold the thinner board vertically on end and slide its face across the tip of the chisel. Most importantly, make sure your fingers and thumb are well up the edges of the upright board so you cannot accidentally slice them with the chisel.

4 Repeat the shoulder line marking, this time laying the chisel on the thinner board, which is going to have the tails cut on it, and mark the faces

of the thicker board, which is going to have sockets to fit the tails. Because the end sockets will reach the edges, this second board needs to be marked across the edges as well as the faces.

Sawing tails

5 With the shoulder lines marked, it is time to start cutting the tails. Pinch the board between finger and thumb to guide the first few small strokes of the saw.

6 Tilt the blade to an angle of about one in seven – in other words, about 85% of a right angle. The exact angle is not important because the shape of each tail will be copied onto the matching half of the joint. ➤



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7 Having said what is not important about the position and angle of the saw, it must be emphasised that it is essential to keep the blade at right angles to the face of the wood when cutting the sides of the tails; this ensures the tails will fit straight into their sockets without gaps.

8 Make a full set of cuts down one side of each tail with the saw tilted one way, before reversing the tilt and cutting the other side of each tail.

Chopping tails

9 The next stage is to chop out the sockets between the tails using a narrow chisel, ideally just less than the width of the gaps. Keep the back of the chisel vertical by viewing it edge on. Chop onto a flat, even surface such as a spare piece of wood or MDF, but not the benchtop because it will soon become pitted and need replacing.

10 Make the first chop 1.5mm inside the line. Even though the chisel edge is razor sharp, the heavy force you apply with a mallet will tend to crush the wood on either side of the cutting edge.

11 Now place the chisel edge in the fine groove of the shoulder line. The second chop here will slice off a thin chip with minimal force, leaving a clean square edge on the shoulder line.

12 Repeat this double chopping procedure from both sides, each time chopping halfway into the wood.

Now, if you press the waste chips back into their sockets, they should become loose and drop out from between the dovetails. If they prove awkward, encourage them to drop out by carefully applying downward pressure with the back of a knife.

Template

13 The row of dovetails now becomes a template for marking out the sockets they will fit into. Align the tails carefully on the end of the other board clamped in a vice, then use a fine knife blade to mark each socket side.

Sawing sockets

14 Take away the tails, leaving the other piece of wood clamped vertically in the vice. Now you need to saw down each side of each socket to



11



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13



14

match the tails. Angle the saw to follow the knife line, keeping the edge of the teeth just on the line and the rest of the blade on its waste side.

15 The trick here is to keep the saw blade perfectly vertical as you cut so the sockets have straight sides. Marking lines on the faces wouldn't help much here – if the saw wasn't vertical it wouldn't follow them anyway, and if it is vertical, they are unnecessary.

16 The end shoulders of the joint need to be sawn away carefully – these are the most conspicuous part of the finished joint and often underestimated.

Chopping sockets

17 The sockets to receive the tails are tapered. The wide side of the socket is chopped with the



15

widest chisel that fits between the pins without marking them. This is OK for a shallow cut but you must not chop too deep with this chisel or it will cut into the pins. As before, chop firstly ahead of the line, then on the line.

18 Chop the remainder of the waste away from the other side of the board using a narrow chisel. Slant the chisel slightly each way to remove the waste up against the sides of the pins.

Final fit

19 Finally, bring the two halves of the joint together, first pressing them partway home to check they fit without forcing. Ideally, the joints should fit straight from the saw cut. Before you are familiar with the procedure, you may need to shave them with a chisel, which is fine so long as you do it patiently. ■



16



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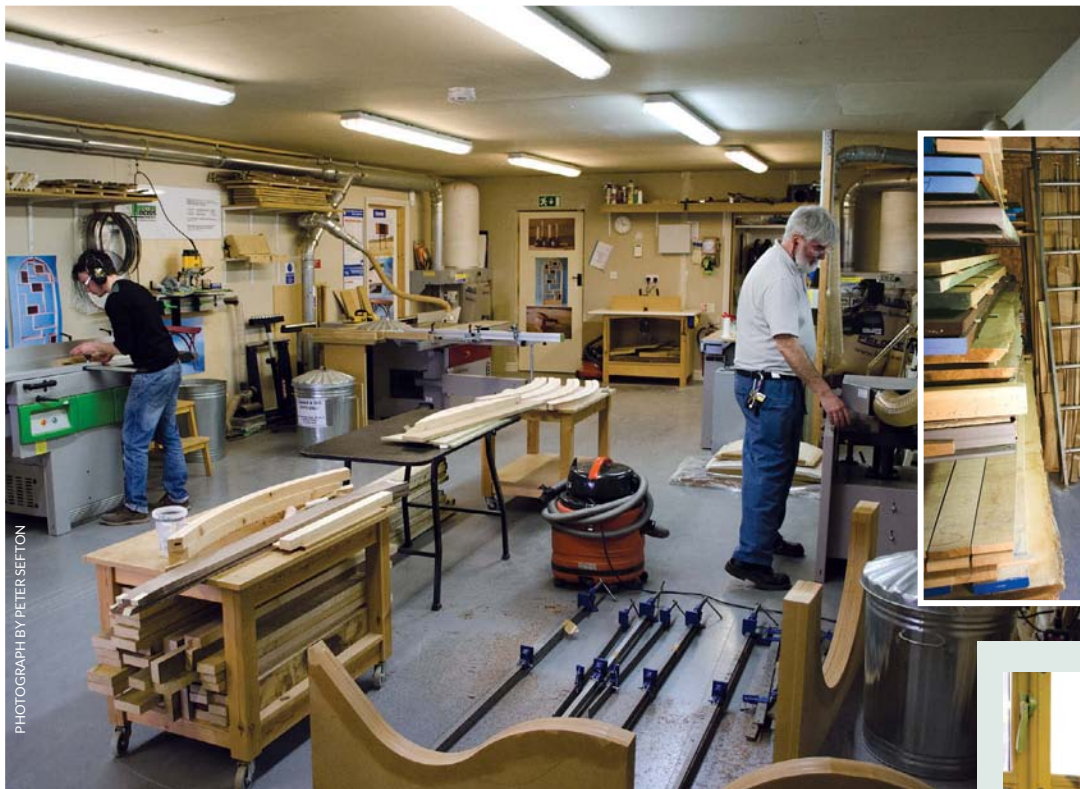


19

John Bullar

John designs and makes bespoke furniture to commission from his workshop in Cheshire. His unique style combines the Arts & Crafts methods handed down to him by his grandfather and John's own contemporary interpretation of it. He also writes for our sister publication, *Furniture & Cabinetmaking*.





LEFT: The machine shop
BELOW: The timber store



PHOTOGRAPH BY PETER SEFTON

Insight

Peter Sefton tells us about what's going on at the Furniture School this month and shares a few important tips on timber selection

February is an exciting time of year for us in the Furniture School; the professional long course students bought their timber for their major projects before Christmas and now it's time to start cutting it up and making their ideas on paper come to reality.

Beauty of timber

The main design work on their masterpieces has been done and now everything is beginning to come to

fruition. Cutting the timber up for the first time after having it stored for several months is an interesting time. The timber has been in stick in our controlled timber store for two or three months, drying down to around 10% moisture content. It's only now that the true beauty of the timber and what we bought on a cold November day can be seen.

Timber range

The students selected a range of timbers including English brown oak (*Quercus robur*), ripple sycamore (*Acer pseudoplatanus*), birdseye maple (*Acer saccharum*), American cherry (*Prunus serotina*) and American black walnut (*Juglans nigra*). I also bought some cedar of Lebanon (*Cedrus libani*) for short courses and stock for the coming year's work. We have a good relationship with a few timber yards and by and large the timber selected has been great – with only two exceptions. This year, the cedar of Lebanon, which I bought blind and



Peter Sefton

Peter Sefton is a well-known furniture maker who has 30 years' experience. He is the 'hands-on' principal of Peter Sefton Furniture School in Worcestershire, where he runs long and short courses in fine woodworking, teaching and mentoring students. He also owns Wood Workers Workshop and he is a Liveryman of the Worshipful Company of Furniture Makers.

Web: www.peterseftonfurniture.school.com



Cedar surface checks and cedar drawer bottom

one student's 75mm oak, both proved to be wetter than expected – and promised! These two timbers have suffered surface checks and have now been replaced, so we are ready for the off! The saw bench and planers have come to life, shavings and sawdust are in abundance and are already bagged up, awaiting next year's winter months ready to be used in the burner that heats the hand tool workshop. ■

NEWS & EVENTS

All the latest events and news from the world of woodworking...

The Cotswold Show and Food Festival

Plans are well underway for this event to be held in Cirencester Park on 4 and 5 July, 2015 with more attractions and trade stands than ever.

Two pavilions on the 100 acre site will be showcasing the very best Cotswolds, UK and international crafts, including ceramics, jewellery, art and fabrics. Many of the traders will also be demonstrating how they work and offering useful hints and tips.

Outside the pavilions, some 200 trade stands will feature shopping for inside and out with garden features, tools, kitchens and log burners.

The traditional rural skills area plays host to a range of artisans, including blacksmiths, beekeepers, fish smokers, saddlers, thatchers and woodcarvers – and perhaps a chance to try your hand at some of these ancient skills for yourself.

Children's entertainments are plentiful with free circus skills lessons as well as a fun fair, donkey rides, a climbing wall, bouncy castles and lots more.

Tickets for the show are on sale via the new website, which is constantly being updated with attractions as they are confirmed.

DETAILS:

When: 4–5 July, 2015

Where: Cirencester Park, Cirencester GL7 2BU

Contact: Cotswold Country Fair Ltd

Tel: 01285 652 007

Web: www.cotswoldshow.co.uk



PHOTOGRAPH COURTESY OF PHILLIPA STAGG PR

The Cotswold Show will have all hobbies covered in 2015



PHOTOGRAPH COURTESY OF WWW.TABBYDANENPORT.COM

A chainsaw carving display at last year's
Weird & Wonderful Wood

Weird & Wonderful Wood

For those who love wood, those fascinated by the beauty of wood and beautiful wooden objects, it event offers a rare chance to see how objects are made and an opportunity to try making things.

Demonstrations will include furniture making, musical instrument making, displays by traditional fletchers and bowyers, chainsaw carving, wheel wright, hurdle making, woodturning, pole-lathe turning, sign writing, flute making as well as coracle making and traditional gypsy caravan displays. Visitors will be able to meet over a hundred artists and craftspeople, enjoy watching their practical skills and appreciate their work. There will also be a working mobile sawmill on site, so if you want to bring your own tree, it can be cut for you!

DETAILS:

When: 16–17 May, 2015

Where: Haughley Park, Wetherden, near Stowmarket, Suffolk IP14 3JY

Web: www.weirandwonderfulwood.co.uk

GET HANDS-ON with Japanese saws and sanding plates

Taking place at Axminster Tools & Machinery's Nuneaton branch, join tutor Lee Stokes as he gets hands-on with a range of high quality and easy-to-use Japanese woodworking hand saws and sanding plates. The event will involve some demonstrations and explanation regarding these tools, plus the opportunity to try them for yourself and get a feel for their precision and quality. Whether a beginner or more experienced woodworker, Lee will be happy to answer questions and offer advice. Find out how these tools can be used to simplify and improve your work.

DETAILS:

When: 6 June, 2015

Where: Axminster Tools & Machinery, Bermuda Trade Park, Nuneaton, Warwickshire CV10 7RA

Contact: Axminster Tools & Machinery

Tel: 02476 011 402

Web: www.axminster.co.uk



PHOTOGRAPH COURTESY OF AXMINSTER TOOLS & MACHINERY



You can expect to see a wide selection of woodworking demonstrations at this popular event

The European Woodworking Show 2015 – woodworking in action

After a one year break, this event returns to the show calendar with its usual mix of top class demonstrators and exhibitors across a wide range of woodworking disciplines. The show will be held at the historic Cressing Temple Barns near Braintree in Essex from 12–13 September, 2015.

Demonstrators include woodturners Joey Richardson, Nick Agar and Mark Hancock, pyrographer Bob Neill, timber hewer Steve Woodley, woodcarvers Peter Berry, Tim Atkins, Dave Johnson and Gerald Adams and marionette maker Lenka Pavlickova. In addition, scrollsaw expert Fiona Kingdon will be present, as well as spoon carver Anna Casserley. You can also see Japanese joint maker Brian Walsh, plus furniture makers David Charlesworth, Dylan Pym and David

Barron, plus many more.

There will also be many familiar tool suppliers including Trend Tools & Machinery, Lie-Nielsen Toolworks, Jet Tools & Machinery, Gransfors Bruks axes, Pfeil, Auriou and Flexcut carving tools, Classic Hand Tools, Lincolnshire Woodcraft, Chestnut Products, David Barron Furniture and a host of other retailers. Masterclasses will be presented by Simon James, author of *Working Wood 3*.

DETAILS

When: 12–13 September, 2015

Where: Cressing Temple Barns, Witham Road, Braintree, Essex CM77 8PD

Contact: The European Woodworking Show

Tel: 01473 785 946

Web: www.ews2015.com

HEALTH & SAFETY NEWS

Is your PPE the real deal?

Despite several warnings recently about counterfeit and inferior personal protective equipment (PPE) finding its way into UK workplaces, the problem appears to be growing according to workplace equipment supplier Slingsby. The company is warning businesses to be extra vigilant when purchasing PPE and says it welcomes proposed legislation that would make retailers and distributors responsible for ensuring products they sell meet the required safety standards.

Slingsby says there are a number of unscrupulous operators in the UK selling a wide range of everyday products including high visibility clothing, gloves and goggles that fail to meet minimum safety requirements.

Lee Wright, Marketing Director, says: "Over the last couple of years, it's been well-publicised that cheap, substandard, and even counterfeit PPE is finding its way into the UK. A lot of the examples we have seen are badly made and fail to offer any real protection, as well as being non-compliant with safety standards. Some products even come with falsified certifications. The fact that to the untrained eye, many of these products still look the part often makes it difficult to spot they are fake. This means it is important to buy PPE through reputable suppliers and to ensure it is certified to the appropriate British or European standards. However, new legislation currently being considered would help to eradicate counterfeit PPE by making retailers and distributors accountable for ensuring the quality of the products they sell."

Until the changes are introduced, however, businesses and organisations have a responsibility to their employees, customers and the public to provide PPE that is safe and will do its job should the worst happen.

Traditional timber frame joints short course



PHOTOGRAPH COURTESY OF WWW.BRYNCHIL.CO.UK

Centre for Alternative Technology

Learn how to measure, mark out and cut perfect joints used in traditional timber framing with this short course at the Centre for Alternative Technology in Powys, Wales, which covers an overview of the tools and techniques used in marking and cutting joints.

Using a hands-on workshop, you will be taken through the initial stages of constructing a timber frame and the course uses buildings on site as a reference to the joints you will make, employing the 'one we made earlier' method. The course is suitable for anyone who is considering building their own timber frame project, including individuals and community groups. The cost of the course is £80.

DETAILS:

When: 30 May, 2015

Where: Centre for Alternative Technology, Machynlleth, Powys, Wales SY20 9AZ

Contact: Centre for Alternative Technology

Tel: 01654 704 952

Web: www.courses.cat.org.uk

CHARLESTON

Charleston, 'An Artists' Home and Garden' in Firle, East Sussex is celebrating 100 years! The Lottery-funded Charleston Centenary Project aims to revitalise the site back to its former glory, when in the care of Duncan Grant, Vanessa Bell and the Bloomsbury group, in 1916. The Centenary Project will involve numerous rebuilds – including the Old Granary and the barns – as well as new additions, a gallery, café, auditorium and more. The Project will also allow Charleston to run an exciting and diverse annual programme of workshops, exhibitions, seminars, talks and events as well as a new education programme.

Over the next three years, Charleston will play host to a number of exciting events for its Centenary celebrations and in 2015, Annemarie O'Sullivan's willow course was one of them. On 5 May, Annemarie ran a course on willow plant supports. The course allowed students to make a plant support from locally grown, freshly harvested willow, which Annemarie oversees herself. Students learned one basic, but strong weave and one binding technique. All techniques taught by Annemarie can be used in other woven projects. Not only has Annemarie taught during the celebrations, but she has also contributed a large sculptural piece to the site, inspired by the surrounding landscape of the South Downs.

DETAILS:

Where: Charleston, Firle, Lewes, East Sussex BN8 6LL

Contact: Annemarie O'Sullivan

Web: www.annemariesullivan.co.uk



Annemarie O'Sullivan's willow sculpture

PHOTOGRAPH COURTESY OF GMC/ANTHONY BAILEY

WOODWORKING IN THE NEWS...

Dads & DIY

According to a recent study, millions of Britons still turn to their fathers for DIY help instead of doing it themselves or paying a professional. More than eight in 10 admitted their father is always the first person they call whenever they have a job they need help with. The study found that 41 is the age that Britons finally stop relying on his help around the house. So, are we really scared of power tools? Apparently so! How many of you help out family when something goes wrong around the house? In fact, more than one in 20 respondents even admitted to calling their father just to change a light bulb! The research also revealed that 85% of Britons admitted they would be completely lost without their father's help. So, if you're a DIY dad, well done to you and hopefully our new magazine will help you to hone those all-important skills even further!

IKEA is forced to ban people from playing hide-and-seek in its stores due to health and safety fears

IKEA was recently forced to ban people from playing hide-and-seek in its stores after several Facebook-organised games attracted tens of thousands of participants, forcing management to ban the event due to safety concerns. The popular events were inspired by the success of a game held in a Belgium store last year in which 500 adults participated and were discovered hiding in fridges, cupboards and under piles of soft toys.

In banning the game, IKEA spokesperson Martina Smedberg said: "It was simply too difficult to control. We need to make sure people are safe in our stores and that's hard to do if we don't even know where they are." She likened an IKEA store to an 'extremely large living room'. As many have pointed out, perhaps if members had to buy at least one item of flat-pack furniture each, then bosses might come round to the idea.



PHOTOGRAPH COURTESY OF INAGIST.COM

IKEA bans games of hide-and-seek in its stores over health and safety fears

Woodworks@ Daventry

Now in its sixth year, last year, this event attracted over 1,500 visitors and the organisers are expecting even more in 2015. Again, there will be refreshments within the show hall and some exciting demonstrators from the world of woodturning. The area's clubs will be showing the results of their endeavours and getting involved in the annual inter-club competitions. There will also be a raffle with some brilliant prizes.

DETAILS:

When: 15-16 May, 2015

Where: Daventry Leisure Centre, Lodge Road, Daventry NN11 4FP

Contact: Tudor Rose Woodturners

Web: www.tudor-rose-turners.co.uk

Picture framing, gilding and upholstery course

Suitable for beginners and taking place over three days at West Dean College, this course allows you to learn the basic skills to mount and frame works of art to a high standard. Using quality materials and minimum equipment at each stage, you will leave with the knowledge to work independently. The course tutor is John Hill who has worked as a framer and who has a keen interest in conservation.

DETAILS:

When: 31 May, 2015

Where: West Dean College, West Dean, near Chichester, West Sussex PO18 0QZ

Web: www.westdean.org.uk



PHOTOGRAPHS BY LOUISE BIGGS

THE CABINET BEFORE RESTORATION



The top with the remnants of contact adhesive

Firstly, the top at some stage had formica stuck to it with contact adhesive to make it look better – the formica had long gone but the remnants of adhesive remained. The second and most important was that the cabinet had no formal base or plinth. Essentially, the bottom of this section of the cabinet was just 12mm-thick. A moulding which had been fitted underneath, went around the front and side edges, but this was causing the cabinet to rock. Further to this, with both doors open the whole cabinet tipped forward, which would be a problem when the intended display to eventually be housed in the cabinet, was china.

After discussion, it was agreed that a plinth would be fitted to the bottom, incorporating the existing moulding and would have enough weight at the back to counterbalance the cabinet with the doors open. Similarly, a cornice section would be fitted to cover over the original top.



The bottom, with the original moulding applied underneath

Walnut glazed cabinet

Louise Biggs restores the top half of a glazed walnut cabinet to its former glory

My client approached me to see what I could do to refurbish her 'glazed cabinet'. When I went to view the cabinet she explained that it was just the top section of the piece available – the bottom section had been separated from the top and went missing long ago. We judged that it had probably started life either as a bookcase or bureau bookcase. Made of walnut (*Juglans regia*), it had softwood shelves, which had edging strips of walnut. The polished surface was not in a good condition, having suffered from damp and wet storage conditions, which in turn had led to black stains – iron marks – around all the pins holding the door mouldings on. Besides this, it had two major problems which the owner wanted rectified...



Stripping a door with wire wool



The bleach in the process of working on the iron marks

Stripping the cabinet

The first step in restoration was to strip the exterior of the cabinet. This was carried out with a proprietary paint stripper and neutralised with methylated spirits before all the surfaces were sanded by hand to cut through any residue that the stripper might have left.

Bleaching the iron marks

The next stage was to apply a two-part ISO bleach to the mouldings to reduce the black stains around each of the pins on the door mouldings – done at this stage it has plenty of time to work and dry. The first solution – aqueous alkaline solution – was put on and left for 20 minutes and then the second solution – a peroxide solution – was applied until the surface was completely wet and it was left to work for 24 hours. Grass brushes must be used and brushes and solutions must never be mixed. The bleached areas were then neutralised with acetic acid and left to dry.

Creating the plinth

The timber requirements were worked out for the cornice and plinth and cut and planed to the cutting list. The plinth was to be a rectangular section with a rebate cut on the top inside edge, using a router set up on a router table. This was to be fitted around the existing moulding that was around the bottom of the cabinet.

A mitre was cut on the front end of one of the side sections – these were left longer than required – a corresponding mitre was cut on the front section. The two pieces were aligned in position and the side piece clamped to hold it. The front section was then cut to length with the mitre

on the other end and the second side piece was mitred. All the mitres were cut on a crosscut saw, but could have been cut on a hand mitre saw. The mitred corners were then grooved to accept a loose tongue and taped together to temporarily hold the joints together.

A large section of oak (*Quercus robur*) was then rebated into the side plinth sections at the back, to form the back of the plinth. When all the joints were cut the side sections were cut to length and the plinth section was glued and clamped in position on the cabinet to keep the right shape. The plinth was then cleaned up with a cabinet scraper and abrasives.

Creating the cornice

The existing square section that was fitted around the top edge was removed. The cornice was made in two parts: firstly, a rectangular section was cut to size and then a rebate was cut on the bottom inside edge, to fit around

Using bleach

At least 72 hours should be left before applying any type of finish after bleaching. Two-part bleach will not be readily available, only through specialist polishing suppliers, but Oxalic acid will bleach the marks – maybe not quite as effectively but it is more user friendly.

Dissolve the oxalic acid in warm to hot water, until you have a saturated solution. Apply to the areas that require bleaching and leave to dry. Neutralise with acetic acid and allow to dry thoroughly before sanding. At all stages of bleaching, whichever type you use, use the appropriate glove, face and breathing protection. If you're not happy about using either of these bleaches, proprietary bleaching products are available.

the top edge of the cabinet. It was jointed in the same way as the plinth with the back section rebated into the side sections. The same procedures were followed for cutting the mitres and cutting the sections to the right ➤



The first section of the cornice glued and clamped to the cabinet's shape



The cove moulding glued and clamped to the cornice frame



The top panel in the bag press

length. The frame was then glued and clamped as before around the cabinet to keep the required shape.

The coved moulding was then cut using a router fixed to a router table, due to the cutter size this was the safest option, over holding the router by hand. The mitres were cut to fit the moulding around the cornice frame and when all sections were ready, they were glued and clamped to the frame. The moulding formed a rebate the depth of 6mm ply with two layers of veneer, one walnut and a counterbalance veneer. As with the plinth, the cornice was cleaned up ready for polishing.

The walnut and counterbalance veneers were joined and taped and leaving oversize at the moment, the top panel was glued and the veneer applied before being put into the bag

press. In the absence of a bag press, the veneered board can be clamped between two substantial pieces of board and weighted in the middle. The board was cut to size and shape to fit the top of the cornice and then cleaned up.

