

Furniture & cabinetmaking

DESIGN • INSPIRATION • PROJECTS • TECHNIQUES • TESTS • NEWS • EXCELLENCE

**Mind the gap...
...and the joint will
look after itself**



A place for everything

Make a wall cabinet
for all your hand tools

Clever construction

Three ways to simplify
curved joinery

Dual action runners

Steve Coonick puts Blum's latest
soft close mechanism to the test

Hikoki - the new name for Hitachi Power Tools



www.hikoki-powertools.co.uk

HIKOKI

HIGH PERFORMANCE POWER TOOLS



Clarke TABLE SAWS

LEG STAND KITS
FOR CTS10D
AND CTS11
ONLY £27.59
INC VAT

FROM ONLY
£72.99
EXC.VAT
£87.99
INC.VAT

INCLUDES
LEFT
& RIGHT
TABLE
EXTENSION

CTS10D

MODEL MOTOR BLADE EXC.VAT INC.VAT

CTS800B 600W 200mm £72.99 £87.99

CTS11 1500W 254mm £149.98 £179.98

CTS10D 1500W 254mm £169.98 £209.98

*was £185.99 inc. VAT

**BEST
SELLER**

Machine Mart

**65 SUPERSTORES
NATIONWIDE**

**WHERE QUALITY
COSTS LESS**

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°

FROM ONLY
£129.98
EXC.VAT
£155.98
INC.VAT

SHOWN WITH
OPTIONAL LEG KIT
CLKS £19.98
EXC.VAT
£23.98 INC.VAT

Clarke TABLE SAW WITH STAND

NEW

CTS16

- 1600W motor
- 250mm blade size
- 0-45° tilting blade
- Cutting depth: 73mm at 90° / 53mm at 45°

INCLUDES LEFT & RIGHT TABLE EXTENSION

FROM ONLY
£99.98
EXC.VAT
£119.98
INC.VAT

Clarke 40" WOODTURNING LATHE

Ideal for woodturning in the workshop

- 1016mm distance between centres allows for turning longer spindles
- Inc. tool rest, tail stock, drive centre, face plate & 3 chisel
- Large turning capacity of 350mm
- 4 turning speeds

CWL1000B

ONLY
£136.99
EXC.VAT
£164.39
INC.VAT

LOCKABLE
TAILSTOCK

BENCH
MOUNTED

Clarke DUST EXTRACTOR/ CHIP COLLECTORS

CDE7B

CWVE1

FROM ONLY
£109.98
EXC.VAT
£131.98
INC.VAT

- Powerful 1100W motor
- 50 litre bag capacity
- Flow rate of 850M³/h

Clarke MORTISING MACHINE

CBM1B

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

CHISELS
AVAILABLE FROM
£8.39 INC.VAT

...fast and accurate with a good solid feel... Excellent value for money...
See www.machine-mart.co.uk

FROM ONLY
£174.99
EXC.VAT
£209.99
INC.VAT

MODEL	MOTOR	FLOW RATE	BAG CAP.	EXC.VAT	INC.VAT
CHVE1	1100W	183 M ³ /h	50Ltrs	£109.98	£131.98
CD35B	750W	450 M ³ /h	56Ltrs	£144.99	£173.99
CDE7B	750W	850 M ³ /h	114Ltrs	£159.98	£191.98

Clarke RANDOM ORBITAL SANDER

CROS3

- Adjustable front handle improves control
- 7000-14000rpm
- INC DUST BAG AND SELECTION OF 125MM DIAMETER SANDING DISCS

FROM ONLY
£32.99
EXC.VAT
£39.99
INC.VAT

Clarke ELECTRIC POWER FILE

CPF13

- Variable belt speed
- Tilting head
- Black & Decker

FROM ONLY
£49.98
EXC.VAT
£59.98
INC.VAT

Clarke CORDLESS STAPLE/ NAIL GUN

CONSN18LIC

- All models include nail/staple pack and tough moulded case
- 18V 2Ah Li-Ion power pack
- 18 Staple/Nail Gauge