The plinth and cornice sections were then clamped into position and held in place with glue blocks, which were rub jointed into place. Although the two sections were glued with PVA, the glue blocks were glued with animal/hide glue as this is reversible, should the need arise. The top panel was then glued in place.

Two new shelves

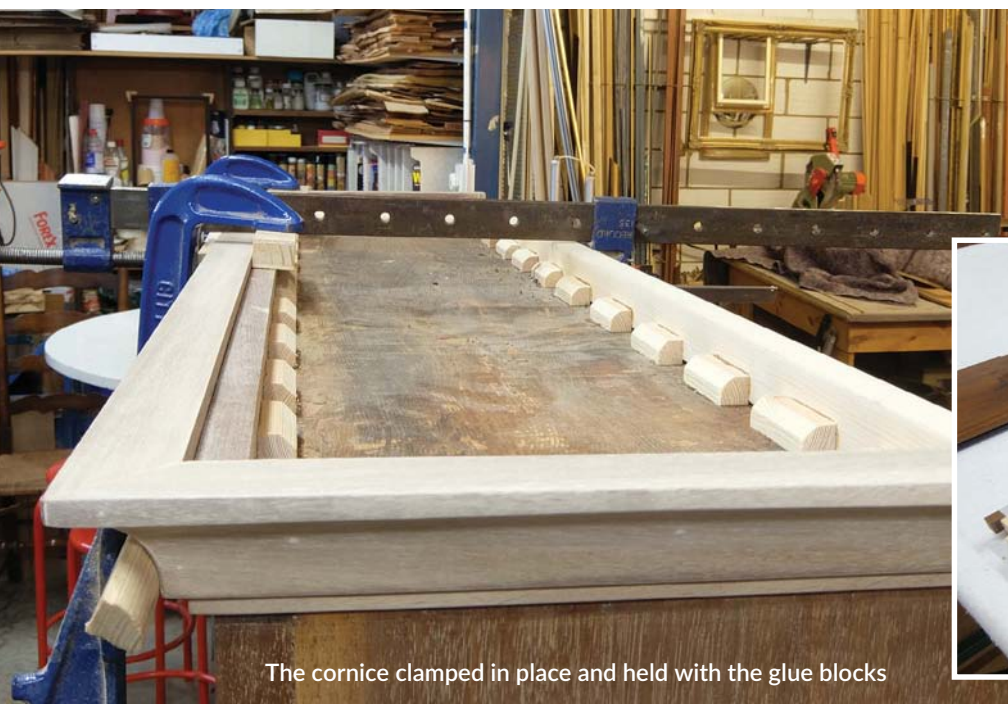
Two additional shelves had been asked for and these were made in the same way as the existing shelves – from softwood with a walnut front edging.

The walnut and softwood – preferably old timber – was prepared to size and the walnut edging glued and taped to the front edge. Once the surface had been cleaned up the shelves were cut to size and the corners notched out on the bandsaw to wrap around the corner supports for the shelf rests. The front walnut edges were then moulded to a half round shape.

The counterbalance

With the cornice and plinth now fitted in place, the shelves were placed in the cabinet and the doors replaced with the glass temporarily held in place. We opened the doors to see whether the cabinet still tipped forward and if so, by how much.

A second, weighty block of oak was planed up and screwed to the inside back section of the plinth. The doors were again fitted and then opened. With the extra weight the cabinet stayed firmly on the ground with the doors open. This part could have been a lot of trial and error to get the extra weight, but I decided to start with a fairly hefty piece and it thankfully paid off.



The cornice clamped in place and held with the glue blocks



The weighty counterbalance in position



Doing the localised colouring out on the door stiles



Bodying up the polished surface of the cabinet with a rubber

Polishing

Evidence of the original plaster of Paris grain filler could be seen, so the cabinet was lightly stained with a mix of Golden Oak and Nut Brown oil stain. The mix was then adjusted for the new cornice and plinth. Once dry, two coats of shellac sealer were applied and then all the surfaces were de-nibbed. A couple of coats of pale polish were applied and any localised colouring-out was done to blend the areas in using a mix of weak red and black polish and earth pigments within the polish.

The polished surface was built up using a pale polish. With each successive coat, applied with a rubber, the colour was becoming too red. A weak blue spirit stain was added to the polish and with successive coats of polish the red hue was reduced and it was more in keeping with the area of original colour the client had

WALNUT

The first historical account of walnut trees growing under civilised cultivation was in ancient Babylon – Iraq – about 2000 BC, however, walnuts have evidently been attached to mankind much earlier by excavations from cave fossils, as suggested by archaeologists. The Egyptians used walnut kernel oil to embalm mummies by replacing the blood with walnut oil. The Greeks are credited with the first noted improvements in the size and quality of the Persian walnut through selection and cultivation, which are now referred to as English walnut trees. The Romans established the Persian walnut tree throughout most of Europe and North Africa. The English walnut (*Juglans regia*), was brought to California in the USA by Spanish Franciscan missionary monks in the early 1800s, who settled along the coast.

Properties

European walnut has a high crushing strength and medium resistance to shock loads, and has medium bending strength and low stiffness, with very good steam bending qualities.



The cabinet fully restored

specified. Once the polish was built up to the required depth, the surfaces went through the stiffing stage of using 50/50 polish and methylated spirit and then the spiriting off stages of using only methylated spirits. Once the surface had hardened, the cabinet was wired and waxed with '0000' wire wool and a proprietary coloured wax. ■



PHOTOGRAPHS BY DAVE BATES

The roots of this 55-year-old tree had lifted a concrete driveway. With a girth of 1,395mm and some dark heartwood, this log was almost viable, but it had been cut too high; the old adage is that a foot on the bottom is worth a yard of the top. It also had several steel appendages, so will sadly be firewood

Walnut works well with hand and machine tools with a moderate blunting effect on cutting edges. It planes well and finishes cleanly and can be turned, carved, nailed screwed and sanded. It can be moulded, bored and routed and glues satisfactorily. It can be stained and given a good French polish finish.

Trees can live to an age of approximately 60 years and grow to about 18m tall.

There are many other walnut species, the best known of which is the Black walnut (*Juglans nigra*), a native American walnut tree, which is grown mainly for its value in making expensive furniture.



Louise Biggs

Having completed her City and Guilds, Louise trained for a further four years at the London College of Furniture. She joined a London firm working for the top antique dealers and interior designers in London, before starting her own business designing and making bespoke furniture and restoring furniture.

Web: www.anthemion-furniture.co.uk



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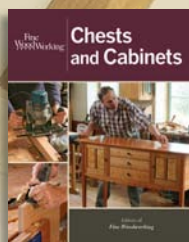
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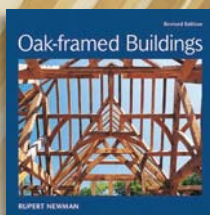
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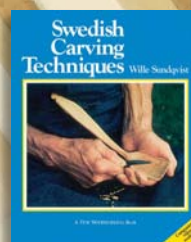
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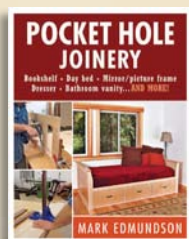
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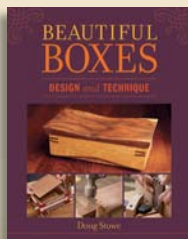
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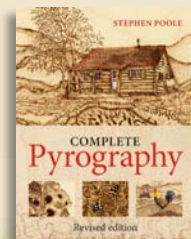
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Woodland ways

PHOTOGRAPH COURTESY OF WIKIPEDIA COMMONS

LEFT FROM TOP:
Catherine's
moss (*Atrichum*
undulatum)

Liverwort
(*Lunularia cruciata*)

Bristle-moss
(*Orthotrichum*
tenellum)

Wake up and smell the moss

PHOTOGRAPH COURTESY OF WIKIPEDIA COMMONS



Timber comes from trees, trees grow in woods, forests, in hedges and commonland – but there's more to woods than meets the eye – as **Gary Marshall** knows....

It amazes me just how unobservant and uninformed we can sometimes be. I spend much of my time in and around woods, walking, working, managing and generally loving them. Many people know a bit about timber production, wildlife and habitats. Every spring, we all look forward to the unstoppable pulse of nature's unfurling and blossoming – from the scuffle of rodents and the drumming of woodpeckers, through to the climactic carpeting of bluebells and the full

throated dawn chorus. Yet, the other day, I had my eyes opened as if I'd been peering down a tube all my life.

Some volunteers and I have been involved in conservation work on a small triangle of local commonland for a couple of years. Our aim is to enhance the biodiversity on the land by selective, careful and planned management work informed by wildlife surveys. The common is a mix of grassland and deciduous woodland, including some old wet woodland.

PHOTOGRAPH COURTESY OF WWW.
WILDBOUTTHEWORLD.COM





ABOVE: Dead standing timber = woodpecker home

RIGHT: 'Messy' woodland or valuable habitat?



It harbours a very good population of reptiles – as evidenced by a survey carried out last year. Since then, we've also embarked on recording flowering plants – including trees and shrubs – and this informed some selective felling of birch (*Betula pendula*), rum cherry (*Prunus serotina*) – a potentially invasive alien – and sycamore (*Acer pseudoplatanus*), as well as some hazel (*Corylus avellana*) coppicing. In this way, new glades have been opened up, benefitting butterflies and basking reptiles – and the common is looking better in places than it has done for years.

New species of moss

During our survey work, just one species of moss was identified – Catherine's moss (*Atrichum undulatum*) pictured and one type of liverwort was found. So we were pleased when an expert in bryophytes – that's mosses and liverworts to you and me – offered to carry out a survey. We expected him to find maybe half a dozen or so species to add to our



Gary and a friend working at clearing the common land

growing list. Imagine our incredulity then to hear, after less than a quarter of an hour, that our expert reckoned there 'could be as many as 50 different species here'. He then showed us the details that defined many of them.

From the beautiful swan's neck moss to tiny crescent shaped markings on a near microscopic liverwort (*Lunularia cruciata*) and Catherine's moss, to the rarer but very attractive slender bristle-moss (*Orthotrichum tenellum*).

One other surprising thing that came out of the survey was that some mosses and liverworts can be recognised by their smell! Well, I'm used to noticing the spicy scent from new leaves of downy birch or inhaling the thin oily liquid from blisters in noble fir bark that whiffs to me of grapefruit – but I never thought to sniff a moss before. When I did, I had an olfactory revelation – it was like the distilled essence of a damp English woodland, with a small touch of astringent antiseptic, which was really quite refreshing.

So, if you're ever out in deepest Sussex and see strange people scratching and sniffing at old woodland banks, don't be alarmed, we're only marvelling at one of the many wonders of nature that we all too often overlook. There's more to woods than meets the eye – or the nose for that matter. So woodland managers and owners and landowners, large and small, take note!

Indicators of air quality

Remember the humble moss and liverwort – as these can also be



Gary Marshall

Gary has had a life-long interest in woodlands and the countryside. He trained in countryside management and subsequently ran a company working with the local County Councils and Unitary Authority and their Countryside and Rights of Way Teams, as well as a wide range of conservation organisations, including the Woodland Trust. Although supposedly retired, Gary still keeps his hand in, writing the odd management plan – and article! – working as a volunteer on rights of way and woodland work, as a trustee of a woodland charity and as a networker in the local rural scene.

excellent indicators of air quality – they can easily lose their often sensitive habitats by well meaning tidying of 'messy' woodland areas. One such area of our common is pictured and contains fallen, storm damaged hazel stools and much soggy fallen timber – live and dead – by a small stream. Our moss expert urged us to treat these habitats with the 'respect they deserve' and to leave them in place since they support several interesting moss and liverwort species. Without such advice, we may have been tempted to clear this area, coppicing such stools. Not now, though – we will leave them be. ■

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MODEL	HEAT OUTPUT	EX VAT	INC VAT
Devil 6002	0.7-2kW	£37.99	£45.99
Devil 6003*	1.5-3kW	£49.98	£59.98
Devil 6005	2.5-5kW	£74.99	£89.99
Devil 6009	4.5-9kW	£129.98	£155.98
Devil 6015	5-10-15kW	£189.98	£227.87

Clarke **CORDLESS DRILL/DRIVERS**

- 10mm chuck size
- 2 Speed, variable control - 0-350/0-1250rpm
- 21 torque settings

MODEL	VOLTS	BATTS	EXC. VAT	INC VAT
CCD180	18v	1	£34.99	£41.99
CCD240	24v	1	£39.98	£47.98
Bosch PSR18	18v	1	£49.98	£59.98

Clarke **DRILL BIT SHARPENER**

- Great for 3mm to 10mm HSS drill bits - 70W motor
- Drill bit guide ensures sharpening at the correct angle
- Saves cost of new drills

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

Clarke **BISCUIT JOINER**

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

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

Clarke **PORTABLE THICKNESSER**

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

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

Clarke **PLANERS & THICKENERS**

- Ideal for DIY & Hobby use
- Dual purpose, for both finishing & sizing of timber (CP-6 planer only)

MODEL	MOTOR	MAX THICK. CAPACITY	EXC. VAT	INC. VAT
CP-6	1100w	150w	£139.98	£167.98
CPT600	1250w	120mm	£169.98	£203.98
CPT800	1250w	120mm	£189.98	£227.98
CPT1000	1500w	120mm	£269.98	£323.98

Clarke **POWER PLANERS**

- 82mm cutting width
- CEPI

MODEL	INPUT	DEPTH	EXC. VAT	INC. VAT
Clarke CEPI	650w	2mm	£21.99	£26.39
Einhell RT - PL82	850w	3mm	£49.98	£59.98
B&D KW750K - GB	750w	2mm	£57.99	£69.99

* was £65.99 inc. VAT

Clarke **DISC SANDER (305MM)**

- Powerful, bench mounted disc sander • 900W
- No load disc speed: 1490rpm • 305mm Disc Diameter (1 x 60 grit sanding disc included)
- Dimensions (LWH): 440x437x386mm
- Weight: 28kg

MODEL	HEAT OUTPUT	EX VAT	INC VAT
Devil 6002	0.7-2kW	£37.99	£45.99
Devil 6003*	1.5-3kW	£49.98	£59.98
Devil 6005	2.5-5kW	£74.99	£89.99
Devil 6009	4.5-9kW	£129.98	£155.98
Devil 6015	5-10-15kW	£189.98	£227.87

Clarke **CONTRACTOR 18V PRO CORDLESS DRILL/DRIVERS**

- 10mm chuck size
- 2 Speed, variable control - 0-350/0-1250rpm
- 21 torque settings

MODEL	BATTERIES	EXC. VAT	INC. VAT
CON18N	2 x Ni-Cd	£64.99	£77.99
CON18L	2 x Li-Ion	£84.99	£101.99

Clarke **SHEET SANDERS**

- 110v in stock

MODEL	SHEET SIZE	MOTOR	EX VAT	INC VAT
CON300	190x90mm	150w	£12.99	£15.59
CON300	230x115mm	330w	£29.98	£35.98
Makita 80455	112x102mm	200w	£54.99	£65.99

Clarke **1000MM VARIABLE SPEED WOOD LATHE**

- Large 350mm turning capacity • Variable speed
- Lockable tailstock • High quality cast iron build

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

Clarke **13" MINI WOOD LATHE**

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

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

Clarke **WOODWORKING LATHES**

- 3 PCE CHISEL SET INCLUDED WITH CWL1000

MODEL	CENTRE TO TURNING CENTRE (mm)	TURNING CAP.	EX VAT	INC VAT
CWL1000	1016	350mm	£114.99	£137.99
CWL1200	940	305mm	£189.98	£227.98

Clarke **BOLTLESS SHELVING BENCHES**

- Simple fast assembly in minutes using only a hammer

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

Clarke **WOODWORKING LATHES**

23228(LH)

Clarke **MORTISING MACHINE** CBM18

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

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Clarke **WOODWORKING VICES**

Record vv7

MODEL	MOUNTING	JAW (WIDTH/OPENING/DEPTH)mm	EXC.VAT	INC.VAT
Clarke	Bolted	150/152/61	£13.49	£16.19
CHT152	Clamped	72/60/40	£16.99	£20.39
Stanley	Clamped	75/50/32	£18.99	£22.79
Record V75B	Bolted	180/205/78	£24.99	£29.99

Clarke **10" SLIDING MITRE SAW**

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

£129.99 EX VAT
£155.99 INC VAT

CMS10S2

MITRE SAWS

Makita

Quality Range of Mitre saws and blades available

MODEL	BLADE DIA	MAX CUT BORE (mm)	DEPTH/CROSS	EX. VAT	INC. VAT
Einhell	210/30	55/120mm	£54.99	£65.99	
TH-SM 2112	210/25.4	60/200mm	£119.98	£143.98	
Fury 3	250/30	75/340mm	£159.98	£191.98	
Einhell	260/30	95/130mm	£199.98	£239.98	
TH-SM2534					
Makita					
LS1040					

Clarke **DUST EXTRACTOR/CHIP COLLECTORS**

£119.98 EX VAT
£143.99 INC VAT

METABO ALSO AVAILABLE

• Powerful 750w motor
• 56 litre bag capacity
• Flow rate of 850M3/h

MODEL	MOTOR	FLOW RATE	BAG CAP.	EX VAT	INC VAT
CDE35B	750w	850 M3/h	56Ltrs	£119.98	£143.98
CDE7B	750w	850 M3/h	114Ltrs	£139.98	£167.98

Clarke **QUALITY CAST IRON STOVES**

20 GREAT STYLES IN STOCK

FLUES, COWLS & ACCESSORIES IN STOCK

POT BELLY

PRICE CUT
£89.98 EX VAT
£107.99 INC VAT

11.8kW

BARREL
£209.99 EX VAT
£250.80 INC VAT

6.9kW

Clarke **WHETSTONE SHARPENER** CWS200

• Produces accurate razor sharp cutting edges on chisels, scissors, tools etc
• 120w motor
• Grinding disc 200mm
• Wet bath • Leather honing wheel

£109.98 EX VAT
£131.98 INC VAT

Clarke **MITRE SAW STAND**

CFMSS1

£64.99 EX VAT
£77.99 INC VAT

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

Clarke **ROTARY TOOL KIT**

CRT40

£29.98 EX VAT
£35.98 INC VAT

Kit includes:
• Height adjustable stand with clamp
• Rotary tool
• 1m flexible drive • 40x accessories/consumables

Clarke **DUST EXTRACTOR** CDE1000

• 50 litre tank capacity
• 183 m³/h flow rate
• 1000W input wattage

£99.98 EX VAT
£119.98 INC VAT

Clarke **CIRCULAR SAWS**

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

CON185

£34.99 EX VAT
£41.99 INC VAT

*Includes laser guide

MODEL	MOTOR	MAX CUT 90/45 (mm)	EXC.VAT	INC.VAT
Clarke CCS185B	1200W	65/44	£34.99	£41.99
Clarke CC52	1300W	60/45	£59.98	£71.98
Clarke CON185*	1600W	60/40	£59.98	£71.98

airmaster **TURBO AIR COMPRESSORS**

• Superb range ideal for DIY, hobby & semi-professional use

HUGE RANGE OF AIR TOOLS IN STOCK

CLARKE 9MM AIR HOSE FROM ONLY £5.99 EX VAT £7.19 INC VAT

Clarke **DOVETAIL JIG**

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

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Clarke **6" BENCH GRINDER WITH SANDING BELT**

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

£49.98 EX VAT
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CBG6SB

Clarke **BENCH GRINDERS & STANDS**

• Stands come complete with bolt mountings and feet anchor holes

6" & 8" AVAILABLE WITH LIGHT

£27.99 EX VAT
£33.99 INC VAT

STAND AVAILABLE FROM ONLY £41.99 EX VAT £50.39 INC VAT

Clarke **HARDWOOD WORKBENCH**

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

CHB1500

£129.98 EX VAT
£155.98 INC VAT

airmaster **8/250**

FROM ONLY £79.98 EX VAT £95.98 INC VAT

MODEL	MOTOR CFM	TANK	EX VAT	INC VAT
Tiger 8/250	2Hp 7.5	24ltr	£79.98	£95.98
Tiger 7/250	2 Hp	7	£89.98	£107.98
Tiger 8/36	1.5 Hp	6.3	£109.98	£131.98
Tiger 11/250	2.5Hp	9.5	£119.98	£143.98
Tiger 8/510	2Hp	7.5	£129.98	£155.98
Tiger 11/510	2.5Hp	9.5	£149.98	£179.98
Tiger 16/510	3 Hp	14.5	£219.98	£263.98
Tiger 16/1010	3 Hp	14.5	£269.98	£323.98

Clarke **ROUTERS**

BOSCH

FROM ONLY £39.98 EX VAT £47.98 INC VAT

ACCESSORIES IN STOCK

• DIY

MODEL	MOTOR (W)	PLUNGE (mm)	EX VAT	INC VAT
CR1C*	1200	0-50	£39.98	£47.98
Bosch	1400	0-55	£74.99	£89.99

POF1400ACE

Clarke **CONTRACTOR CR2 ROUTER**

£109.98 EX VAT
£131.98 INC VAT

• Powerful heavy duty machine ideal for trade use
• Variable speed control from 7,400-21,600 rpm
• 2100w motor • 0-60mm plunge depth, CR3 Router with 15 Piece Bit Set also available only £94.99 £113.99

INCLUDES 15 PIECE SET WORTH OVER £20

Clarke **ROUTER TABLE** CRT-1

Router not included

£56.99 EX VAT
£68.39 INC VAT

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

Clarke **5PC FOSTNER BIT SET**

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

£9.98 EX VAT
£11.98 INC VAT

CHT365

Clarke **TABLE SAW WITH EXTENSION TABLES (250mm)** CTS14

• Ideal for cross cutting, ripping, angle and mitre cutting
• Easy release/locking mechanism for table extensions • 0-45° tilting blade • Cutting depth: 72mm at 90° / 65mm at 45° • 230V/50Hz, Motor: 1800W, max cut speed: 4700rpm
Shown with optional leg kit

£119.98 EX VAT
£143.98 INC VAT

CLKS £22.99 exc.VAT £27.59 inc.VAT

Clarke **SCROLL SAWS**

FROM ONLY £64.99 EX VAT £77.99 INC VAT

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

MODEL	MOTOR (W)	RPM	EX VAT	INC VAT
CSA400B	85w	1450	£64.99	£77.99
CSA16V	120w	400-1700	£79.98	£95.98
CSA400C	90w	550-1600	£99.98	£119.98

* Includes flexible drive kit for grinding/polishing/sanding

Clarke **ROUTER TABLE** CRT-1

Router not included

£56.99 EX VAT
£68.39 INC VAT

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

EVOLUTION **255mm MULTI-PURPOSE TABLE SAWS**

FURY 5 ONLY £149.98 EX VAT £179.98 INC VAT

WAS £191.98 INC VAT

MODEL	MAX DEPTH CUT	TABLE SIZE (mm)	EXC. VAT	INC. VAT
FURY5	54mm	73mm	£149.98	£179.98
RAGE5	55mm	79mm	£269.00	£322.80

*FURY power: 1500W (110V available)
*RAGE power: 1800W/230V (110V available)
table extensions included
*was £191.98 inc.VAT + was £334.80 inc.VAT

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CAMBRIDGE 181-183 Histon Road, Cambridge, CB4 3HL	01223 326275	LEEDS 227-229 Kirkstall Rd, LS4 2AS	0113 231 0400	SHEFFIELD 453 London Rd, Heeley, S2 4HJ	0114 258 0831
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DIY *starter toolkit*

The Editor gives us a glimpse in his own busy DIY toolbox

If you describe yourself as a ‘DIY novice’, then we think the best place to start learning this craft – it is a craft skill – is with a decent starter set of tools, so here are my suggestions based on a lot of personal DIY experiences – yes plural, because every job is different.

Let’s assume you aren’t tackling hardcore tasks that need competence with services, such as gas, water and electricity. Unavoidably, you do come into contact with them sometimes but it’s better to steer away from them and leave those types of jobs to the requisite professionals.

THE TOOLS

1. Toolbox or toolbag

Big enough to hold most items in this list and compartments for small items are very useful. This hard case can be used for sawing on and features an angled slot, which helps to hold timber securely. Make sure you buy a big enough toolbox to start with.

2. Hardpoint handsaw

There are plenty to choose from and a general purpose blade is favourite; the hardened teeth last a long time but after that, just throw the saw away. Also, a larger saw is easier to control.

3. Claw hammer

Choose a larger one as the extra weight is useful and you can still aim on small nails and pins, especially if you hold them with pliers – no more mashed thumbs!

4. Cordless drill

The ‘must have’ DIY accessory and no decent toolkit can go without one. Choose a 14.4V or 18V combi model, which will tackle anything from metal to wood to masonry with its hammer action.

5. Hand plane

With tools, bigger is invariably better: more control, more weight, less effort and a better result. Choose a No.4 smoothing plane to start with and learn how to sharpen the blade properly.

6. Hacksaw

A full size hacksaw, not a junior type, will tackle all your metal cutting needs and is useful on plastics and other thin materials.



PHOTOGRAPH BY GMC/ANTHONY BAILEY

7. Clamps

'Quick' clamps are the way to go.

Buy at least two – there are cheap but useable ones sold in outdoor markets as well as respected brand models.

8. Drill and screwdriver bits

Choose a set which contains metal and wood bits – the latter have brad points – masonry bits and a magnetic bit holder for screwdriver bits, especially Pozi-drive heads.

9. Screwdrivers

Still very useful, even in the cordless age. Choose different Pozi- and slot-head sizes. Often available as complete sets at a good price.

10. Try/composition square

The latter type is three tools in one: you can mark at 90 and 45° and the scale is good for measuring.

11. Expanding tape rule

A ubiquitous gadget. Keep it in your pocket or on your belt, ready to rule, along with a flat carpenter's pencil – medium grade because they stay sharp longer than an ordinary pencil.

12. Retractable blade knife

Everyone has one and they are useful

for a multitude of jobs. If you need to trim carpet, then replace the flat blade with a hook type.

13. Spirit level

You can't often get a shelf level without one of these – choose a shorter version to get in confined spaces.

14. Chisels

Two or three widths of blade are necessary for various tasks, from paring to chopping. Choose a type with a head that is designed to be struck with a hammer.

15. Diamond sharpening plate

The best way to sharpen today is using a diamond plate. These vary in price – the best sort is a 300 or 400 mesh/1,000 mesh combination plate. Use with a cheap honing guide to get the bevel angle and water or lapping fluid as a lubricant.

16. General purpose file

A half round medium file will tackle metal and wood when you want to smooth things off.

17. Grips and pliers

Essential when you need to get a grip. A rapid adjustable set of grips will turn tough nuts and tighten loose plumbing fittings. A standard pair of pliers is also very handy to have.

18. Allen keys

So many things that require adjustment need Allen keys in different sizes. A fold-out set stays together and the case acts as a means of leverage.

19. Safety kit

Ear defenders, enclosed safety glasses or goggles, good quality face masks and work gloves are a must – don't start a job without them. It's also handy to keep a small pack of waterproof adhesive plasters too.

20. Gaffer/duct tape

This not only holds things together and seals breaks and holes, but it can also be used to stick carpet or dust sheets down for safety.

21. Filler knife

A filler knife is incredibly useful, not just for filling holes but scraping off loose material as well.

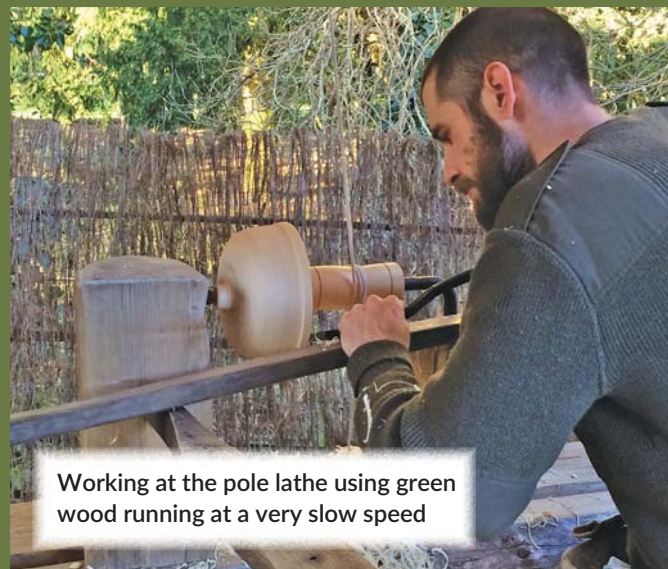
NEXT MONTH

We will look at all the consumables and accessories needed for a variety of jobs. ■





Taking down a Scottish ash the old fashioned way



Working at the pole lathe using green wood running at a very slow speed

Lee Stoffer goes GREEN

Lee Stoffer introduces himself and tells us about taking up green woodworking full-time

I'm Lee Stoffer and I'm a green woodworker. Thinking back, I've always had an interest in working with wood in one form or another, but it wasn't until my late 20s that I discovered the joys of working with green wood. Inspired by watching Ray Mears on TV creating all manner of useful items from the trees around him using only basic hand tools, I purchased my first axe and a couple of cheap knives. With my new tools, I managed to carve what could loosely be described as a ladle out of a piece of conifer from the garden. At the time I was quite pleased with it, but it has many flaws and is not very functional. It did teach me lots and encouraged me to keep practising, which I've been doing ever since.

Pole lathe turning

The next milestone was seeing Mike Abbott demonstrating pole lathe



Weaving seats is quite an art but satisfying when done well

turning at a local craft fair. I was fascinated by the skill he displayed turning baby rattles with three captive rings. We got chatting and I ended up booking onto his introduction to green woodwork course, back in September 2007. I spent a wonderful weekend in good company, camping and working in a beautiful woodland. The course provided a great insight into the tools and techniques employed in this traditional craft. I built myself a shave horse, which has proven to be a very useful tool. The whole experience was a real eye opener and got me determined to learn more about green woodworking.

Going pro

I've been lucky enough to meet lots more friendly and talented craftspeople along the way, who have been happy to share their knowledge. As well as talking to others, I've also gained useful information from magazines, books and the internet. Having come to a point now where I am spending much of my time using and making the hand tools of my craft, I have decided to make it a full-time job, part of which will include regular contributions to this new magazine where I hope to bring you some interesting and challenging projects to get stuck into, as well as sharing some of the knowledge that I've picked up so far. ■

Trimming off a series of timbers using a batten as a guide for chainsawing



PHOTOGRAPHS BY LEE STOFFER

Lee Stoffer

Lee Stoffer has finally decided to turn his passion for green woodworking into a full-time occupation – making, teaching and demonstrating. Lee can be found showing off his enviable skills at many woodworking shows and events. He is always happy to chat about what is involved and he is keen to encourage other people to try their hand at one or more of these fascinating traditional craft skills. You can visit his Facebook page or his new website to learn more about what he has been up to.

Web: www.covertcraft.com

Facebook: www.facebook.com/covertcraft

From cupboard to workstation

Want to do woodworking but have nowhere to work? Have you got a small property and are short of space? Just starting out on the road to discovering your craft skills? Let us give you a helping hand with our new series – **Small Space Woodworking**

First of all, you need a base, a place to keep your kit and do at least some of those all-important tasks or pursue your woodworking hobby. Let's suppose you are starting out with the minimal amount of kit, tools and no workbench. I pay regular visits to our local furniture recycling charity called 'Furniture Now!' Their stock keeps changing all the time so it is always worth paying frequent visits just in case.

I was after a smallish piece of furniture that I could convert into a workstation and it had to fulfil several requirements: a good height to avoid bending over much, so a desk was out of the question; it needed storage so at least one drawer plus cupboard space would be needed; it also had to be sturdy and not made of chipboard and lastly, it had to be cheap!

After several unsuccessful visits, this tragic looking cupboard from the 'age of pine', i.e. the 1970s-80s, caught my eye. It was high enough and had a drawer and a cupboard with a shelf underneath. Although I couldn't claim a lower price as someone 'unwaged', it was still a snip at £24, so the deal was struck.

1 The knobs looked very out of date so they came off first. It needed something new and funky.

There were damp marks and slight surface damage, but a complete makeover would sort that out.

2 I decided to try some sugar soap wipes, which claimed to clean off dirt, wax and grease prior to refinishing. It seemed to do the trick as I didn't want the new finish to be rejected by any muck underneath. ➤



1



2

BEFORE



PHOTOGRAPHS BY GMC/ANTHONY BAILEY

AFTER



PREPARATION FOR NEW HANDLES



3 A series of slim square strips of softwood were trimmed to a round at one end and cut off ready to plug the knob holes.

4 With glue and a hammer to tap them home, all the holes including larger bracket holes on top were plugged tight and surplus glue wiped away.

5 A flush cut saw, like this one, is invaluable for a variety of trimming jobs without damaging the surrounding wood.

Flush cut saw

Japanese saws are pull saws, so no pushing allowed unless you want to wreck them. They have thin blades with wickedly sharp teeth. The blade flexes and there is no 'set' to the teeth so you can trim things flush without marking the surrounding wood. They just can't be beat!

Price: £14.58 (inc VAT)

Web: www.woodworkprojects.co.uk



Right: a Z-Saws flush cutting saw



FITTING A BACKBOARD & PREPARATION



6 Every workbench needs a backboard for tools and to stop anything falling down the back. There was a rebate where an upstand had been, so I just fitted a new board in its place.

7 This piece of waste skirting was the ideal way to fix and strengthen the meeting of the board and the cupboard. It is also useful as it gave a 'skirting gap' down at floor level.



8 The drawer seemed to have lost a thin strip of wood that the drawer would run on. It was easy to glue a new piece in place and it didn't even need trimming to thickness.

9 Now the entire carcass exterior needed sanding to 'key' it ready for painting. I used a coarse 3M foam sanding block with a chisel edge, which fitted nicely around the panel edges.

CLEANING & FITTING HANDLES



10

10 The sugar soap wipe I used earlier came in handy acting as a 'tack rag' to wipe away all dust before painting.

11 Before painting, I decided to mark the holes for the new handles, which had 65mm centres. Marking on masking tape makes it easy to see and avoids denting the wood.

12 A last fitting was a shelf to go on the backboard, which could be used for planes or other items. It was simply screwed straight through the back in three places but not near the ends, which would avoid splitting the ply.

13 My eye was taken by the range of Rust-Oleum all-surfaces paint



11

in our local DIY store. It claimed to be primer/undercoat and finish all in one. It is supposed to be very tough, but it is High VOC – Volatile Organic Compounds – so plenty of ventilation and no smoking!

14 The red looks a bit shocking when you first put it on but with the handles in place, it looks really smart. Now for a vice and the start of a decent toolkit – but that's for another day... ■

Resources

Furniture Now! Lewes, East Sussex
Web: www.furniturenow.org.uk

Rust-Oleum paints
Web: www.rustoleum.com



Parrot vice

We chose to use the new Axminster parrot vice – so called because, well, it looks a bit like a parrot. It swivels from side to side, can be placed on its side – like a dead parrot – and winding the front jaw tight locks the swivel action. It is easy to fit wooden jaws and it will hold just about anything. Best of all, no tricky installation – just three screws needed to fix it to its perch – sorry, workbench.

Price: £36.96 (inc VAT)
Web: www.axminster.co.uk



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PHOTOGRAPH COURTESY OF ROMAS PHOTO/SHUTTERSTOCK.COM

The Art of Topiary



No-one really gives too much thought to the common ‘hedge’, but as the simplest form of ‘topiary’, the hedge is only the beginning of a long-practised art form

When we think of precision-clipped and shaped trees, plants and shrubs, our thoughts would probably go straight to the popular Japanese art form of bonsai, shaping miniature trees grown in containers. When, in fact, the term ‘topiary’ covers the craft to a much larger scale. Deriving from the Latin word used for ‘ornamental landscape gardener’, being *topiarius*, topiary is a horticultural practice to train live perennial plants into clearly defined shapes. Topiary is often described as ‘living sculpture’.

The ‘hedge’ – the most basic form of topiary – is used to create boundaries, walls or screens but since the recording of topiary’s European origins – in Ancient Roman times – topiary has always been pushed and has proved itself to be an art form. Not only did the ancient Romans practise topiary, but so did the ancient Egyptians and the Persians.

It was Cnaeus Matius Calvinus who was credited by Pliny’s *Natural History* and the epigram writer Martial, with first

introducing topiary to Roman gardens. The nephew of Pliny the Elder – author of Pliny’s *Natural History* – Pliny the Younger (62–100AD) wrote letters describing the ‘elaborate figures’ of animals, inscriptions, cyphers and obelisks in clipped greens, in Cnaeus Matius Calvinus’ Tuscan villa. However, many writers think that Egyptian, Syrian, Greek or Jewish slaves were the first people to introduce the art to the Romans.

The fall of the Roman Empire in Italy left topiary to be hidden away, but still very much alive with the medieval monks in the cloisters of their monasteries. During the Renaissance, wealthy families would pay to have their villa garden as elaborately set out as those monks, who took their inspiration from the writing of the Ancients. These Renaissance ideas spread to France by 1520. The French were particularly taken with the use of hedges to give formal structure, which were then used at King Louis XIV’s Palace of Versailles. This formal hedging soon became popular across Europe, to Denmark, Germany, Russia and Sweden.



In fashion

The 17th century was seen as the golden age of topiary. The word 'topiary' also came to describe a wider variety of green sculpture, soon used more loosely to describe a number of garden features that also rely on the close clipping and shaping of plants. These included: parterres, beautifully ornate clipped box hedges swirling around in mirrored patterns or geometric designs, typically used in lavish Italian gardens; mazes and labyrinths, particularly popular in Britain and introduced after the Norman Conquest, but still found in a great number of private and public gardens; and knot gardens, popular in the Tudor and Stuart time, which were formed from different coloured box planted in crisscrossing patterns, so it appeared that the ribbons of hedges had been tied up in knots.

The fashion of topiary, however, was to be short-lived as the mania for the Landscape style meant that many formal topiary gardens were ripped up for use as open parkland. Luckily, topiary didn't entirely fade away, as small cottage gardens still continued to use the art.

It was down to the revival of the 'Jacobethan' taste in architecture in England that brought topiary back into the public eye. Soon, mature examples of topiary in such gardens as 'Mon Plaisir' at Elvaston Castle, Derbyshire opened to the public in the 1850s, creating a sensation. This brought back architectural topiary to England and then a further 25 years later, sculptural topiary. Topiary then came to mix with roses and mixed herbaceous borders – classic statements of the British Arts & Crafts revival – creating an 'old-fashioned garden' or a 'Dutch garden'.

Popular to work

The plants used to create 'living sculptures' are evergreens, with a dense foliage. They would be predominately 'woody', with small leaves or needles and have fast compact and/or columnar growth habits. Common species to work on in topiary include: cultivars of European boxwood (*Buxus sempervirens*), arborvitae (*Thuja spp.*), bay laurel (*Laurus nobilis*), holly (*Ilex spp.*), myrtle (*Eugenia* or *Myrtus spp.*), yew (*Taxus baccata*), and privet (*Ligustrum spp.*).

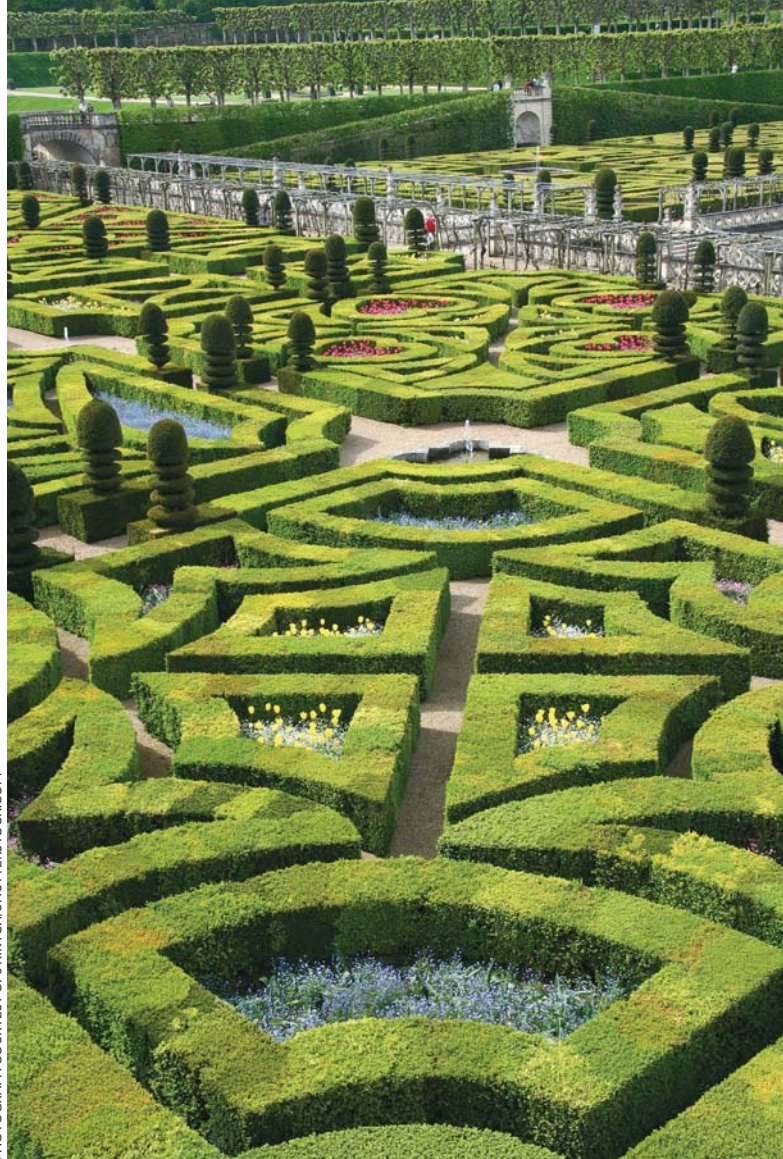
Traditionally, topiary depends on patience and a steady hand, but a popular helping hand in modern topiary comes in the form of shaped wire cages. These cages guide shears, perhaps used by those less practised, to create and hold their desired shape. Small-leaved ivy can be used to cover a cage and give the look of topiary in a few months.

Design

With its precision trimmed hedges, clean lines and perfect cuts, one might think topiary is set in its ways when it comes to design – a huge subject in the craft. However, design in topiary is ever evolving to more intricate shapes, words and colourful designs.

With the average garden, topiary can be used to enhance and emphasise elements, such as lawns, pools, paths, path junctions, entranceways, vistas and garden 'rooms', using techniques such as clipped hedging, formal or freeform topiary, or a change of level in topiary. These features are often paired up or lined up to create symmetry and visual rhythm. Formal hedging may be clipped with buttresses, niches and alcoves, or even formed into a colonnade to make more intricate designs.

A brilliant, natural element that can be used to enhance the effect of topiary is sunshine. In bright sunlight, shadows



PHOTOGRAPH COURTESY OF KIRYCH/SHUTTERSTOCK.COM



PHOTOGRAPHS COURTESY OF JAKE HOBSON, UNLESS OTHERWISE STATED

TOP: The gardens of Château de Hautefort, a 17th-century château in the Dordogne, France

ABOVE: Topiary mixed with herbaceous border planting ►



PHOTOGRAPH COURTESY OF WIKIPEDIA COMMONS

TOP: A fusion of Japanese and western topiary
ABOVE: Cloud pruning in Korea
BELOW: Dense foliage plants are used to create topiary

are brought out, highlighting the clean shapes and surface textures. Through thoughtful positions of geometric pieces among simple, clean line topiary – domes, spheres, cones and obelisks – a very interesting landscape can be created and only built upon when shadows hit the shapes.

Views and ideas on topiary design can not only vary from designer to designer, but will also certainly depend on the garden type it is to be used in. To create bold lines with topiary, a large area is needed and to create soft lines, a small one. A simple bit of topiary in front of what might be a hectic and chaotic planting background will be extremely effective and emphasise contrast even further.

Topiary can even be used to add a little humour to the garden. By creating a mirror copy of an existing sculpture within the garden, humorous comparisons can be drawn and created, especially when the green version is within view of the original.

Another element that must be thought of when designing and creating topiary is height. To create a pattern that is attractive when looked down upon from a height, such as a balcony, window, raised decks and terraces, is key to great topiary skill. These types of patterns – ground patterns – can be made with low hedging, e.g. knots and parterres, in geometric shapes or swirling curves. On a much larger scale of some topiary, avant garde topiarists are even using landforms under turf to make large-scale works.

Far Eastern topiary

Bonsai is the most concentrated expression of topiary in Japan and penjing for China, where the clipping and shaping of shrubs and trees are practised with equal rigour. The Japanese form of cloud pruning is the closest to the European practice, to make cloud-like formations of clipped growth. The goal in a Japanese garden is to achieve an artistic representation of the 'natural' form.

The Japanese Zen gardens – karesansui, dry rock gardens – are a prominent form of garden in Japan, often incorporating works of topiary to create a full picture of 'Zen'. These Zen garden trees and shrubs make use of Karikomi – a topiary technique – creating and clipping them into large curved shapes and Hako-zukuri – clipping shrubs into box shapes and straight lines.

There are certain key elements that are popular to the Japanese garden, alongside and enhanced with the use of topiary. Concealment: the 'promenade' garden is to be 'discovered' along the way, often following a path or trail. The viewer will see one landscape at a time, with features





hidden behind hills, trees groves or bamboo, walls, or structures. Miniaturisation: miniaturism in Japanese gardens is to show an idealised view of nature. Using rocks to represent mountains, ponds to represent seas and to give the illusion of larger gardens, large features will be placed in the foreground and small ones in the background.

With trees as only one feature in a Japanese garden, they are trimmed to provide attractive scenes and placed carefully so as not to block other views of the garden. These trees are sometimes tied to bend, to form shadows or better reflections in the water. To do this, their growth will be controlled to give them picturesque shapes – a technique called niwaki.

Jake Hobson

The owner of www.niwaki.com, Jake Hobson is one of the country's leading topiary and pruning specialists. Jake specialises in the grey area of what he calls 'organic topiary', which is a fusion of cloud pruning and more deliberate Japanese niwaki-style pruning, inspired as much by local landscapes and organic forms as by Japan.

Jake studied sculpture at the Slade in London and from there he won the chance to travel to Japan. He went as a hopeful sculptor, to study and investigate the cultural phenomenon of the cherry blossom season, hanami, for a month. While in Japan, Jake drove roads lined with mini gardens – barely 15sq.m – packed with immaculately shaped, cloud-pruned pines and yews. The more sophisticated Japanese regard them as commonplace, where the aim is to manipulate and enhance their natural state and reflect the landscape – mountains, forests, waterfalls and rocky coastlines. This gives the impression that Japanese traditions aim to work with nature, whereas Westerners appear to aim to take control over nature, pruning and tending to remove plants from their natural state.

Jake's one month trip turned into two years, spending one year in Japan teaching English in Saitama and his second year working at a traditional plant nursery in a rural part of Osaka. Once back home and while working at Architectural Plants in Sussex, Jake's creative enthusiasm was harnessed by Angus White, introducing Japanese attitudes to pruning and maintenance. During this time, Jake realised how much better the tools he had used in Japan were compared to those on offer in England, so with the help of brother-in-law Haruyasu – a gardener in Osaka – the very first Japanese tripod ladders and secateurs were shipped over. People began to notice and soon a business grew: Niwaki.

Jake's business has been growing ever since, with his clients including Rosemary Alexander, Carol Klein, Amazing Retreats, The Lost Gardens of Heligan and Knepp Castle, as well as lecturing and demonstrating to groups.

Dedicated tools

There are so many dedicated topiary tools to choose from and Jake sells a great variety from his Niwaki business. Built around the tools used for Japanese niwaki-style pruning, Jake explains the most important ones to use for basic pruning. He explains: "The very basics are a pair of secateurs, for rough shaping and formative work as well as a pair of shears for clipping and shaping." These tools must be kept sharp, so a decent sharpener is also a must! Adding to the list, Jake mentions the smaller shear-type tool, topiary clippers – one handed clippers – which are ideal for detail and smaller works.