ONLY
£109.98
EXC.VAT
£131.98
INC.VAT

SPARE NAILS /
STAPLES IN STOCK

ELECTRIC AND CORDLESS
MODELS IN STOCK

Clarke 18V BRUSHLESS COMBI DRILLS

CON180LI

FROM ONLY
£109.98
EXC.VAT
£131.98
INC.VAT

*was £203.98 inc. VAT

MODEL VOLTS BATTS EXC.VAT INC.VAT

CON18LIC 18V 2x 2.0Ah Li-Ion £109.98 £131.98

CON180LI 18V 2x 4.0Ah Li-Ion £159.98 £191.98

Clarke BOLTLESS SHELVING/BENCHES

150 PER SHELF

350 PER SHELF

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

MODEL DIMS WxDxH(mm) EXC.VAT INC.VAT

150kg 800x300x1500 £29.98 £35.98

350kg 900x400x1800 £49.98 £59.98

Clarke WHETSTONE SHARPENER (200MM)

CWS200B

- Produces razor sharp cutting edges on chisels, planes, etc.
- Inc. 3 tool holding jigs, workpiece clamp & support frame, polishing paste & water trough

ONLY
£119.98
EXC.VAT
£143.98
INC.VAT

Clarke WOODWORKING VICES

STANLEY
Record

VW7

FROM ONLY
£14.99
EXC.VAT
£17.99
INC.VAT

MODEL	MOUNTING	JAW (WIDTH/OPENING /DEPTH)mm	EXC.VAT	INC.VAT
Clarke Bolted	150/152/61		£14.99	£17.99
CHT152	Clamped	72/60/40	£18.99	£22.79
Stanley Multi Angle	Clamped	75/50/32	£21.99	£26.39
Record TV75B	Bolted	180/205/78	£29.98	£35.98

Clarke 13" MINI WOOD LATHE

CWL325V

FROM ONLY
£154.99
EXC.VAT
£185.99
INC.VAT

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

Clarke BISCUIT JOINTER

TC-BJ900

- 11000rpm Operating Speed
- 860W motor
- 14mm Cutting Depth
- Inc. dust bag, storage case and face spanner for cutter change

2 YEAR
GUARANTEE

FROM ONLY
£54.99
EXC.VAT
£65.99
INC.VAT

Clarke BELT SANDERS

BS1

ABRASIVE SANDING BELTS IN STOCK

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

MODEL	MOTOR	M/MIN	EXC.VAT	INC.VAT
Clarke BS1	900W	380	£36.99	£44.39
Clarke CBS2	1200W	480	£79.98	£95.98
Makita 9911	650W	75-270	£89.98	£107.98

Clarke CIRCULAR SAWS

CON185

FROM ONLY
£41.99
EXC.VAT
£50.39
INC.VAT

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

MODEL	MOTOR	MAX CUT (mm)	EXC.VAT	INC.VAT
CCS185B	1200W	65/44	£41.99	£50.39
CCS2	1200W	60/45	£59.98	£71.98
CON185*	1600W	60/40	£62.99	£75.99

Clarke PLANERS & THICKENERS

CPT800

FROM ONLY
£179.98
EXC.VAT
£215.98
INC.VAT

PRICE CUT
NOW FROM
£215.98
EXC.VAT
£259.98
INC.VAT

MODEL	PLANING WIDTH	MAX THICK. CAPACITY	EXC. VAT	INC. VAT
CPT800*	6"	120mm	£179.98	£215.98
CPT600	8"	120mm	£219.98	£263.98
CPT1000	10"	120mm	£299.00	£358.80