Other useful tools to use in topiary include knives, rakes, ladders and frames – some can even become collector's items for the real enthusiasts. ■

Contact details

For more information on Niwaki, visit www.niwaki.com.

CLOCKWISE FROM BELOW: Using a Japanese tripod ladder, Jake Hobson, owner of niwaki.com and just some of the specialist tools required for topiary



Ask the Experts

This is your chance to challenge our Editors and for them to try and successfully answer your comments and queries. This month, **Anthony Bailey** fields the questions

If you have anything to say, write to: **The Editor, Woodworking Crafts, 86 High Street, Lewes, East Sussex BN7 1XN.** Alternatively, email: **anthonyb@thegmcgroup.com**

ANTHONY BAILEY
Editor, *Woodworking Crafts Magazine*



MARK BAKER
Editor, *Woodturning Magazine*



DEREK JONES
Editor, *Furniture & Cabinetmaking Magazine*



PHOTOGRAPH BY GMC/ANTHONY BAILEY

The Trend diamond sharpening kit

DIAMOND STONES FOR SHARPENING

“ I keep reading that diamond stones are the best way to sharpen edge tools. I've used oilstones all my life and they seem good enough, although I'd like to get better cutting edges, but the cost of a diamond stone seems high – after all, I'm going to sharpen with them, not wear them! ”

Chris Bryant – by letter

Anthony replies:

Hi, Chris,

The problem I run up against every time I demonstrate blade sharpening is how impressed people are with the speed and sharpness obtained with a diamond plate and honing guide, until that is, I mention the price. Frankly, that speaks for itself – a far better solution for more money – of course. Oilstones tend to wear out of shape, become hollowed, they clog with oil and metal dust and the oil is rather messy to use anyway. By contrast, a diamond plate stays flat and uses thinner lubricants including water, although you need a blast of WD40 afterwards to keep both tool and plate from rusting – lapping fluid is better despite the cost and you don't need much each time. Avoid the cheaper diamond plates with holes in mounted on plastic, there are better solid plates and the price of some has reduced recently. I bought a combination 400/1,000 mesh plate from Axminster a little while ago at a woodworking show for about £25 I seem to remember, which is not bad for what it is.

THE PROBLEM WITH WOODWORKING MAGAZINES

“ Dear Anthony, I'm getting a little fed up with woodworking magazines that all start to look alike and spout on about things I'm not that interested in. I've worked in the trade for years having got my City & Guilds 25 years ago and it's annoying when I read things that are patent rubbish! Your magazine is one of the better ones, but it's still the same old stuff. ”

**Yours,
Brian Aldis – by email**

Anthony replies:

Ouch! That hurt a little, Brian. Well I suppose it was a guarded compliment at least. Funnily enough, we feel there is scope for something fresh and a bit different, hence the magazine you are referring to, no longer exists. Instead, I hope you are reading this one – *Woodworking Crafts*. It has fewer projects, but more techniques and a much wider spread of craft skills as well as features and hopefully more reader input. Importantly, there is a bit less of me – instead, a group of acknowledged experts in their respective fields to give you useful advice. We aim to be better than the rest, so let's see if you approve of our new magazine.

MARQUETRY COURSES

“ I’ve not long started reading your articles on marquetry in my husband’s copies of the magazine. I thought I would have a go as I am craft minded but my first efforts weren’t as good as I had hoped. I’m still trying to perfect the ‘window’ technique and I hope I will improve. It would be really good if there were courses that one could go on to learn first hand, rather than just reading about it. ”

Virginia LeMaistre – by letter

Anthony replies:

This is a statement perhaps rather than a question Virginia, but I’ll try to give you a proper answer instead. I think an awful lot of people want to do some form of craft activity, which is why this magazine exists – to help satisfy that need. Unfortunately, there isn’t much serious craft training these days and marquetry is among one of the lesser practised ones in any case. We are trying to get people interested and get them on their way, so to speak. There are some specialised furniture schools or practitioners who can give hands-on training, but they are few and far between. What I would say is that the projects shown so far have mainly not been too complicated and fairly approachable. Like all craft skills, you need to keep practising because ‘practice makes perfect’. Do keep trying – it’s worth choosing a small project or part of one and repeating it until you get really good cut lines and tight joints between veneers. Don’t just do a whole big project and be disappointed by your own work. Start small and work up, you’ll get there in the end.



Wooden box with marquetry image of a guitar, using maple with macassar ebony, sapele pommelle and birdseye maple veneers

PHOTOGRAPH COURTESY OF WIKIPEDIA COMMONS

Things to do in June...



PHOTOGRAPH COURTESY OF WWW.DIYINSPIRED.COM

Put your dust sheets down and get out your paintbrushes, as spring is finally here!

■ The brighter sunny days show up all the defective and yellowed paintwork indoors. Choose a room at a time and make a resolution to give it a decent paint makeover. Throw open the windows, put down the dust sheets and get brushing. Use sugar soap on grimy surfaces first and ‘key’ the surface with a medium abrasive before slapping on the paint. For interior woodwork, you can’t beat the newer water-based satin finish paints for woodwork, which don’t discolour and dry quickly. A room in a day!

■ Around 21 June, make a note to help your dad or maybe dad himself should get the family helping with the DIY tasks normally left to him. Give the poor old fella a break – it’s Father’s Day after all!

■ It’s June: the weather can be variable from hot sun to rain and rainbows, but whatever the weather, trees which have been rather dormant in winter are now in leaf and bud. So why not take yourself down to the nearest forest or arboretum with a tree recognition book or guide and not only enjoy the walks, but also acquaint yourself with the material that might one day feed your desire to make things from timber. By studying them in detail, the bark, the leaf, the fruit or seed, you can become your own expert and learn more about their growing habits and what they can be used for.



PHOTOGRAPH COURTESY OF WWW.OVERTONPARK.ORG

WOODWORKING FOR YOUNGSTERS

“ I run an activity class for disadvantaged young people who often have low self-esteem and need something to keep them out of trouble. It gives them the chance to do something practical like woodworking and gain confidence as a result. Your magazine has been really helpful for giving us good ideas for projects and learning basic woodworking skills. Long may you continue to do a good job! P.S. I’m the guy you met recently at a show with some of my students. ”

Chris Hay – by email

Anthony replies:

Hi Chris,
I do remember your group – it was good to chat. Well, the magazine has changed – reborn you might say. There won’t be quite so many projects but often the technique stuff is being applied to work or projects in progress, so I hope that will still be relevant. One thing I am determined to bring to this new magazine is green woodworking; that is working in rustic crafts using fresh unseasoned timbers. There is a hell of a revival going on out there, as people are seeking new ways to express their creativity and learn skills that are a lot less challenging than cabinetmaking, for instance. Your students may well benefit from trying some of these projects as we go along. Stay with us for the ride!



PHOTOGRAPH COURTESY OF WWW.READWATCHDO.COM

Woodworking can provide many great advantages to young people

SLAB TOP coffee table

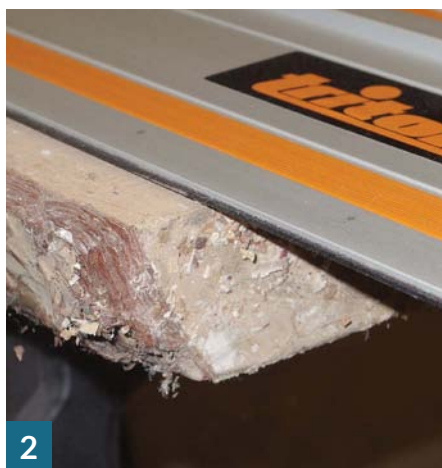
Give **the Editor** a nice slice of a tree and he'll never get 'board' – groan. Anyway, at least he's now ready for the next coffee break – we know he prefers a latte...

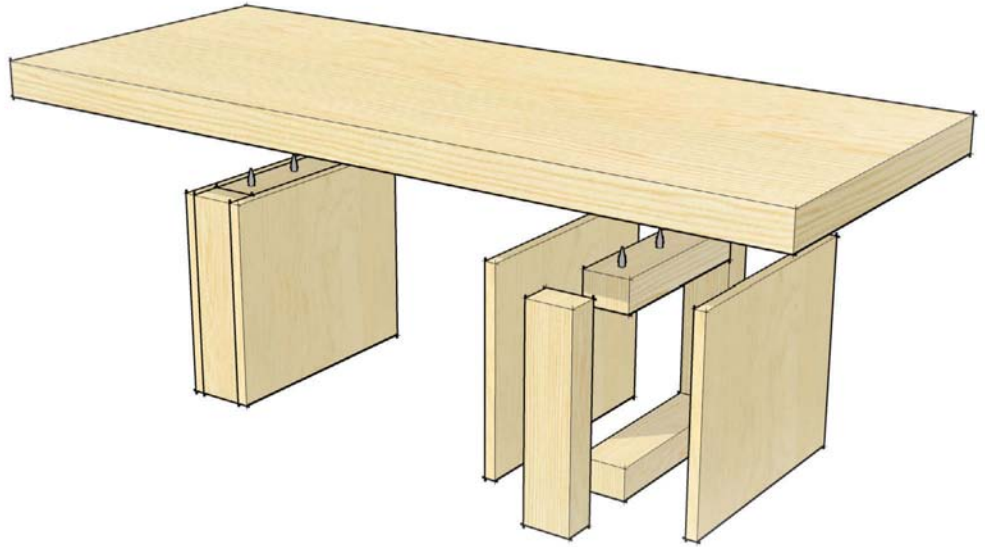
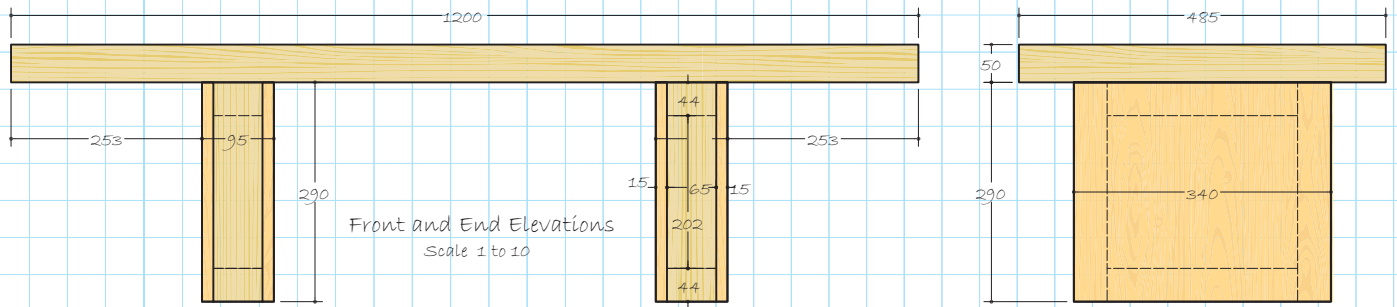
This thick slice of pine (*Pinus spp.*) complete with its waney edge was presented to me by a client who wanted a coffee table. It was substantial enough and apart from the usual bow and one or two defects, it was ideal. It was suggested from the outset that the base be completely different so it looked more impressive and less rustic. Being a large board, it presented preparation problems and some hard graft.

1 This was the waney-edge board – damp marks, knots, resin pockets and all.

2 I decided to use the Triton track saw – this would give neat, straight cuts even though it wouldn't cut to full depth. The track was set so the saw would cut inside the narrowest edge of the wane.

3 Measuring from the first kerf I could get the width parallel from end to end – the tape rule hooking conveniently in the kerf.





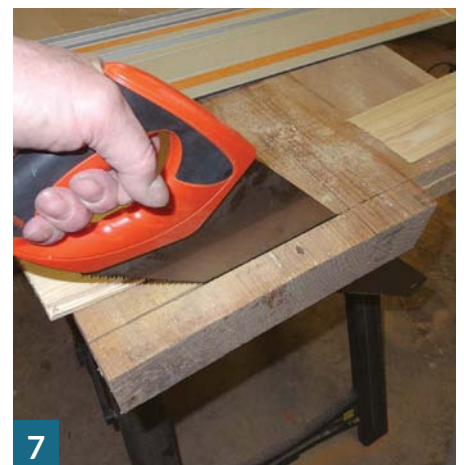
4 Once the first passes were done and the board turned over, I found I could line the cuts up exactly for a planer finish. The fine TCT teeth had no difficulty handling what turned out to be rather resinous timber.



5 Trimming the cross-grain ends wasn't such an easy proposition. The bow meant the track was flying over the dip so the saw wouldn't cut so deep.

6 In order to do the convex face, I used wedges to level and steady the track. I knew I was unlikely to get both cuts perfectly aligned this time.

7 The last remaining vestige of wood was cut through with a handsaw. I had yet to decide how to trim the ends flush. ➤



8 The track shows just how un-flat the pine board really was. It was now my task to sort that out without ripping it down in order to feed through a planer/thicknesser.

9 One of my Jack planes has a blade sharpened with a slight camber or curve; it is a gentler version of an American scrub plane.

10 I gave all my attention to the top, which was convex. This face looked slightly better and needed more hand work to get a good result. Planing was done diagonally from both sides to get an even levelling.

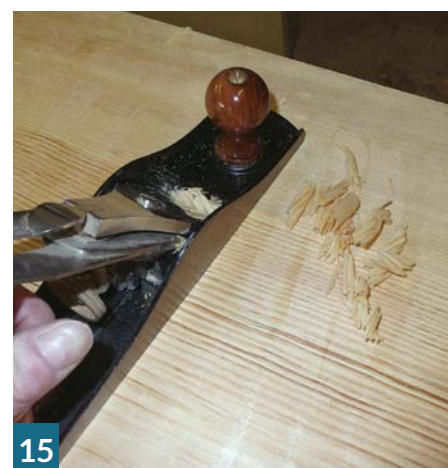
11 Two knots and a resin pocket were a concern but there was plenty of wood to plane before it would be flat.

12 That wasn't my only problem as the resin in the wood was gumming up the plane and I had a long way to go. It would take a long time to level the surface.

13 After scraping off the bits of pine, a clear waxing proved to be the answer to prevent further sticking with occasional new applications of wax.

14 The top was still considerably bowed towards the outer edges – now was the time to change planing technique.

15 This time I went completely across the board. Not only did it help towards flattening but the change in direction showed in the surface of the grain so I could see where it still wasn't level. The short shavings came away easily in this direction.



16 Having got the whole thing pretty much right, I swapped over to a late Victorian Stanley 4½in smoother with its original carbon steel blade. I have sharpened straight across – no camber – and the ends are ground up slightly to avoid any dig-in.

17 Setting the blade out a small amount gave light, smooth shavings 'with the grain'. Its small sole length meant it could follow the shape of the board better.

18 Now for the concave underside. It didn't need to be done to a perfect finish as it would never normally be seen, but it did present a challenge, so it was between a long No.7 jointer or the Triton beam planer.

19 Going cross grain with the Triton soon topped the edges of the board.

20 The next step was to move long grain. This machine is easier to use than it actually looks to be. I expected ridging between the overlapping passes and I wasn't disappointed.

21 After some hand plane work to even the underside up, I placed the tabletop on my bench, which I use in preference to winding sticks, to find out how flat a board is. It was slightly 'in wind' but I was pretty happy with the result – the board would keep moving in the next few days anyway.

22 I used a big router with a bottom-bearing guided trimmer to level the cuts on the ends with the board inverted, as the original kerfs on the top face were in the correct position. ➤



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Triton beam planer

I used the TPL 180 for this project and it was surprisingly easy to handle, considering its size. It is intended for flattening big sawn beams and it does this really well and at a good price, too. Our only real criticism is that the internal bayonet on the chippings exhaust can cause blockages, although it would be easy to remake the moulding with an external bayonet.

Power input: 1,500W

No load speed: 15,000rpm

Platen length: 530mm

Blade width: 180mm

Blades: Triple blade reversible 65Mn

Planing depth: 0-2mm

Weight: 8.2kg

Typical price: £219.99 (inc VAT)

Web: www.tritontools.com



23

From the substantial to the ridiculously small. I used a 3.2mm roundover cutter to take off the edges smoothly – I felt a bevel would not look right somehow.



23

24

I didn't want to sand the board as the burnished effect of a hand plane and slight undulation looked and felt good. Unfortunately, it wasn't even enough to be acceptable so I used Abranet on a random orbital at 80 then 120 meshes. The mesh structure didn't clog, whereas the resin and dust would block up conventional abrasives.



24

25

I vacillated over what finish to use but in the end I plumped for tung oil because it is tough and hardens off, which I felt would seal the resin in place before waxing. Two coats with a light rub between each was enough and some of the pine dust filled any defects.



25



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My cunning plan was to make MDF or ply boxes for legs so they appeared solid. These would fix to the underside of the top by screwing some 75 x 50mm softwood under the top.



27



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The box sides were cut on the Record tablesaw with the blade set right down to avoid splintering.

28

Next, the boxes were glued together with PVA glue. The components were rubbed into place and a spacer used at the top end so I knew the blocks under the tabletop would fit.

29

The vintage – or is it antique? – Stanley 4½in was used to trim the edges of the two boxes all round and then they were sanded ready to be painted.



29

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A quick drying satin black finish was evenly applied all round and left to dry. The last job being gluing them onto the tabletop blocks. I'm quite pleased with the result – let's hope the client is too... ■



30

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Hints, Tips & Jigs

We've got all the woodworking experts together to pass on their expert hints, tips & jig secrets to you

cleaning circular saw blades

Re your request for tips using normal household products, ordinary, domestic oven cleaner will do a good job cleaning the built-up resin from circular saw blades and router bits. I just lay several thicknesses of newspaper on my bench, spray or brush on the oven cleaner, leave for a few minutes and then brush with an old toothbrush. Just as efficient and far cheaper than the proprietary resin cleaners.

Rick Davis – a keen reader

STAR
LETTER



PHOTOGRAPH BY GMC/ANTHONY BAILEY

Taking a tracing

If you are restoring a piece of furniture that is missing small sections of wood or veneer, normally as a result of being knocked about, the most effective way of taking a tracing is with fax paper. Similar to the technique used as children for taking brass rubbings, place the fax paper – shiny side up – over your missing area and rub down with something soft like a fingernail and the heat created by the friction will burnish and produce a copy of the missing shape.

**Amber Bailey –
marquettarian and surface
design artist**

Using fax paper for tracing
missing sections works well



PHOTOGRAPH BY AMBER BAILEY



PHOTOGRAPH BY GMC/ANTHONY BAILEY

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If you have any tips to share with us, please write to: the Editor, *Woodworking Crafts* magazine, 86 High Street, Lewes, East Sussex BN7 1XN. Alternatively, email: anthonyb@thegmcgroup.com

Technique for a box seal

When making a box which may require a reasonably airtight seal or a seal to prevent the contents from escaping if the box is turned over or moved, cut a radiused groove around the lead edges of the box and lid using a core box router cutter. Hard rubberised upholstery piping can then be cut to length and mitred in the corners before being glued into the box edges, as illustrated.

**Louise Biggs – professional
woodworker
& furniture maker**



PHOTOGRAPH BY LOUISE BIGGS

Cutting a radiused groove
using a core box router
cutter is ideal for creating a
lid with an airtight seal

Plan your joints

This one I learned from bitter experience. Look carefully at the timber you are using and make sure that any knots or awkward bits of grain do not coincide with the position of the joints you are going to cut; they will not only make the job more difficult, but will also weaken the final structure.

Walter Hall – professional woodworker and woodturner



PHOTOGRAPH BY WALTER HALL

Highlight any
awkward bits of
grain or knots
before you
commit to using a
piece of timber

It's good for your wood

Timbers such as pine (*Pinus spp.*), normally associated with the building industry, provide a good economical building medium and can have a long life if given good protection. The protection for externally used timbers is often in the form of layers of paint, although pre-treating the wood with an appropriate preservative will add to its protection. Even advanced exterior paints will only have a useful life of five years. For timbers just below the roofline, such as fascias and barge boards, or for porches, such regular painting often involves working at height and can be expensive. One method of overcoming regular maintenance is to cover the timber with a plastic cover board; another method is to remove the timber boards and replace them with plastic board.

James Hatter – DIY expert



PHOTOGRAPH BY JAMES HATTER

To overcome maintenance, fascia boards can be covered with a plastic cover board

Unblocking blast gates

I use small bore extraction ducting but the blast gates get choked with dust and won't open properly. The answer, after trying 'the unscrew and tap sharply' method failed to work, was to make a bent wire hook to run along the groove the gate slides in. With a bit of scraping, it clears the groove and the gate will now open and close fully.

Roger DeFreitas – cabinetmaker



PHOTOGRAPH BY ROGER DEFREITAS

New coat for the spring

To say that it's been a long harsh winter in Upstate New York would be an understatement, but spring appears to finally be in the air and it's time to pack up our winter gear and get our spring coats on. It's also time to put a new coat on the bench.

My recipe for a good coat is a tried and tested blend of beeswax, gum turpentine and boiled linseed oil:

Recipe

60gm of beeswax
0.5 litres of gum turpentine
boiled linseed oil – BLO



1 Pour the gum turpentine into a large glass bottle and shave the beeswax into the turpentine – I use a large cheese grater – and cover until the wax is dissolved into a butter-like consistency. Then, add an equal volume of BLO and stir until the mixture is combined into a thick liquid. This litre mix is enough for several years.

It might look very slippery, but the wax does create some resistance and your bench will also resist glue sticking. The aroma from the finish is quite pleasant. This finish, or something very close to this finish, was most probably used on most of the surviving 18th- and 19th-century workbenches. I once read about an old Italian woodworker's rule: apply the finish once a day for a week, once a week for a month, once a month for a year, and once a year for a lifetime.

My bench is almost two years old and so the annual putting on of the new coat is now a tradition and so much more pleasant than rummaging around in the attic looking for spring clothes.

Note: BLO heats up while curing, so oil-soaked rags should be laid flat outside in a single layer to allow the heat to dissipate while the material cures.

Michael T Collins – an Englishman in New York



PHOTOGRAPHS BY MICHAEL T COLLINS

Application

2 First, scrape off some of the old wax using a cabinet scraper. Wipe the blend over your workbench, but not the vice jaws. The legs also need a good waxing and don't forget the underside. Allow the wax to be absorbed into the wood for an hour or two, then remove the excess.



3 Allow the finish to cure for a few days and then buff to a soft shine.

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Easy
project



PHOTOGRAPHS BY EMMA NOTES

Resources

Hardwax oil: www.osmouk.com

3mm natural leather: www.thebeaderie.co.uk

Mirror fixings: www.diy.com

Natural-edge CHOPPING BOARD

These lovely chopping boards are great to use and have a handy hand strap fashioned from leather, held on with mirror screws and caps, although the soft focus is optional...

We do like our waney-edge boards – they have a much more organic feel to them and are perfect for projects such as these chopping boards.



1 Firstly, take some offcuts of waney-edge board cut to suitable lengths. Use timbers suitable for food use, such as maple (*Acer campestre*), sycamore (*Acer pseudoplatanus*), beech (*Fagus sylvatica*), etc.



2 Remove all the loose bark with a chisel, taking care not to dig into the wood. Some dark matter may remain but so long as it is firmly adhered, this is OK.



3 A good stiff wire brushing is next on the menu in order to get rid of any dust, dirt and little creepy crawlies....



4 Just in case they didn't get the message, the decibels from a sander will soon sort them out. Give both faces a good sanding until you get a smooth but not necessarily even surface.



5 The wood needs to be protected and sealed with a food-safe finish. We chose tung oil – a natural oil that dries and hardens, gives plenty of protection and keeps it looking lovely. ■



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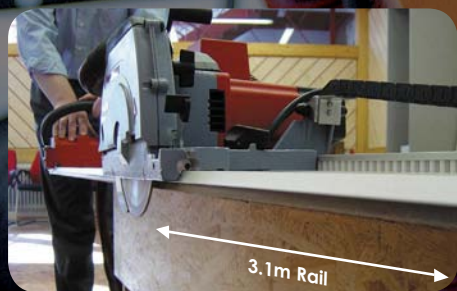
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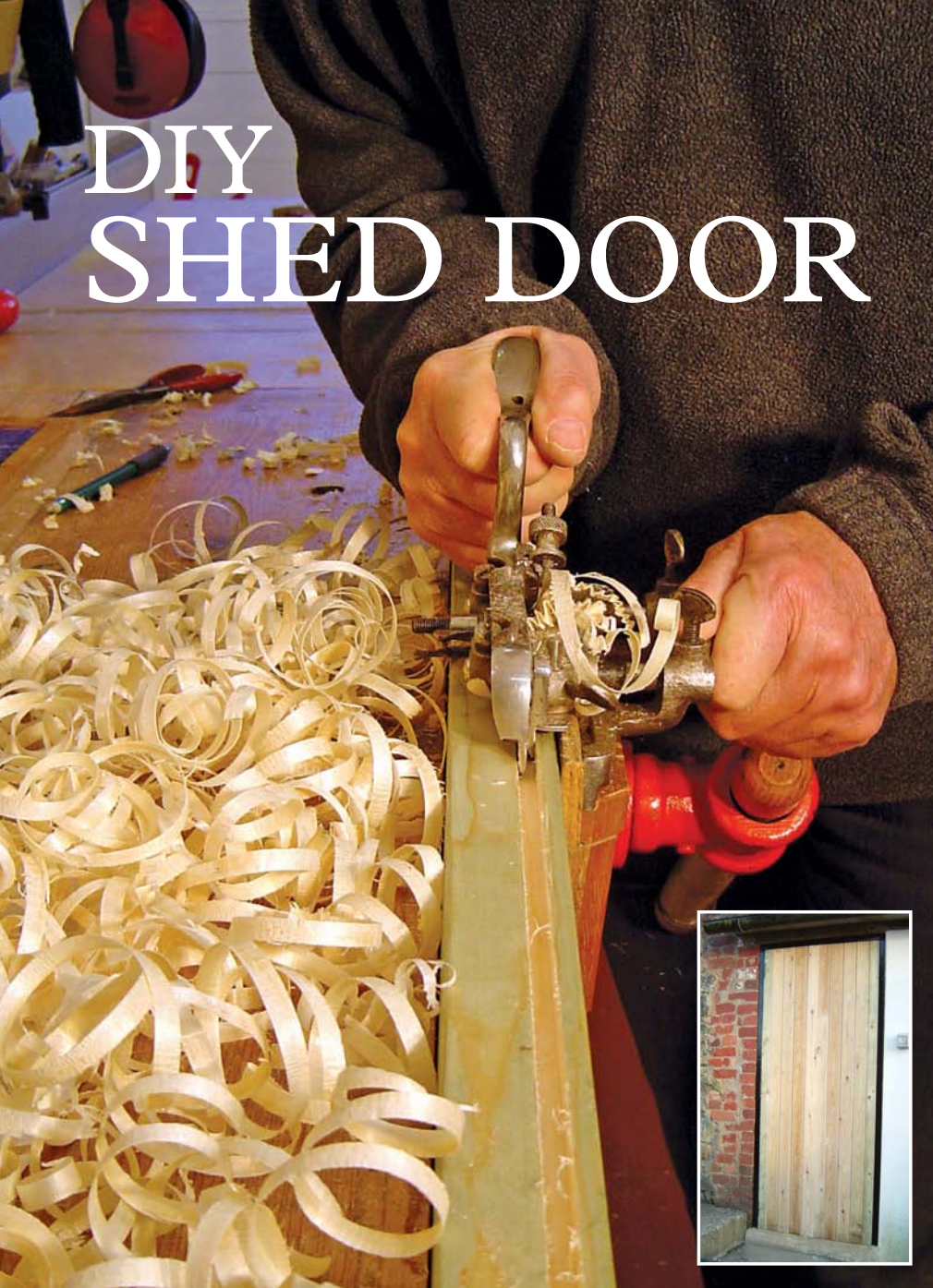
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DIY SHED DOOR

What you will need:

- CLS 38 × 63 × 2,400mm
- Stanley No.5 Jack plane
- Bandsaw
- Saw
- Chisel
- Drill
- Draw-pin
- Preservative
- Iron-ware
- Cross-cut saw
- Radial arm saw
- Plough plane
- Polyurethane glue
- Decorator's caulk



Iain Whittington makes this shed door from CLS studwork timber

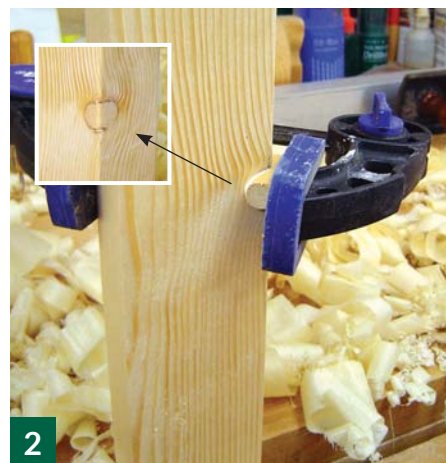
Needing some wood to fill a hole in a hurry, I went to the local 'shed' and despaired at the quality of the timber. However, I find that CLS studwork timber as a nominally 'structural' product can be of reasonable quality so, given a bit of patience and a lot of sorting through for the best near-quartersawn pieces, I left with half-a-dozen usable lengths of CLS 38 × 63 × 2,400mm.

1 CLS has rounded edges, so to turn it into door timber takes a little bit of exercise – or machinery. Luckily, my father's old Stanley No.5 Jack plane was made for this sort of work and can still deliver. As the whole design is a

'cheat', only the outsides of the door and the insides of the frame need to have square edges, so there is not too much to do.

2 As CLS is not intended for joinery, a bit of filling of knots may be required. Should it also need an edge reinstated, insert a length of dowel to replace any dry knot.

3 The next step is to join the frame with pegged mortise and tenons, where the tenons can be cut accurately on a bandsaw, as can the mortise. The centre of the mortise can either be cut out with a saw or, as I did, chopped out with a chisel. ➤



4 Then, drill the two components for draw-boring and test fit with a draw-pin, ready for assembly.

5 Some forward planning prior to assembly can save a bit of time and effort. Cut the hinge and lock mortises into the relevant uprights, while they can still be laid flat on the workbench. Then, pre-assemble them – this is much quicker than having to do them ‘on site’ after assembly.

6 After assembly, trim the ‘horns’ and treat the freshly exposed end-grain with preservative – in line with the rest of the frame.

7 Pre-paint the frame prior to installation. With the iron-ware screwed to the painted frame, the whole thing can then be fitted into the hole and attention moved on to the door itself. At this point, do a trial fit of the hinge upright, to check alignment – this is much easier as there’s no door attached to it!

8 Pre-cut the joints and mortises into the two door uprights prior to assembly, as much of the work can be undertaken quickly on a cross-cut saw. The door is designed for easy construction using halving joints. Cut these with a radial arm saw, along with the hinge mortises.

9 If the lock mortise requires a chisel taken to the back of the middle rail, this can be left until after assembly.

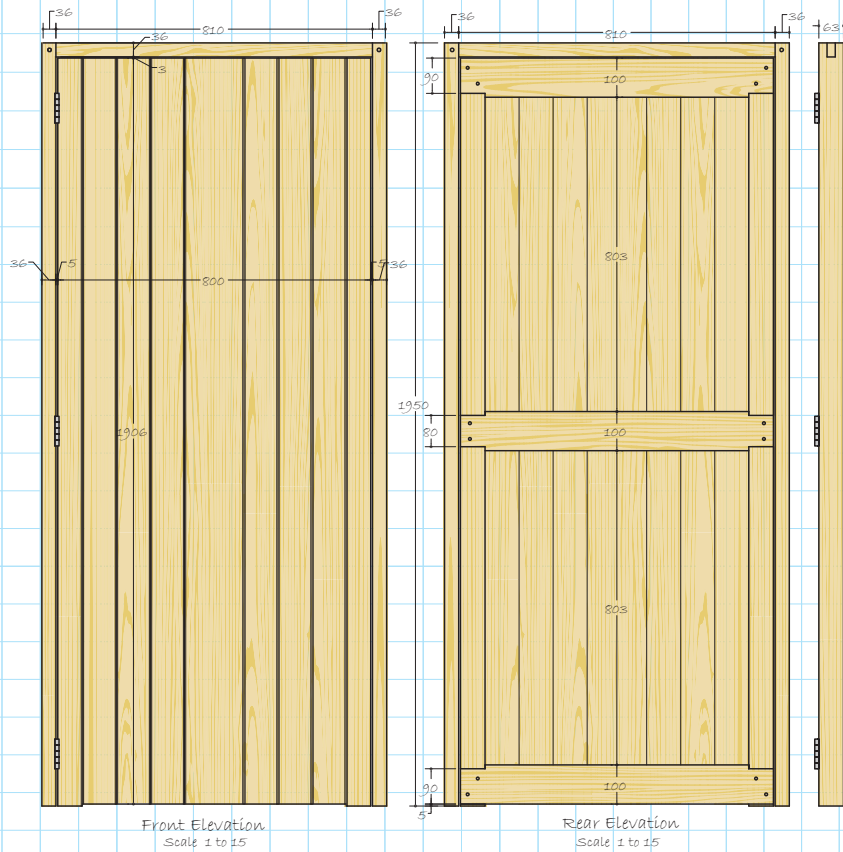
10 Cut a groove in the uprights, by hand with a plough plane.

11 Make sure the groove in one upright has a double-tongue board, so an extra tongue strip can be glued in and planed down to size.

Board jointing

I clamped the two board face together in the twin screw front vice of my joiner’s bench. Selecting my longest hand plane – a No.4 will suffice – I aimed to take a fraction more from the centre of the boards than the ends. The clever part of this traditional procedure is that, if your planing is a little out-of-square, the two boards automatically have a mirror image of the error, which then self-compensates, so they stay dead flat when they are put together.

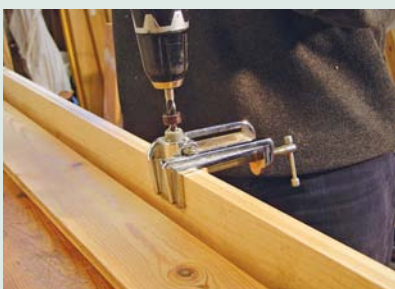




12 Mate the 'structural' first plank with the appropriate upright and glue in place using polyurethane glue. Although polyurethane is a messy product to use, it does have the benefit of being an external grade glue with gap filling properties – ideal for ensuring a weather-proof joint. Secure

the board to the three rails from the back by through-screwing, with the screw heads filled before painting.

The old traditional way of assembling a weather-proof plank door was by applying paint to the tongue and making a rubbed joint with the groove, while the paint was still wet. The paint was more flexible than glue and if it did fail, any exposed seam would be the same colour as the door. Unfortunately, modern water-based paint does not remain 'open' long enough for this to work, so use a bead of external decorator's caulk for the same purpose and the resulting squeeze-out makes a flexible joint that can be smoothed with a damp cloth. ➤



Extra hands

In the absence of an apprentice to provide the extra pair of hands during glue-up, on long boards like these I usually add a few dowels or biscuits to keep them in alignment – this also provides the extra tensile strength that will ensure the glue line does not fail under timber movement – remember, this is an external door potentially with hot sun on one side and damp/cold on the other, a recipe for differential timber movement.



12

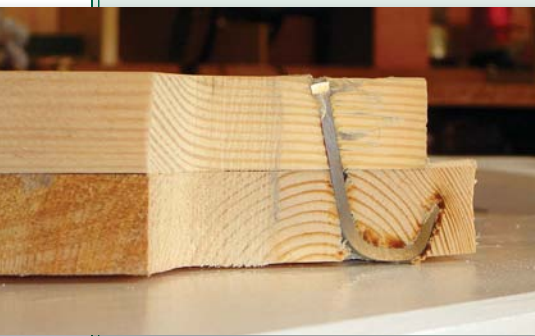


As this is being painted, there is no need to grain-match the two boards and as they are tongue & groove, the discussion about alternating the growth rings for stability is academic – the 'V' side is clearly the 'face', so clamp the two boards together – 'V' – in the vice.

DOOR DESIGN

The basic shed door would normally be a board door of 'ledge and brace' construction, where the internal diagonal brace gives the structural rigidity that stops the door sagging.

This would be aided by clenched through-nailing, where the nail is driven into an 'anvil', causing it to turn back and clench like a staple. However, I need this one to be in keeping with the existing barn doors that are of a 'stile and rail' construction with in-fill boards over-sailing the centre and bottom rails. The strength of these original doors comes from a top rail with full thickness pegged through mortise and tenons. The other two – thinner – rails are half thickness through-joints, all beefed up with an internal cross brace. Not having the time or quality of timber to accurately



Clenched through-nailing, where the nail is driven into an 'anvil'

reproduce this design, I have designed a 'cheat' based on CLS. All three rails are identical half-thickness boards, assembled with 'glued and screwed' halving joints, to allow over-laid T&G boards to lay flush with the CLS stiles. With no internal cross-bracing, the stiles have to be reinforced to stop the door from sagging under its own weight. With this in mind, the stiles have been grooved to take the tongue of the first board – or loose tongue for the last board – and the whole lot, including the tongue, glued and screwed to the stiles for strength and rigidity. The remaining centre boards are then inserted and through-screwed from the back, along their centreline, to allow movement. The doors are all painted, so I knew the reverse side's screw heads could be simply filled. I rejected hidden fixing through the tongues, as I had already planned for the screwed joint on the stiles and I find a single centreline fixed point is more forgiving of wood movement.

Security for external doors is always a feature, so while strap hinges are quick and easy, they don't give the security of concealed hinges, unless traditionally rose-nailed or through-bolted. The choice of a mortise lock was made easier by the fact that a change in my house insurance to a requirement for



Rose-nailed strap hinge with coach-bolt through door



Van lock – secure but ugly

BS3621:2007 locks had left me with some spare locks to the superseded standard, still secure enough for a shed door. The secure alternative is an external hasp, but as the only one I feel is up to the job is an ugly full-scale van lock, a mortise lock it was.

13 With assembly of the door now under way, an old design conundrum has to be addressed. Unless you have total freedom to design both frame and door together, it is unlikely that you will end up with an exact number of boards across its face. This leads to the discussion about design 'cosmetics', in that you will have to make a decision as to how to make up the uneven gap. Two possibilities exist: first, to put two equal strips at either edge, or to joint two boards to make a wide central 'panel'. With my design, where the two edge boards are structural, I felt that the width of the edge 'fillers' would not have given the rigidity that I sought, so a jointed centre board was needed. Unfortunately, as I live on an old farm, the hole for the frame is inevitably slightly out-of-square, so even with a lot of care in tailoring the door, a trial fit is essential, with the trusty hand plane coming into its own again to trim the door to the exact



13

shape of the frame, then smaller by a few millimetres all round. Then, paint the door inside and out before finally fitting it in the hole. ■



Iain Whittington

Iain is a retired army engineer who started woodworking as a lifelong hobby under his father's guidance in the family's garage.

Retirement was marked by taking on the restoration of a 17th-century Devon longhouse, with associated fittings and furniture, which has provided many opportunities to use his woodworking and restoration skills.



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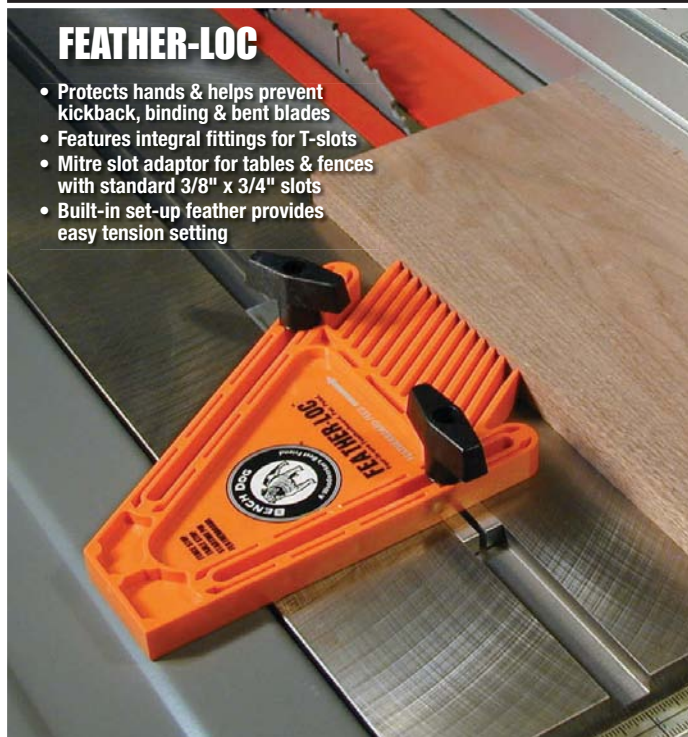
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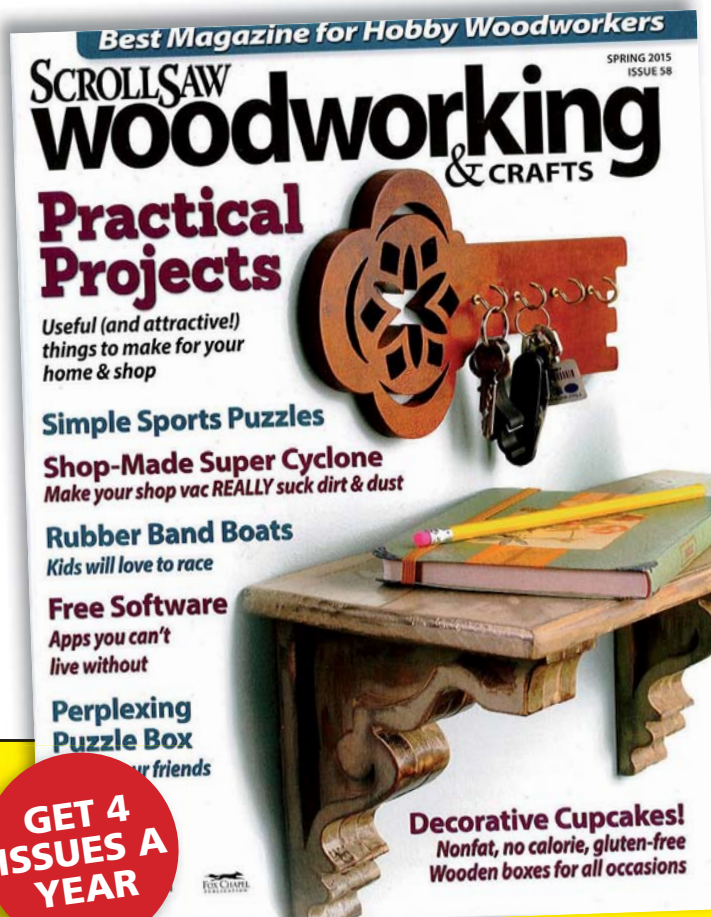
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ROUTER CUTTER choice

The Editor puts a new spin on an old topic – choosing cutters. Trust him to think different...

I often get asked what is the ideal set of cutters to own. The standard answer is any starter cutter set – minus the dovetail cutter – which is next to useless unless teamed correctly with the right dovetail jig. One manufacturer once told me that a dovetail cutter was expected to be in a starter set and therefore should be included – what utter bunkum!

So, let's be a bit more radical, shall we? Do you need an ovolo or a 'V' point cutter? Is a 19mm straight cutter as useful as it seems to be? Maybe or maybe not. This is my own short cutter selection and the good reasons why.

6.4mm diameter long straight

The 6.4mm is ¼in diameter equivalent and appears everywhere – it is ubiquitous. I'll let this one through as it is genuinely useful, even though in a metric world it makes slightly less sense. You can buy a 6mm diameter cutter if you want an exact match for grooving sets, etc., but if you fit a veneered MDF panel in a groove, you'll be glad of the extra 0.4mm even if there is a slight panel rattle. A long

variant is of more use, but use plenty of passes to depth to avoid straining the shank.

8mm diameter straight

Not an obvious choice, but most routers come with a 16mm diameter guidebush. You need to measure to check it is truly 16mm as pressed steel versions can be slightly smaller by a few tenths of a millimetre. Plastic moulded guidebushes, such as the Trend type or their more expensive 'seamed' metal variants, are more accurate. The point is that if you do guidebush work, it doesn't half simplify matters if, when calculating the extra amount you need to allow on a jig or template, the guidebush is an exact round number. So for my money, an 8mm diameter straight cutter is definitely in my set.

Hinge mortise

A 16mm diameter hinge mortise is excellent for shallow recesses, as it clears material without fuss or resistance, so it can be persuaded to do slightly deeper grooves that are usually the province of a 16mm or

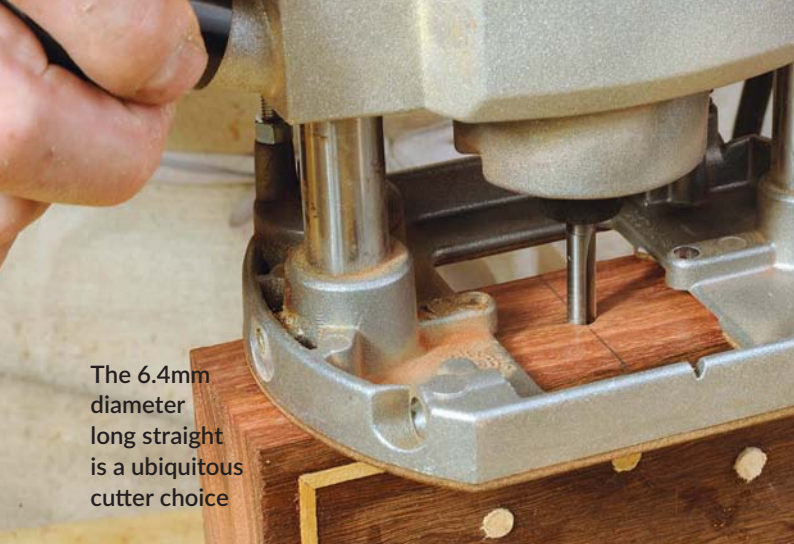
19mm straight cutter. Since the centre is missing it can plunge satisfactorily, whereas the standard type must have a bottom cutting carbide insert to plunge without strain or burning.

Tenoning

As far as I am aware, Wealden is the only company to make these at present. I own both the monster ½in shank version as well as the more dinky ¼in shank model, which is 25mm in diameter. It isn't just for tenoning, as it also creates excellent smooth rebates. It does this by having four cutters, which alternate at forward and back shear angles, thus creating the perfect cutting action. For my money, this excellent tenoning and rebating cutter is in, especially as it can slot cut as well.

Rebate

The previous listed cutters can create rebates that are possible only with a fence in position because they don't have any form of guidance. I often find a need to rebate shaped work so a multi-bearing cutter, i.e. one that



The 6.4mm diameter long straight is a ubiquitous cutter choice



A 8mm diameter straight cutter is definitely in my set

comes with interchangeable bearings, is really useful as you can change the width of the rebate precisely and easily.

Bevel cutter

So far, I have chosen straight cutters because they are often more use than fancy moulding profiles. You can make an argument for almost any router cutter type but I think next on the list would be a decent size bevel cutter. It has the ability to do a tiny bevel to 'break the edge' – in other words, remove a small amount from the arris or corner of the wood; this avoids ragged edges and splinters and makes it a lot neater looking. In addition, it can take off a large amount in a number of passes to create mitre joints, and lastly, it creates my favourite effect on oak (*Quercus robur*) furniture – the stopped bevel, which suits oak very well.

3.2mm roundover

This selection is not the usual group of cutters with roundovers, coves and ovolos, but I couldn't round it off, so to speak, without mentioning a tiny 3.2mm roundover. This can be used safely in a router trimmer as well as a larger machine. Whereas oak looks better with bevelled edges, something like maple (*Acer campestre*) for instance, needs a discreet rounded shape on the edges. I find it is perfect for using on kitchen worktops, dining tables and other solid wood or lipped furniture edges.