BLACK & DECKER POWER PLANERS

TE-P1850

FROM ONLY
£54.99
EXC.VAT
£65.99
INC.VAT

- 82mm cutting width

MODEL	MOTOR	DEPTH OF CUT	EXC.VAT	INC.VAT
Einhell TE-P1850	850W	3mm	£54.99	£65.99
B&D KW750K	GB 750W	2mm	£57.99	£69.99

TURBO AIR COMPRESSORS

airmaster

FROM ONLY
£89.98
EXC.VAT
£107.98
INC.VAT

*V Twin Pump

MODEL	MOTOR	CFM	TANK	EXC.VAT	INC.VAT
8/250	2HP	7.5	24ltr	£89.98	£107.98
7/250	2HP	7	24ltr	£94.99	£113.99
11/250	2.5HP	9.5	24ltr	£109.98	£131.98
8/510	2HP	7.5	50ltr	£119.98	£143.98
11/510	2.5HP	9.5	50ltr	£139.98	£167.98
16/510*	3HP	14.5	50ltr	£209.00	£250.80
16/1010*	3HP	14.5	100ltr	£259.98	£311.98

Clarke HARDWOOD WORKBENCH

CHB1500

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

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

Clarke DETAIL SANDERS

CDS-1V

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

- Perfect for smooth and fine finishing along with hard to reach areas or curved surfaces

MODEL	WATTS	EXC.VAT	INC.VAT
PS105	105W	£19.98	£23.98
CDS-1V	280W	£29.98	£35.98

ALL MODELS INC. SANDING SHEETS

VAC KING WET & DRY VACUUM CLEANERS

FROM ONLY
£49.98
EXC.VAT
£59.98
INC.VAT

*SS = Stainless Steel

MODEL	MOTOR	CAPACITY	EXC. VAT	INC. VAT
CVAC20P	1250W	16/12ltr	£49.98	£59.98
CVAC20SS*	1400W	16/12ltr	£59.98	£71.98
CVAC20PR2	1400W	16/12ltr	£64.99	£77.99
CVAC23SS*	1400W	19/17ltr	£67.99	£81.99
CVAC30SSR	1400W	24/21ltr	£89.98	£107.98

Clarke OSCILLATING BELT & BOBBIN SANDER

COBS1

FROM ONLY
£129.98
EXC.VAT
£155.98
INC.VAT

PRICE CUT
NOW FROM
£155.98
EXC.VAT
£189.98
INC.VAT

*was £167.98 inc. VAT

Clarke 4" BELT/ 6" DISC SANDER

CS4-6E

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

FROM ONLY
£92.99
EXC.VAT
£111.59
INC.VAT

Clarke 6" BELT/ 9" DISC SANDER

CS6-9C

- Includes stand
- 1 HP/ 230V/ 1ph motor

FROM ONLY
£239.99
EXC.VAT
£286.99
INC.VAT

Clarke 1" BELT/ 5" DISC SANDER

CSB1-5B

- Includes 2 tables that tilt & lock
- Quality Induction 250W motor

NEW

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

Clarke 4" BELT/ 8" DISC SANDER

CS4-8

- Includes 2 tables
- 550W 230V motor

FROM ONLY
£159.98
EXC.VAT
£191.98
INC.VAT

Clarke DISC SANDER (305MM)

CSB1-5B

- Powerful, bench mounted
- 900W
- Dust extraction port

PRICE CUT
NOW FROM
£124.99
EXC.VAT
£149.98
INC.VAT

*was £155.98 inc. VAT

Clarke SHEET SANDERS

CON300

FROM ONLY
£16.99
EXC.VAT
£20.39
INC.VAT

*was £39.59 inc. VAT

MODEL	SHEET SIZE	MOTOR	EXC.VAT	INC.VAT
COS200	190X90mm	150W	£16.99	£20.39
CON300*	230X115mm	330W	£29.98	£35.98

BUY NOW SPREAD THE COST

- Over 12, 24 or 36 months
- Purchases over £300
- 12.9% APR, 10% Deposit*

EASY TO USE WEBSITE

NOW OVER **21,000**
PRODUCTS ONLINE!

For hard-to-find,
specialist items
visit the
Xtra
section on
machinemart.co.uk

FREE 508 PAGE CATALOGUE

over
450
PRICE CUTS &
NEW PRODUCTS

GET YOUR FREE COPY NOW!