6.4mm roundover

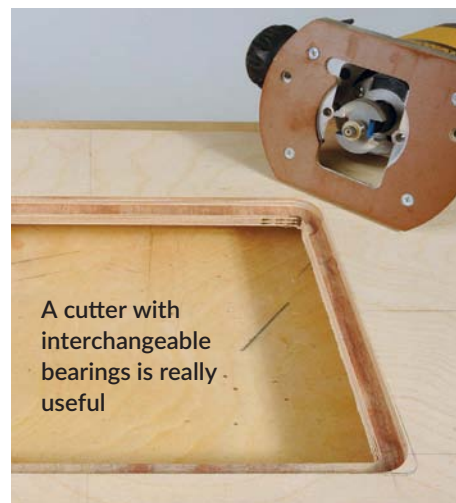
Where you need more edge definition, this is a better cutter than the 3.2mm variant. It can be used with a smaller bearing to create an ovolo with its stepped profile. This is one cutter that does actually turn up in a standard set of cutters and is useful for creating a 'comfort curve', such as for the stool project I'm working on here. ■



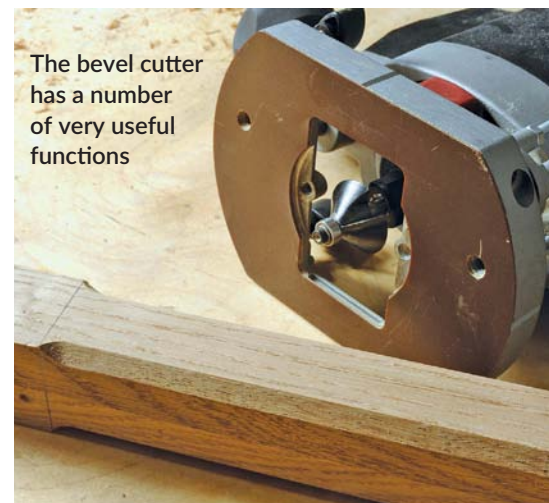
A hinge mortise is excellent for creating shallow recesses



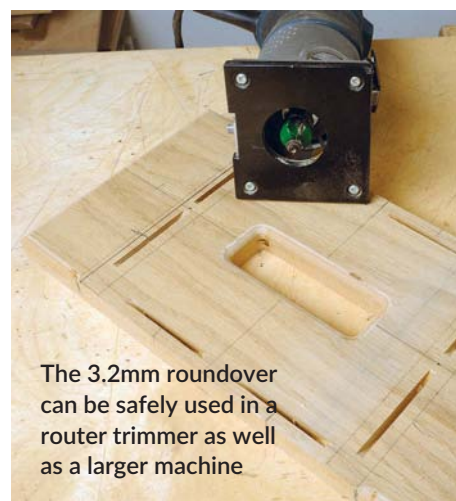
The tenoning cutter is also great for creating excellent smooth rebates



A cutter with interchangeable bearings is really useful



The bevel cutter has a number of very useful functions



The 3.2mm roundover can be safely used in a router trimmer as well as a larger machine



The 6.4mm roundover is ideal when you need more edge definition

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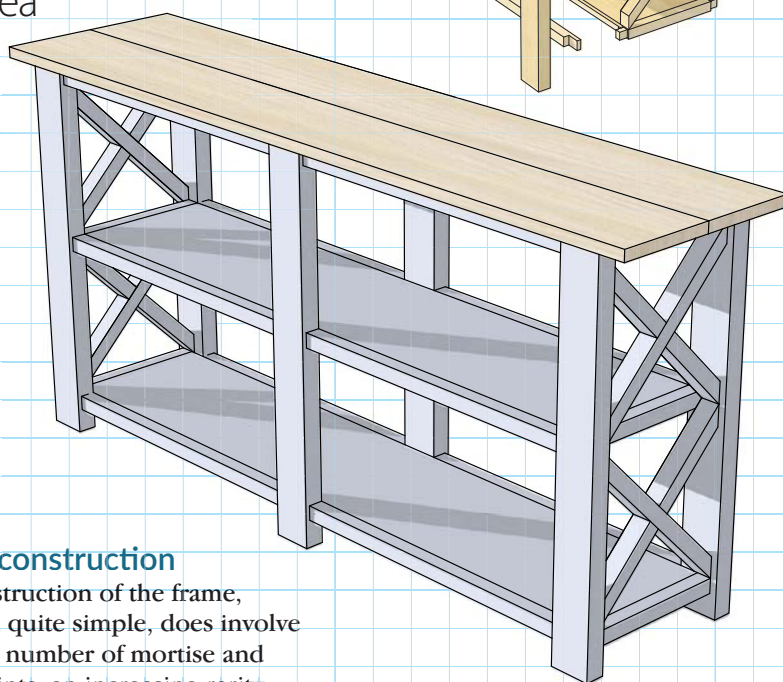
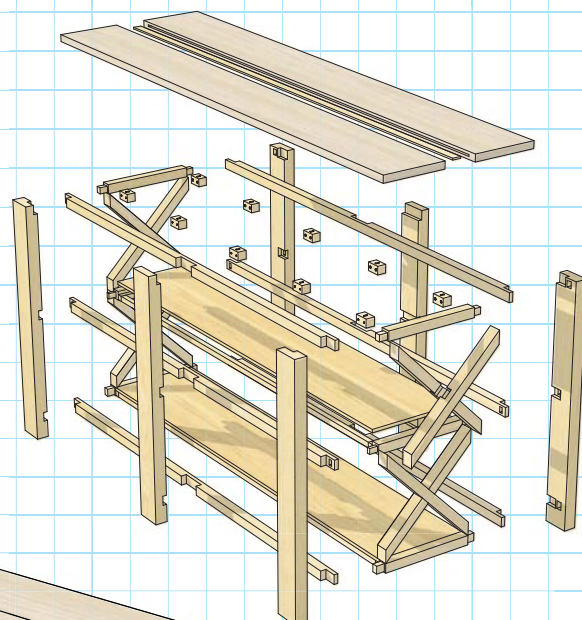
Side table

Simon Rodway has a neat design for a space-saving side table, which would be ideal for a kitchen or dining area

Cutting list

Top	1 @ 1,882 × 450 × 25mm
Legs	6 @ 888 × 94 × 44mm
Side rails	6 @ 1,632 × 34 × 34mm
End rails	6 @ 390 × 34 × 34mm
Middle shelf	1 @ 1,544 × 330 × 12mm
Bottom shelf	1 @ 1,632 × 330 × 12mm
Cross braces	8 @ 501 × 34 × 44mm

Main components only. Top listed as single piece. Shelf battens to fit.



To call this month's project a side table is perhaps stretching a definition a little: these often have an additional shelf at a lower level, but seldom feature a middle shelf as well. What I feel fairly sure about, however, is that it is potentially a very useful addition to a dining area or kitchen, where storage and serving space are always at a premium.

Where possible, I will try to stick to standard timber sizes, so that you will have a minimum of cutting and planing to do and most of the parts of this table are 'off the peg' prepared softwood or sheet material sizes. The notable exception is the top and since the frame and shelves will probably look best with a painted or stained finish, it's worth spending a bit of money on a contrasting hardwood or good quality pine (*Pinus spp.*) top, which will also last longer and take a bit more punishment. Although it's not that deep at 450mm, you will still need to join at least two pieces and probably more. To get a good, strong joint, use either biscuits at regular intervals or a loose tongue in something like 6mm ply, stopped 25mm or 30mm short of the ends.

Frame construction

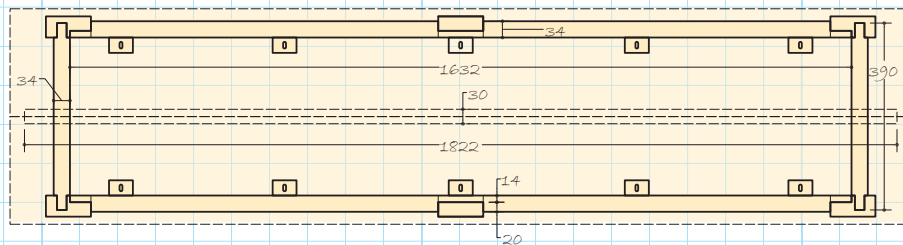
The construction of the frame, although quite simple, does involve cutting a number of mortise and tenon joints, an increasing rarity these days with the advent of biscuit and domino joiners. Additionally, a series of half lap and half-shoulder tenons join the three legs on either side with long rails.

Start by marking out the two end pairs of legs with the mortises and housings for the side rails. Then, take the end legs on one side and lay the middle leg between them, marking off the positions of the side rails on the middle leg from the two outer ones. Cut the top and bottom mortises in the end legs and housings in all three, but leave the middle, smaller mortise until later. I would allow 10mm of timber between the top of the leg and the top mortise, but otherwise a fairly small shoulder all round is fine, as there is plenty of timber around the mortises because of the width of the legs.

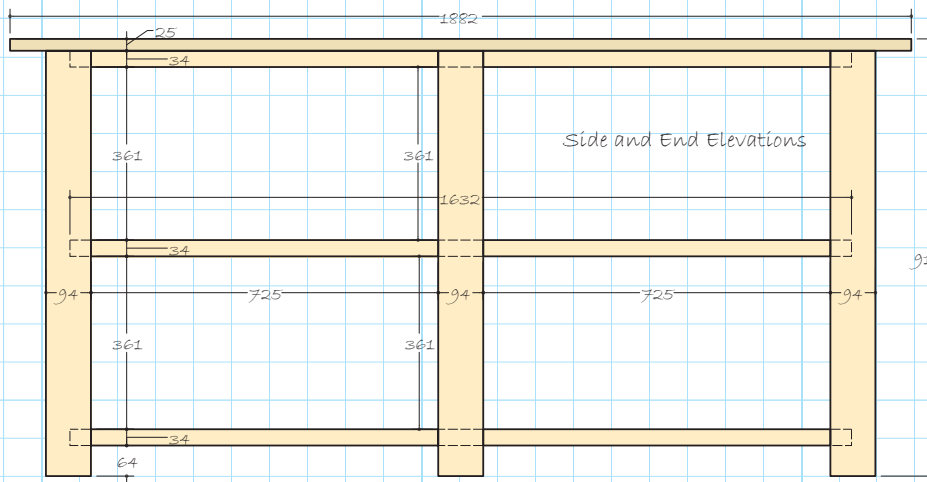
Housings and tenons

Cut the housings and tenons in the long rails as a trio for each side and assemble the sides as two pairs of

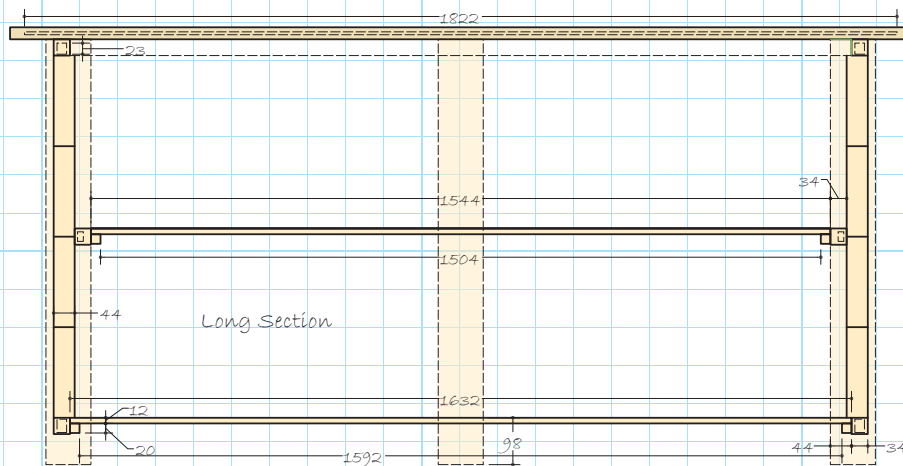
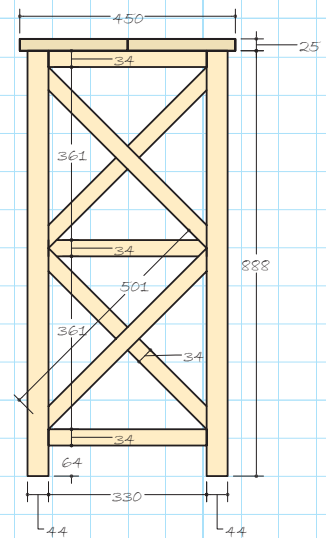
three legs and three rails, gluing and screwing all joints, except the ends of the middle rails, from the inside of the rails into the legs. Next, mark the smaller mortises for the middle end rails, which actually pass through the half-shoulder tenons. I've allowed for a tenon 12 × 20mm, offset away from the leg face by 16mm; this leaves a reasonable amount of the half-shoulder tenon intact. Now cut the end or cross rails and form tenons on the ends, 2mm shorter than the mortises. Dry assemble, check for square and when you're happy with the frame, glue up. Next, fit the battens and plywood for the middle and bottom shelves. Ripping down some 20mm-thick timber is the cheapest way to get the battens, and dry fit with a few screws initially until you have dropped the plywood in place, in case you need to adjust the height. Once you're happy with the fit, screw the battens in place and pin the plywood around the edges into the tops of the battens.



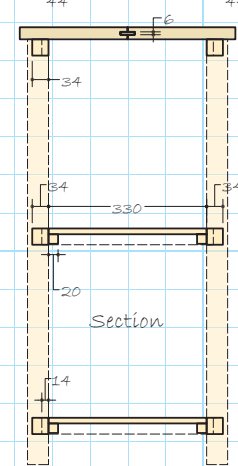
Plan/Section



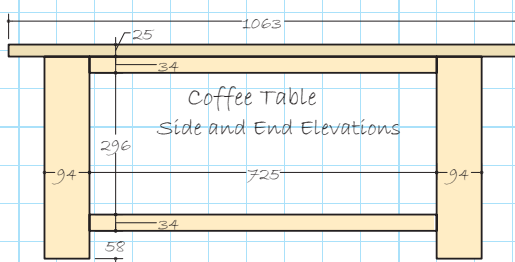
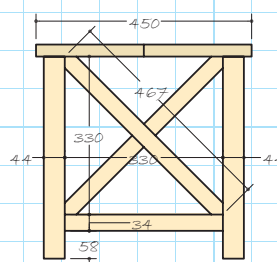
Side and End Elevations



Long Section



Section

Coffee Table
Side and End Elevations

Cross-bracing

Now move onto the cross-bracing at either end. Cut the cross pieces over length, cut the half lap joints in the middle and glue up. Offer up the bottom cross-brace assembly to one table end, mark and cut the ends at 45°, then repeat for the top braces and repeat at the other end. You should achieve a reasonably tight fit between the sides and the bottom and top rails; this will give the table real strength and stability as well as being a feature of the design.

Finally, cut slotted blocks to secure the top to the frame. Screw at regular intervals along either side and slot the holes for the screws that will go upwards into the top across the grain direction of the top – in other words, front to back. Combined with the loose tongue, these blocks will help to prevent cupping in the top. I have also included a mini version, or coffee table, which has identical construction features where relevant, and of course you could always practise on this one first, before tackling the side table. ■



Simon Rodway

Simon Rodway also runs LineMine, a website with articles and online courses on drawing software. A new course, 'SketchUp for Woodworkers', is starting this month. For details and to get discount coupons, see website details below.

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New from Axminster, this simple yet versatile oscillating bobbin sander is suitable for use at home and can be used for all manner of finishing tasks in the workshop. The bobbin oscillates by 24mm, spreading the wear over more of the sanding sleeve. The cast-iron table tilts up to 45° and has several nylon table inserts to give a close fit around the bobbin. The 370W induction motor is quiet in use and slow running so as not to burn your work. The base is fabricated in sheet steel and has storage for spare bobbins and table inserts. Dust extraction is via a 50mm port on the rear and should be connected to a suitable vacuum extractor. This simple but sturdy machine would be a great asset for crafts and small projects. Supplied with 19mm, 38mm, 50mm and 76mm bobbins. Please note that this price is valid until 31 December, 2015.

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IRWIN Tools' Blue Groove wood boring drill bit

IRWIN is continuing to innovate with the introduction of long and short length bits to its current Blue Groove 6X wood boring range and has added 100mm and 150mm variants. Unlike spade bits that have spurs to scribe holes when cutting, IRWIN Blue Groove 6X bits have a tapered three-flute design for faster chip ejection and less binding.

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18th and 19th century English joiner's tool kit from the Weald and Downland Open Air Museum, West Sussex

BEGINNERS' GUIDE:

Using hand tools and traditional methods to make a draw-bored mortise and tenon joint

Michael T Collins looks at how a selection of basic hand tools can be used to make a variety of traditional joints

We have one drawer in our kitchen that contains our shared tools – the tools we reach for when something needs doing and I don't want to trek to the workshop to get my tools. It's a set of tools that has taken years to refine, based totally on our needs. You could call them 'necessary tools'. English joiners through the years have used a small selection of tools and were able to produce a wide variety of beautiful furniture.

When starting out acquiring tools, it's easy to be confused with the plethora available, some so specialised that you may only use them once or twice. It's important to not fall for the more is better philosophy – if I have this tool or that tool, then I'd be a better craftsman.



Michael T Collins

Michael has been working with wood off and on for 40 years. Having run out of projects in the UK, he moved to a small village in the heart of the Finger Lakes in Upstate New York with his family in 1996. Over the years, he has made bespoke furniture, including clocks, inlay work, Adams fireplaces, book cases, reproduction furniture, woodcarvings, restorations, bowls, tables and some major construction projects. As a mathematician by training, he is constantly looking to solve puzzles and woodworking for him is a continual process of solving puzzles – or maybe that's just the way he works...

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THE TRADITIONAL JOINER'S TOOL KIT

When starting out in hand tool joinery, you do not need to go out and buy all the tools you are ever likely to use in your woodworking career – you only need a subset of the traditional joiner's tool kit.

The saying 'you get what you pay for' is so true when purchasing woodworking tools. Unless you have a lot of money to fork out, reasonably priced, good quality tools are hard to come by and forget chain DIY stores for quality hand tools. Very few of my hand tools were purchased new and, for the most part, were obtained by scouring flea markets, car boot sales and online auctions. These offer the best hope of finding good quality, older tools at reasonable prices.

I received my first tool kit when I was about seven-years-old, a wooden box

filled with every tool that someone else assumed an aspiring joiner needed. A key tool missing was a mentor. At that young age, it was my father and I learned mostly by observation. After that it was my secondary school woodworking teacher, who instilled in me a passion for working with wood and the respect and care of tools and I have been making sawdust and wood chips ever since. As I tell woodworkers starting out: "The only difference between where you are and where I am is time and equipment ruined."

So what's in the tool kit?

- Dovetail and tenon saw
- Jack and block plane
- Chisels: 10mm mortise chisel and a 20mm bevel edge
- Brace and 6, 10 and 20mm twist bits

Basic joiner's tools



- Mortise gauge
- Marking knife
- Try square or combination square
- Wooden 150mm mallet with flat head
- Bradawl
- Homemade bench hook

LET'S MAKE A JOINT

When woodworking, there's a natural progression at play, but only if derived from an understanding based on personal experience. If you have a plane and develop a connection between eye, brain, muscle, hand, tool and wood, you will gain an understanding of how the tool responds in the hand and also its limits. The more you use the tool, the sooner you will know when it's time to acquire the next tool to accomplish a given task.

By this experiential process, your knowledge and skills will develop and your tool kit will need to grow along with your experience.

Now that we have our tools assembled, let's look at producing one of the fundamental joints that has been used for thousands of years: the draw-bored mortise and tenon. This classic joint can be found everywhere, in chair, table and door construction.

1 After planing your leg stock to size, mark the face side and face edge with cabinetmaker's marks and gang the parts together. Lay out the mortise location using the width of the rail, a try square and pencil.

2 It's a good idea to leave extra wood 'horns' at the end of the legs; this prevents blowout when chopping the mortise. Set the legs aside for now.

Tenons

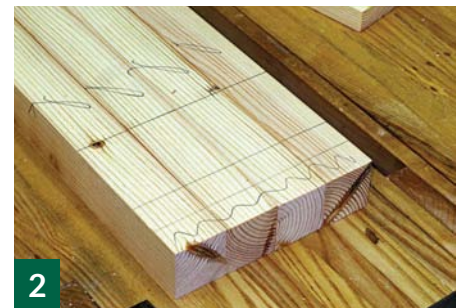
3 Mark the tenon depth based on the mortise depth you want – my rule



of thumb is three-quarters the width of the mortise stock, but there are no hard and fast rules.

4 Gang the rails and scribe the shoulder line on the face side, then with the try square, using only face side and edge side to mark a knife line on all faces.

5 Set the mortise gauge using the width of the chisel. I make my tenons half the width of the stock, so 20mm stock will have a 10mm mortise – I find this is a good size for most mortises but I have been known to over-engineer things. ➤





6 Adjust the mortise gauge so that the mortise is in the centre of the rail. Scribe the tenon, using the face side, by dragging the gauge away from you across the wood.

Cutting the tenons

7 Cut a 'V' groove on the waste side and then pare out a notch using a chisel; this will give you a place for the saw to cut and produce a very clean shoulder. Using a bench hook and a tenon saw, saw down to the tenon marks. If your tenon is going to have four shoulders, then repeat on all sides.

8 Place the rail in the vice at 45° and mark a small 'V' notch on the waste sides of the tenon lines. Using a dovetail saw, rip down on the waste side to the ends of the scribe marks you can see. You can only cut what you can see – do not try and cut down to the shoulder in one go. Rotate the wood in the vice and again saw at 45° using the saw kerf as a guide – you will have left a triangle of uncut wood at the bottom of the kerf. Place the wood vertically in the vice and then cut down to the shoulder and the waste should fall away. If need be, you can clean up with a chisel by paring towards the tenon. If you have two intersecting tenons, bevel the ends



and leave a small gap for any seasonal movement in the leg.

Chopping out the mortise

9 From the face side, mark the mortise, using the same mortise gauge setting you use to mark the tenon. If you want a reveal, then simply move the mortise gauge's fence away from the pins by the depth of the reveal. To chop the mortise, place the wood over the leg of your bench so that the forces are concentrated in the chop rather than absorbed by the bench.

10 Chopping a mortise is a simple matter of placing the chisel with the bevel facing the mortise and about 1.5mm from the end; this will protect the wood from being damaged while removing the waste. Now 'walk' the chisel towards the far end of the



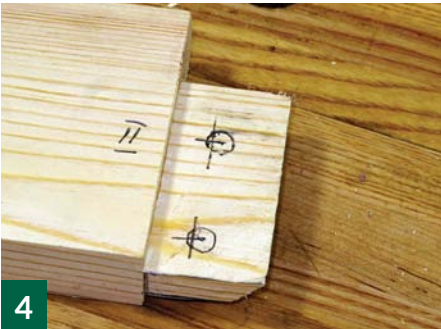
mortise with each successive chop and you'll find the chisel will go deeper into the mortise.

11 Continue to within 1.5mm of the end, then about face and repeat the process back to the start, clearing out the chopped wood as you go.

12 You should only remove wood that has been cut – don't try and lever out unchopped wood as you are likely to split the wood and even bend the chisel. Lastly, true up the ends of the mortise by chopping vertically down the end mark. If two mortises are going to intersect, only chop the mortise down to the level of the intersecting mortise. This way, you will have support – in the bottom – when chopping the second mortise. You can draw a line or add a bit of tape on the chisel as a depth gauge.



DRAW-BORING



1 Draw-boring is a technique that has been used for thousands of years. Pegs are driven through the mortise and tenon to secure the joint and there is no need to use glue or cramps when assembling. Some of these joints have lasted many centuries and are as secure now as they were then.

2 Position your holes so that they do not intersect with those securing the other tenon in the leg and are not too close to the edges. Bore through the tenon from the side with a 6mm bit – choose a size that's proportional to the joint. Offset the pins if you think the wood is liable to splitting.

3 Hold the joint together firmly and using a bradawl, mark the tenon through the holes.

4 Take the joint apart and offset a point 1.5mm towards the shoulder – in hardwoods you can use 3mm and bore through the tenon.

5 Reassemble the joint, making sure to give each a unique label – remember, these are custom made. Traditionally, a draw-bore pin was used to smooth the path in the holes.

6 Make your pegs by splitting straight-grained dry stock from the same wood or harder than the wood of the joint. If making green wood furniture, the joint will get tighter as the wood



dries. If much harder, the peg will deform the hole and you will be able to fit a square peg into a round hole. Pegs should be tapered to navigate the offset in the hole.

7 Hammer the pegs home using just enough force to seat the peg, but not so much as to split the joint.

8 Lastly, cut the pegs and plane flush. The finished joint should look something like this.

9 In some period pieces of furniture, the pegs were left showing on the exit side of the hole. OK, now I just need to make six more joints and a tabletop! ■

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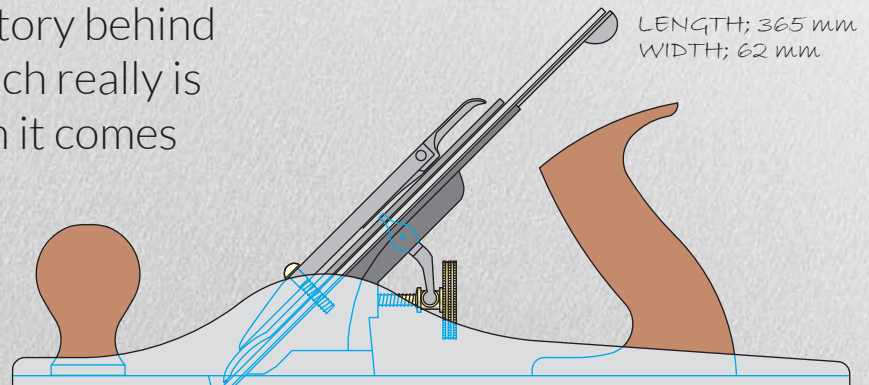


JACK of ALL TRADES

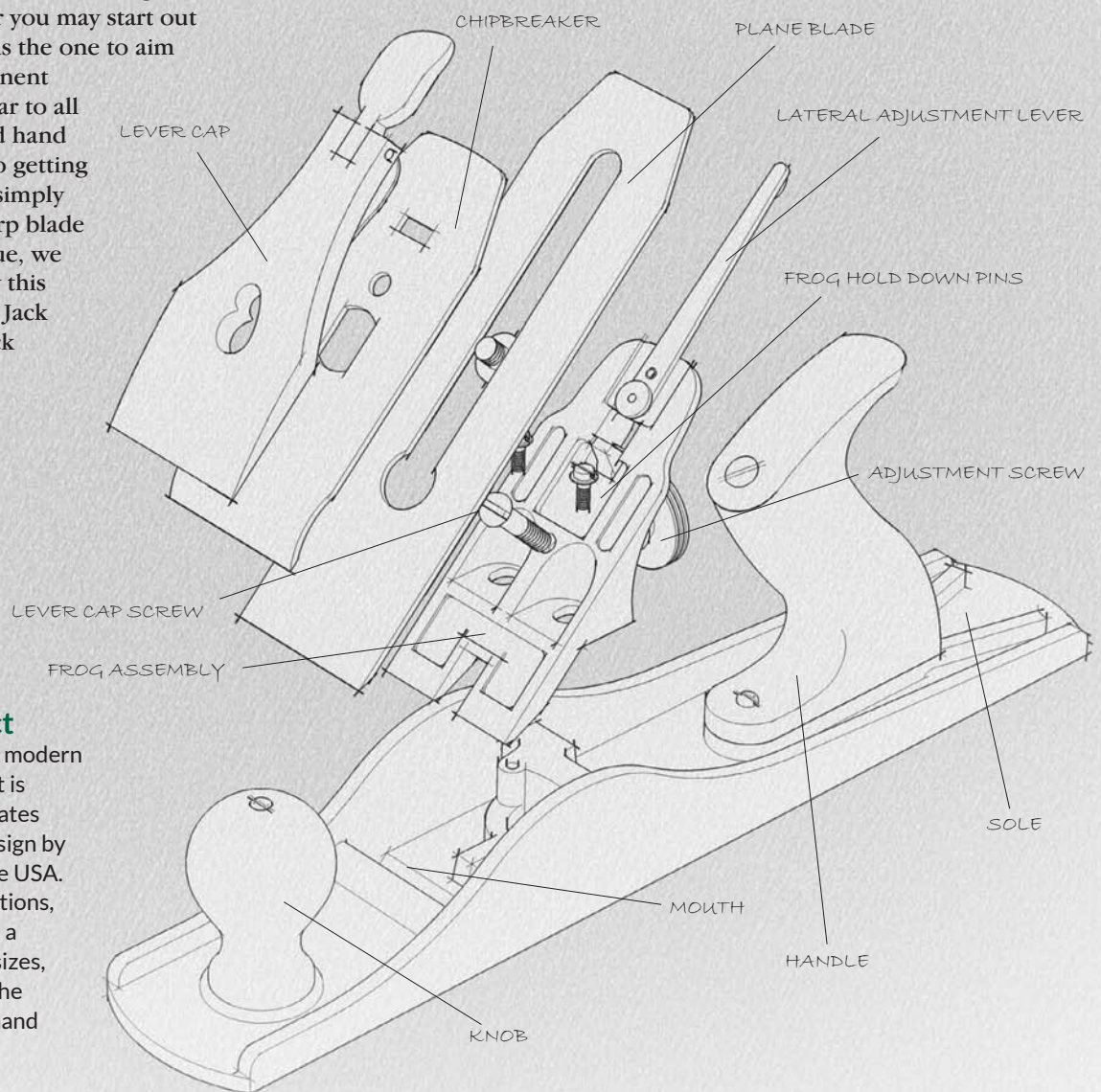
The No.5 Jack plane

We take a look at the history behind the **No.5 Jack plane**, which really is 'a Jack of all trades' when it comes to hand planing

If you are new to woodworking, the most likely size of plane you will find in a DIY store will be a small block plane or a No.4 smoothing plane, which is again, shorter than the No.5 model. It is good to be able to understand the construction of the plane and how its relatively simple mechanism all goes together. Whatever you may start out with, a Jack plane is the one to aim for and the component layout is very similar to all other metal-bodied hand planes. The trick to getting the best from it is simply having a really sharp blade and in a future issue, we will show you how this can be achieved. A Jack plane is truly 'a Jack of all trades'. ■



STANLEY "BAILEY" NO 5 JACK PLANE



Fascinating fact

Believe it or not, the modern No.5 Jack plane, as it is commonly known, dates back to the 1867 design by Leonard Bailey in the USA. With slight modifications, and having spawned a variety of different sizes, it is still essentially the same 'machine' for hand planing of wood.

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Model	Product Group Series	Specification Includes (as per quoted price)	Mc HP / Scorer / Volts	Depth of cut & length of stroke	Price Exc VAT - Plus Carriage	Price Inc VAT - Plus Carriage
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Forsa 4.1 - P2	Professional	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 2.1 m	£3500.00	£4,200.00
Forsa 6.0 - P2	Professional	Inc Professional STC + TWE + TLE + Scorer	5.4 / 1.0 / 415v	107 mm x 2.1 m	£3,995.00	£4,794.00
Forsa 8.0 - P3	Professional	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 2.6 m	£4650.00	£5,580.00
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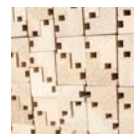
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Veneer 'paper' chain

Amber Bailey creates a stylish home accessory using wood veneers

If you enter any homeware shop in the high street, it is quite apparent that it is all the rage to be adorning your house with 'earthy' products and wooden decorations that can cost quite a pretty packet. With a bit of initiative and dexterity, it is surprising how quick and easy it is to transform your home into a chic haven that Mother Nature herself would be proud of and, most importantly, it doesn't have to break the bank or even require a proper workshop, as I will show you here.

A veneer 'paper' chain is a

contemporary and adult friendly twist on a traditional decoration. A simple statement piece that is ideal for displaying in the holidays or leaving up all year round with the guarantee of being admired by guests.

Selecting your veneers

1 The paper chain is naturally going to be very delicate but to ensure that it is as strong as it can be, then the choice of veneers used is very important. It is necessary for the veneer to bend so the grain needs to

What you will need:

- A selection of veneers from 0.6-0.8
- Decorative split pins
- 10A scalpel and cutting mat
- Fine grade sandpaper and sanding block
- Spray cellulose lacquer

The measurements in this project are recommended but the chain links can be made at any size, smaller or larger. Why not experiment to see what you can do?

Suppliers

To purchase any of the materials and equipment, visit any well stocked DIY or craft store.

For veneers visit www.originalmarquetry.co.uk or your local veneer merchant.

follow in the same direction otherwise it will just snap. Keep to soft and quite plain veneers, decorative timbers, such as burrs, will split in every direction. A single grain direction will bind the veneer together and if sliced thin enough it should be reasonably flexible. The veneer needs to be able to bend right around in a circle; a smaller strip length will require a much tighter curve.

2 I chose cherry (*Prunus spp.*), mahogany (*Khaya ivorensis*) and

Health & safety

This project involves using a scalpel to cut the pieces of veneer. When using this sharp implement, always make sure you're cutting in a direction away from yourself and keep your fingers out of the way of the blade. Cellulose lacquer gives off extremely strong fumes so always work outdoors or in a well-ventilated area and wear the appropriate safety equipment.



1



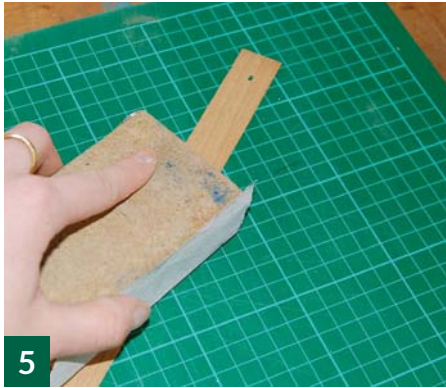
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3



4



5



6



7



8



Amber Bailey

As a recent graduate of the BA (Hons) Furniture: Conservation, Restoration & Decorative Arts course at Buckinghamshire New University, Amber now works as a marquetarian and restorer, specialising in veneered furniture. From September, 2015 she is off to Paris to study marquetry for a year at the prestigious Ecole Boulle, refining her skills and learning the traditional French techniques.

Web: www.abmarquetry.com

walnut (*Juglans regia*) as these are fairly straight-grained timbers.

Burr veneers are just too unstable and unreliable for a project such as this one.

Making the links

3 Cut your veneers into strips of 20 × 300mm – it will be easier to have a bit of a production line going rather than working on individual pieces, which will also save you time in the long run. Begin by cutting the length so that a whole batch of strips can be cut to width consecutively. I found that the most secure method for fixing the links without splitting the veneer – this is when the long grain direction will now want to work against you – is to use split pins. A vast selection of split pins is available on the market in a range of sizes, metals and decorative

ends. Unlike with paper, just piercing the surface with the pin will actually split the veneer, so instead you need to remove a little hole at each end of the strips using the scalpel. To ensure these holes align, cut one and bend the veneer around to mark up the position on the other end.

4 The juxtaposition of metal on wood can add a touch of class to the piece.

5 The split pin holes need to be as accurate as possible to avoid the pin being too loose or the veneer splitting if too tight.

To eliminate any danger of splinters, very carefully sand the edges of each strip and, to give the piece a silky finish, sand both surfaces. Move across the veneer slowly to avoid breakages.

6 Join up your link with the split pin and repeat the process but attach each link to one another creating a chain. Keep going until you are at your desired length. Once ready, hang the chain up ready for spraying, preferably outside or in a well-ventilated area indoors. Apply several layers of spray cellulose lacquer and leave to dry. It's nice to have some woodwork that doesn't involve getting covered in glue!

7 Jewel-covered split pins can add a touch of glamour. Your veneer 'paper' chain is now ready to be hung up using thread or drawing pins.

8 The chain is now complete – why not consider alternating the veneer species or link sizes to customise your chain with your own personal touch? Have fun! ■



FREEHAND POWER CARVING IN HARD AND SOFT WOOD

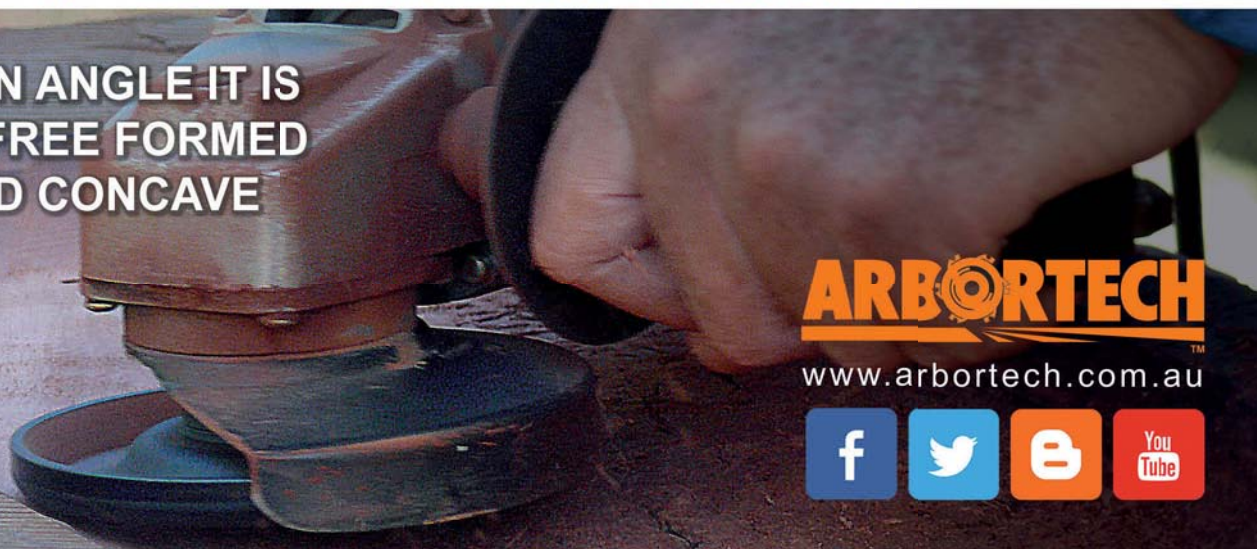


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Tiled House number sign

Have you ever tried to find a house and the name or number is missing or not visible? It can be very annoying. Well, our new power tool and machinery expert 'signing' – geddit? – **Bob Adsett** has finally got around to making a new one for his house

It's amazing how time flies. We moved into our house 13 years ago and said we needed a new house number, but as time went by, it dropped off the radar. I'm sure many of you reading this know that familiar feeling!

Two years ago while on holiday in Lanzarote, we visited a local market and there were various artisan shops selling pictures and lovely glazed pottery items and among these were tiles for house numbers, in all different colours and sizes. We decided on the ones we wanted and brought them

home. This project didn't get picked up again until I came across a nice piece of mahogany (*Khaya ivorensis*), which I put through a Jet thicknesser, cleaning up both faces. It was now time to dust off the numbers and with the addition of my nice piece of mahogany, put the two together to make a suitably inviting sign for our house

1 As you can see from the photo here, the old house number was still in place but looking a very bad sight, so I set about the job in hand – making a new one. ➤



2 First, I laid out the tiles on the mahogany board and marked out the positioning and the length to cut the wood. This was then put into the vice and cut with a handsaw. I now had a board with two clean faces but with four rough edges.

3 Using my old hand plane, I cleaned and squared both long edges and then, using a 100mm belt sander, I sanded both faces and all four edges. Now I had the wood clean all round and was able to continue the project.

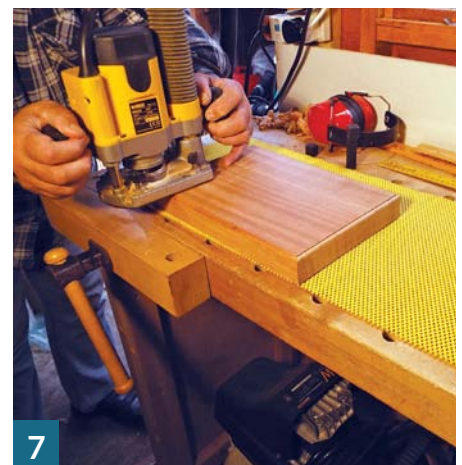
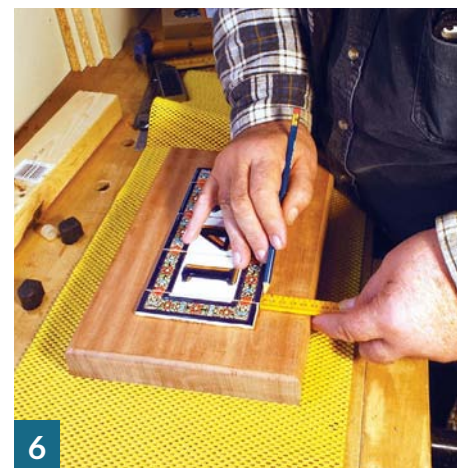
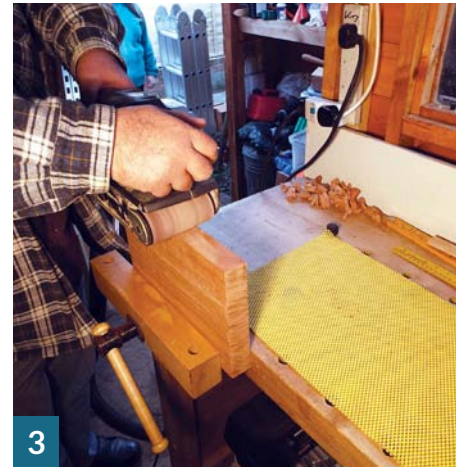
4 I marked out the position for the mounting plates and used a small pillar drill to bore out both ends of the required slots just a little deeper than the thickness of the plates; this was so they could be screwed at the correct depth. Next, the drill stop was set about 6mm deeper and the middle holes were drilled; this is so that the screw heads can move under the plate as the number plate slides into place.

5 The uneven edges were then cut back with a chisel so that the plates can sit in; this was deliberately made oversize to allow setting the plates in line when screwed in.

6 The next task was to mark out the exact position of the numbers on the face of the board; this was done by measuring in all around to get a central point, then marking out the positioning lines on the board with a square and straight rule.

7 Using a half-round cutter in my router, I then put a roundover moulding around the outside edge, starting with the end grain first followed by the long grain. Working around in this way means the cutter will not split out at the end as any small splits will be removed as the cutter moves along the work.

There are different bonding agents for things like tiles on wood but it is between the heavy builder's mastic, such as Pinkgrip or Gripfill, and tougher grades of silicon mastic, which are designed for exterior work. Both would bond these tiles effectively, bearing in mind that eventually weathering can loosen the bond of either type. Apply in an even pattern, press the tiles firmly into place and check they are all level.

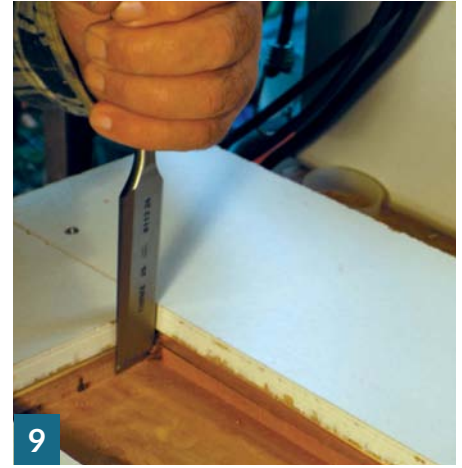


8 For a one-off, I saw no point in spending money on something that I probably would never use again. So with some offcuts of melamine-faced chipboard and odd lengths of timber offcuts, I made a template by screwing the melamine to the timber so that it aligned with the pencil lines marked on the face of the workpiece. I used a 12.7mm diameter cutter on a 6mm shank with a bearing mounted on the shank in the router and set the depth to about half the required depth for the first cuts. I worked the bearing along the template first and then removed the material inside after, then reset the router depth to the finished depth and repeated the process again. The final depth was about 3mm lower than the thickness of the tiles.



8

9 Next, the corners were cut square with a chisel and the tiles put in place to check that they fitted well. Using a sharp chisel, I put a bevel all the way around the inside of the recess while the tiles were still in place; this gave me a guide line and allowed me to use the surface to support my finger to guide the chisel.



9

10 All sharp corners were then sanded over by hand with a fine grade of abrasive and all faces and edges were fine sanded ready for finishing.



10

11 I decided to use an acrylic lacquer – the type used on a car body – which I sprayed on as I find this easier than a brush-on lacquer. Using a number of light coats and rubbing down with fine paper in between coats, it was possible to build a durable finish that should last for years.



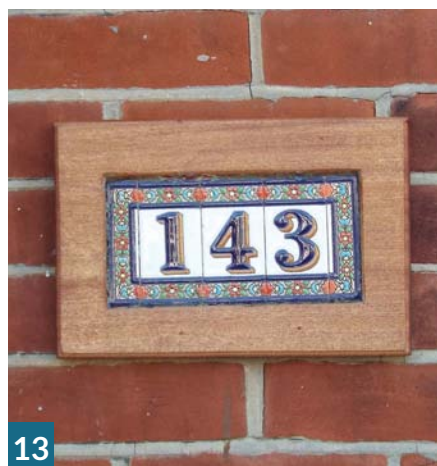
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12 When the lacquer was dry, the number tiles were bonded in place, making sure the board was the correct way up, because the fixing plates only work one way.



12

13 Finally, to fit the number board to the wall, I marked the exact position of the holes on an offcut of ply. Two small holes were drilled through and then used to mark the drilling position on the wall with a punch and a hammer. The masonry was drilled to take plugs and the screws were fitted and the number board hung on them. I could then stand back and admire my work with pride! ■



13



Bob Adsett

Bob started his woodworking career in 1967 in furniture manufacturing before moving into the construction industry. He then worked as a demonstrator and trainer for Kity Machines, which included factory-based training in Soviet-era Latvia. He then joined Axminster Tools & Machinery where he marketed CMT cutters and helped launch a range of Lamello products. He is now retired and waiting to see what offers may come up!



From the side it is easy to see the greater depth given to different parts of the classic equine head by using risers

Intarsia Arabian horse

In this excerpt from the *Big Book of Intarsia Woodworking*, **Kathy Wise** shows you how to make an Arabian horse using a variety of contrasting timbers



Not only are Arabians some of the most beautiful horses to look at, they also are one of the toughest and most enduring breeds. For centuries, Arabian horses have been used to improve and refine other horse breeds around the world. Now you can memorialise one in intarsia!

Any number of wood species can be used to create this stunning intarsia horse. For example, I used black walnut (*Juglans nigra*) for the mane, mahogany (*Khaya ivorensis*) for the bay colour, ebony (*Diospyros spp.*) for the eye and basswood (*Tilia americana*) for the blaze. Feel free to substitute different coloured woods to make your work unique.

Although this mane was cut from several colours of walnut, you can simplify it by cutting it out of a single piece of wood and sanding in the varying levels of the mane to achieve the flowing lines. There is a little light carving on the nose to accent the nostrils and veins in the face. This pattern is designed for an intermediate to advanced woodcrafter.

Special thanks to my father-in-law, Phil MacDonald, for his help and advice with this project.

1 Make about 10 copies of the pattern. Always keep a master copy to use later. Cut out and group pattern pieces together by colour: dark, medium, light and so on. Attach

Mahogany (*Khaya ivorensis*), black walnut (*Juglans nigra*), ebony (*Diospyros spp.*) and basswood (*Tilia americana*) detail the colours of this intarsia Arabian horse head

the colour groups onto A4 paper with glue stick. Copy each set of colour sorted patterns; save a copy for future projects. Tape the contact paper flat on a board. Spray adhesive on the pattern and put together. Cut out each paper pattern piece. Starting with totally flat wood, peel the backer off the contact paper and adhere the pattern piece to the wood lining up the grain direction.

2 Carefully cut out all pieces using a scrollsaw with a No.5 blade or your

What you will need:

These are suggested types of wood; you can use your own wood of choice

- 25 × 305 × 405mm dark walnut
- 20 × 50 × 150mm white basswood
- 20 × 75 × 150mm ebony or very dark walnut
- 20 × 200 × 620mm mahogany
- 6 × 610 × 305mm plywood for backer and risers
- Roll of clear shelf contact paper
- Spray adhesive
- Glue stick
- 100% silicone glue
- Yellow woodworking glue
- Gel natural varnish
- White base gel varnish
- Sawtooth hanger

Tools used

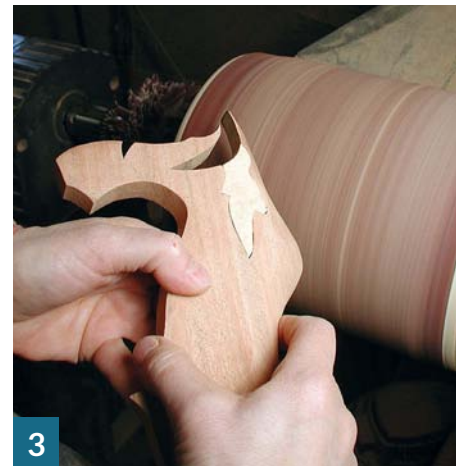
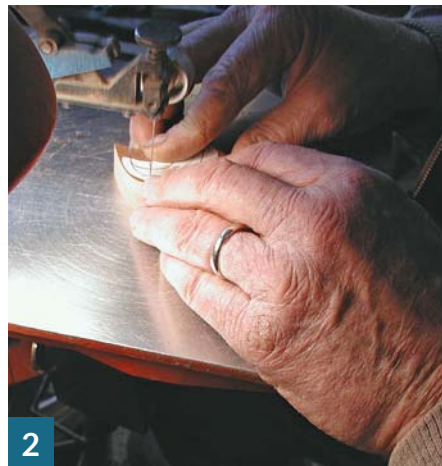
- No.3 or No.5 blade
- 4mm diameter drill bit
- Pneumatic-drum sander
- Wiping rags
- Hobby knife or carving tools

blade of choice. Make sure your blade is square to the saw table by using a square to check a cut piece. Always mark the back of your piece. Lay out all your cut pieces on a pattern taped to a work board and check for fit.

3 Shape and sand each piece individually. I use a pneumatic-drum sander. Glue the basswood blaze into the horse's forehead to shape the pieces together. Use a pencil to mark where you want to take off excess wood. Replace pieces back into the project often to check how much wood you are removing, and re-mark as needed. You want to achieve depth and shadows in your mane.

4 Lightly round the edges of each piece. Use a rotary power carver with a 12mm sanding drum to round the inside edges of the mane you can't reach with the pneumatic-drum sander. Cut 6mm shims for the two higher pieces of the mane.

5 Carve the under chin details. I use a hobby knife, but a 6mm veiner gouge also works well. Follow the line on the pattern with the veiner to create a rounded wrinkle. The veiner cuts a deep enough groove to give the wrinkle depth, but also leaves the wrinkle rounded and natural looking. ➤



6 The wrinkles over the horse's eye were made with the 12mm sanding drum and a carving knife. Take your time carving and shaping this area, especially if you have never carved before. These features really bring the horse head to life. If you don't want to do any carving, simply cut the dotted lines in the middle of the face and shape, then ignore the dotted areas around the nostrils and above the eye.

7 You can use a flexible shaft tool with a small sanding drum to create the graduated curves in the nose area and the face. Or you can use a 6mm veiner or a 10mm gouge to carve the two veins in the face where shown on the pattern. Follow the dotted lines to add dimension to the lower part of the face, then use the flexible shaft tool to recess the area around the nose to help pop out the nostril and give a 3D feel.

8 Rub a coat of Bartley's Base white gel stain on the white wood of the blaze to keep it from turning yellow. Take care not to get any on any other part of your horse. Let the stain dry overnight. Using a soft clean rag, apply clear gel varnish to all the pieces, carefully covering the top and all the side edges. Let it dry for a few minutes before wiping it off with a clean rag. After it's dry, apply a second coat and let it dry overnight. Cut the backer board out of 6mm plywood. Use the whole pattern but cut 6mm inside the outline. Mark the glue side with a marker. Stain the edges of the board dark mahogany. Sand the glue side and remove any stain that may have gotten on the face of the board to ensure clean and tight gluing.

9 Tack the sections of the horse together with 100% silicone glue. Tack the small mane parts together and glue them to the risers, taking care to follow the pattern closely. Make sure the risers don't stick out beyond the sections of the mane.

10 Tack other sections of the horse head with 100% silicone glue. The tacked sections will remain together, making it much easier to glue. If you have any gaps, pull apart the silicone tacked sections and space them evenly to hide the open areas. I glue the mane section in four large pieces. I also tack the entire nose section and the eye/forehead section together. Let the glue dry overnight.



Make your own sandbag

Fill resealable freezer bags with sand to make your own sandbags. Buy any grade of sandblasting sand, or use clean, screened beach sand to make your own sand bags for weighing down pieces while gluing. Be careful not to get sand into the seal part of the bag. Press all the air out of the bag and seal. Take a strip of duct tape, bend the end over and tape, taking care not to have any sharp edges. Put the sandbag into another bag and seal and tape the end. Cover the entire bag with duct tape. This will keep the plastic bags from puncturing and spilling sand all over your project and workshop. It will make it very durable and will not slip when you pile more than one or two sandbags on your project.



11 Lay out all the tacked sections of the horse head on the backer board and make sure you have a tight fit. Ease the pieces away from the section you are gluing and mark the edges with a pencil. Glue the first section down with yellow woodworking glue and weigh them down with sandbags, working from the outside to the inside. Let the glue set up for a couple of hours, then glue the rest of the horse head down and weigh down with sandbags again pressing them from the outside to the inside. Let the glue dry overnight.



12 Trim any overhanging backer board with a rotary power carver and a sanding drum and touch up the edges with stain. I like to put a final wipe of gel varnish on the entire piece at this point. Saturate your wiping rag and wring out – use just a light rub. Don't get a lot on the piece or you will have to spend time cleaning the excess out of the cracks, then attach a sawtooth hanger. ■

Big Book of Intarsia Woodworking by The Best of Scrollsaw Woodworking & Crafts magazine

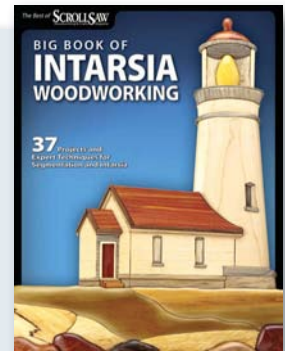
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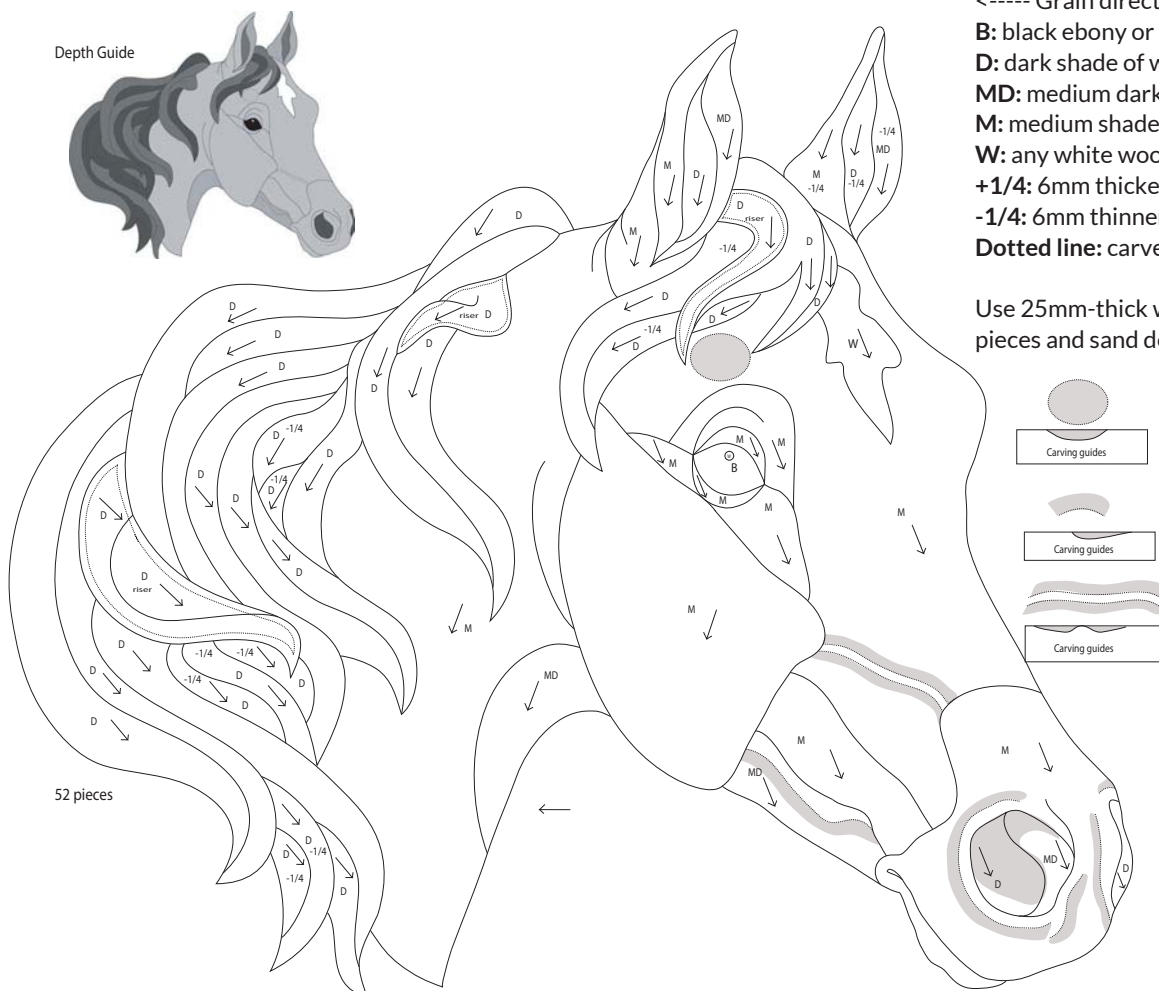
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Depth Guide



KEY

Start with 20mm wood

<----- Grain direction

B: black ebony or stain black

D: dark shade of wood/walnut

MD: medium dark shade

M: medium shade of wood

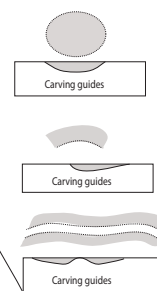
W: any white wood

+1/4: 6mm thicker wood or shim

-1/4: 6mm thinner wood or sand down

Dotted line: carve out shaded area

Use 25mm-thick wood for all mane pieces and sand down to varying depths



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BUG BOX

Neil Lawton shows us how to make several variations of bug boxes using just a few simple timber offcuts

As any gardener knows, there are insects and there are insects. There are those that see your flowers and carefully nurtured crops as an abundant supply of food, and those who prey on them.

Increasing suitable habitat for these beneficial predators should hopefully increase the population, leading to a natural fall in numbers of the undesirables, without resorting to nasty chemicals and spraying away the good, as well as the bad.

Bug boxes are an easy and tidy way of providing more living space for these creatures, without resorting to piles of twigs, etc. around the garden. There are many other materials and designs that can be utilised, but I am once again using reclaimed timber and whatever I have to hand.

1 For this box, I am using pallet wood, some logs from the burning pile and bamboo garden canes.

2 With the saw set at 45°, a mitre is cut on one end of the pieces, which will form the sides and the roof. I'm using the tablesaw here, but a mitre saw would suffice.

3 A stop block is clamped to the cross-cut fence to ensure that the paired components are cut to the same length. It's not too crucial for this project, but very handy when making enclosed boxes and picture frames.

4 Lay out the pieces to establish the working width – the sides can join the roof in any position and can be adjusted to suit the filling materials you have available.

PHOTOGRAPHS BY NEIL LAWTON, UNLESS OTHERWISE STATED



What you will need:

- Pieces of pallet wood 16mm-thick
- Ply back: 6mm-thick
- Roof parts: 166mm from the long edge of the mitre and 87mm wide
- Sides: 272mm to the long edge and 75mm wide
- Back – ply – is 180mm wide and approximately 330 from the apex to the bottom

Above left: Eastern Carpenter bee – male (*Xylocopa*)

PHOTOGRAPH COURTESY OF WIKIPEDIA COMMONS

5 For the back of the box, cut a piece to width. I used ply as I have a quantity of offcuts, but you could build the back up using sections of pallet wood. The next step is to glue and pin the roof sections together. A small mitre clamp was used to keep the pieces in line and to stop them sliding away from each other.

7 With a centreline marked on the back, the roof section can be used as a template to mark the cut lines.

8 The basic box can then be just glued and pinned together.

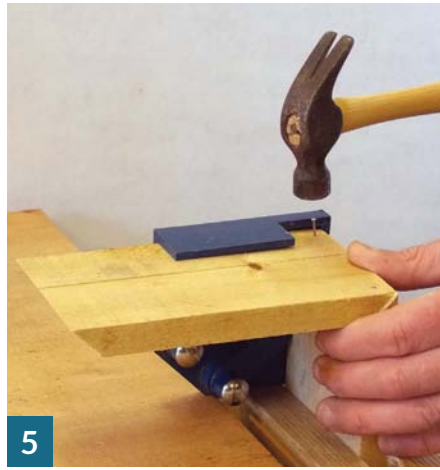
9 Charring the timber with a blow torch will remove the rough sawn finish and provide you with better weatherproofing. Brushing the timber with a brass bristled brush will remove excess char and give a smooth finish. Always carry out this process well away from other flammable material – ideally outside, if possible, wearing the necessary PPE.

10 Measure up for the log, which will form the bottom of the box.

11 The log I had chosen had been split on a hydraulic log splitter. There was a high spot, which made it a little unstable to bandsaw. This was removed with a plane, but chisels or a sander can be used to obtain a more stable surface.

12 Next, using a flat cut on one side, the log can then be cut to fit. Using the first offcut, as well as a pushstick, will keep your hands well clear of the blade.

13 The more stable log can now be cut to suit the depth of the bug box. ➤



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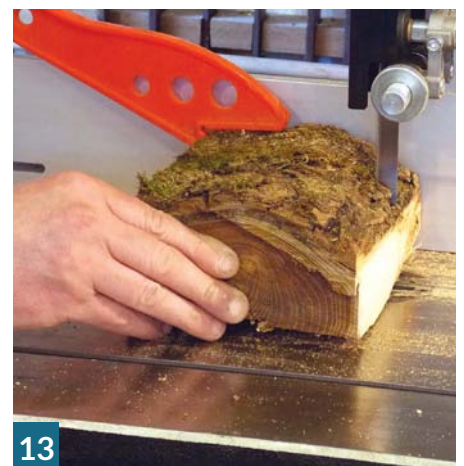
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14 Lay out the pieces, trying different positions, until you find one you are happy with.

15 Secure the pieces in place. I used a nail gun here, but a hammer and nails or screws could be used.

16 A selection of HSS drill bits were chosen to suit and the appropriate depth marked using masking tape.

17 A series of holes can then be drilled into the various logs. Using these drills ensures that no great problems will occur if you hit one of the securing nails.

18 Next, cut the bamboo to length. These could be cut by hand in bunches, as the length is not too critical. If machine cut, it is essential to use a V-block and ensure they are cut singly. A 'roundish' piece can easily rotate with the cut and either fly back at you, or potentially pull your hands towards the blade.

19 Start to fill in the spaces with the bamboo. A few different sized blocks of wood will help you contain it, without it falling over.

20 Keep repositioning the blocks until there is no large area unfilled.

21 Once the blocks are removed, gently tap more bamboo into the loose areas.

Advice from RSPB

Insects will use man-made structures in which to lay eggs, or to hibernate in through the winter, either as an adult or larvae. Bundles of tubes provide somewhere for insects to lay eggs or to hibernate in. The hollow stems of bamboo or hogweed are ideal. Gather tubes into a bundle and secure together.

Ensure one end is blocked off so the tubes do not become a wind tunnel.

Web: www.rspb.org.uk

Boxelder bug
(*Boisea trivittata*)



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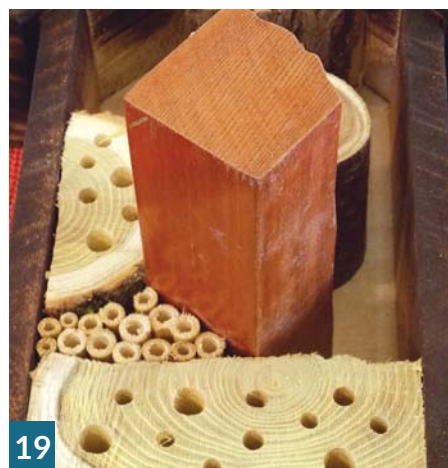
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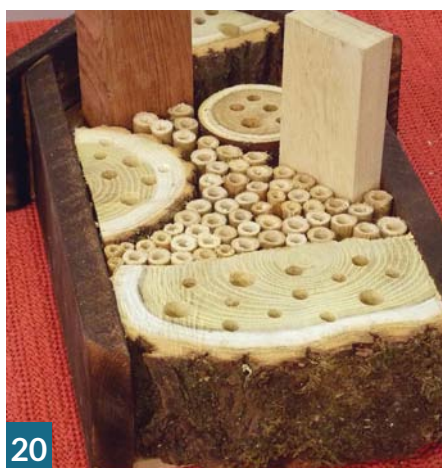
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22 This may cause previously tight feeling areas to become loose. Keep checking for movement until you can turn the box over, with nothing falling out.

23 Staple some small mesh wire over the box. Small birds will quite happily try and pull out the contents in their foraging!

24 Bend back any sharp edges of the wire and staple in place.

25 The hanger was fashioned by filing a V-notch in an old table expansion bracket – I try to recycle where I can!

26 The finished article – a home for all those beneficial insects!

27-28 Here you can see a few variations on the theme. These were made from hardwood offcuts and were photographed prior to wiring. Why not let your imagination run free and create your own habitat for those beneficial bugs today! ■



22



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Attracting bugs

Ladybirds like to hibernate in the nooks and crannies in dead wood, and you can buy artificial homes that mimic this. Ladybirds are particularly important for controlling aphids.

Right: Ladybird (*Coccinellidae*)



26



27



Neil Lawton

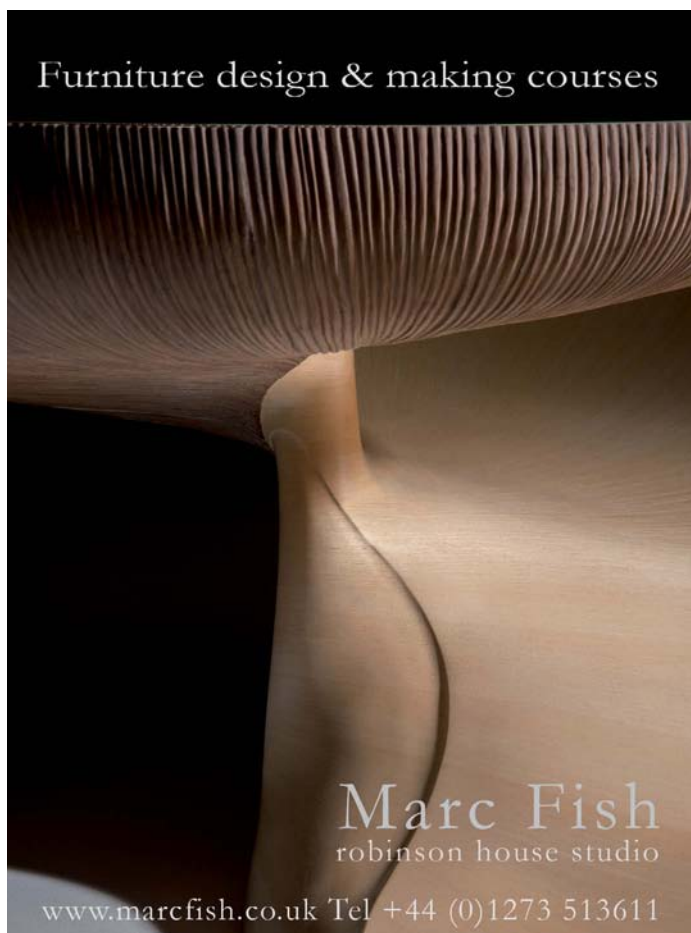
Neil is a woodworker/turner who specialises in the use of reclaimed and recycled materials in his projects and seasons native timbers for his turning work. He works from his home workshop in York and works part time in the Design Technology department of the local school.



28



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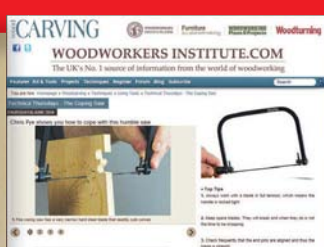
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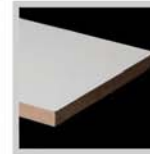
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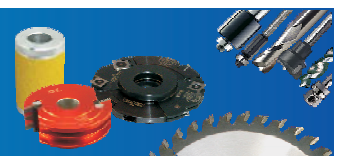
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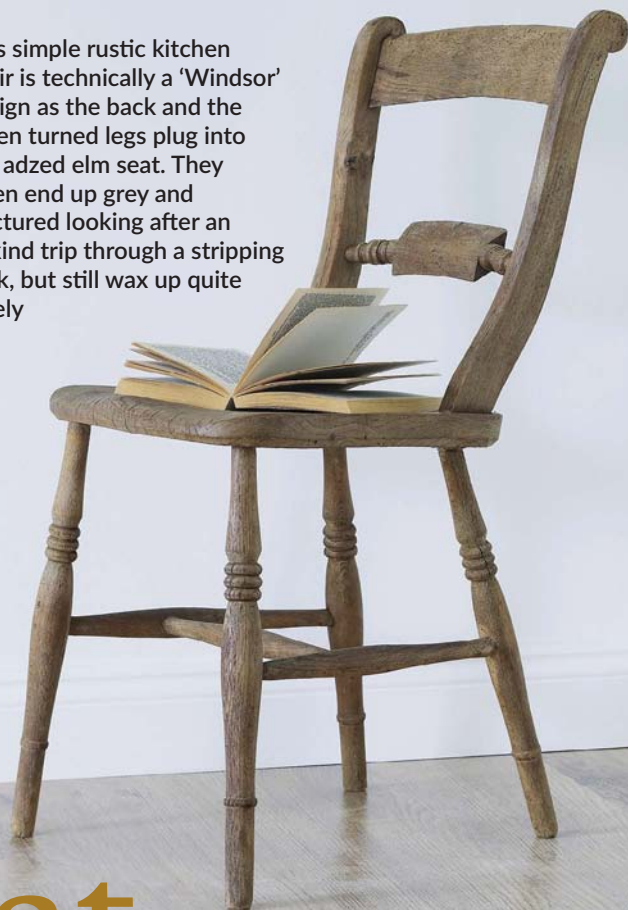
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A simple stick-back design with a curved crest rail allied to a conventional frame with a panelled seat makes for a pleasing design – but add a cushion for comfort....

This simple rustic kitchen chair is technically a 'Windsor' design as the back and the green turned legs plug into the adzed elm seat. They often end up grey and fractured looking after an unkind trip through a stripping tank, but still wax up quite nicely



Design inspiration Take a seat...

We take chairs very much for granted but they are fundamental to our comfort and wellbeing. We highlight and discuss a few familiar styles for you to pick

An American Adirondack style chair that hasn't caught on in the UK but with its simple construction and fan back shape, perhaps it should?



This rather outdated pine ladder back dining chair is just asking for the special paint treatment to make it a lot more interesting

The vintage style of 'Thonet' inspired, steamed bentwood chair never really goes out of fashion, perfect for café society but not out of place in the kitchen and dining room, too



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