- IN-STORE
- ONLINE
- PHONE

0844 880 1265

Clarke SLIDING COMPOUND MITRE SAWS

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

BEST SELLER

FROM ONLY **£89.99** EXC.VAT
£107.99 INC.VAT

CMS10S2

MODEL	BLADE DIA/BORE DEPTH/ (mm)	CROSS CUT	EXC.VAT	INC.VAT
CMS210S	210/30	60/120	£89.99	£107.99
CMS10S2	254/30	78/340	£139.99	£167.99

Clarke ELECTRIC HEATERS

BEST SELLER

DEVIL 7003

FROM ONLY **£49.99** EXC.VAT
£59.99 INC.VAT

MODEL	VOLTAGE	HEAT OUTPUT KW	EXC.VAT	INC.VAT
DEVIL 6003	230V	1.5-3	£49.99	£59.99
DEVIL 7003	230V	3	£59.99	£71.99
DEVIL 6005	400V	2.5-5	£69.99	£83.99
DEVIL 7005	400V	5	£84.99	£101.99
DEVIL 6009	400V	4.5-9	£109.00	£130.80
DEVIL 6015	400V	5-10-15	£169.00	£202.80
DEVIL 7015	400V	15	£199.98	£239.98

Clarke BENCH BANDSAWS

• Produces fast, precise mitre & longitudinal cuts
• 350W motor
• 7.5" throat size
• Cuts in all types of wood

£129.99 EXC.VAT
£155.99 INC.VAT

CBS190B

• Great for both home & professional use
• Induction 300W motor
• Table tilts up to 45°
• 9" throat size

Clarke PROFESSIONAL BANDSAWS

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

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

QUICK RELEASE FENCE
DRIVE-BELT TENSIONING

CBS300

FROM ONLY **£219.99** EXC.VAT
£263.99 INC.VAT

Clarke PROFESSIONAL BANDSAWS

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

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

MODELS ALSO FEATURE:

- MULTI-STEP DUST EXTRACTION OUTLET
- FLEXIBLE LED WORKLIGHT
- REMOVABLE DUST TRAY
- BLADE TENSIONING CONTROL

was £478.80 inc.VAT # was £597.60 inc.VAT

MODEL	THROAT DEPTH	MAX CUT 90°	MAX CUT 45°	EXC. VAT	INC. VAT
CBS250	250mm/10"	100mm	75mm	£219.99	£263.98
CBS300	305mm/12"	165mm	115mm	£379.00	£454.80
CBS350	340mm/14"	225mm	160mm	£479.00	£574.80

Clarke MITRE SAWS

£54.99 EXC.VAT
£65.99 INC.VAT

Laser Guide
Sliding Compound

• Quality Range of Mitre saws and blades in stock

was £71.98 inc.VAT

MODEL	BLADE DIA/ BORE (mm)	MAX CUT DEPTH/CROSS	EXC. VAT	INC. VAT
CMS210	210/30	60/120mm	£54.99	£65.99
Einhell TC-MS 2112	210/30	55/120mm	£59.98	£71.98
Einhell TC-SM 2131	210/30	62/310mm	£129.98	£155.98
Einhell TC-SM 2534	250/30	75/340mm	£159.98	£191.98

Clarke TURBO FAN GAS HEATERS

Offering low cost, efficient heating

DUAL VOLTAGE 230V
110V 10A 1000W FROM £226.80
£79.99 EXC.VAT
£95.99 INC.VAT

PROANE GAS FIRED

MODEL	MAX OUTPUT KW	EXC. VAT	INC. VAT
Little Devil II	10	£79.98	£95.98
Devil 700	15	£99.98	£119.98
Devil 900	24.9	£139.98	£167.98
Devil 1600	36.6	£169.98	£203.98

Clarke STATIC PHASE CONVERTERS

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

PRICE CUT
£189.99 EXC.VAT
£227.99 INC.VAT

CBS225

• Great for both home & professional use
• Induction 300W motor
• Table tilts up to 45°
• 9" throat size

Clarke ROUTERS

BOSCH

• Powerful heavy duty machines ideal for trade and DIY use

CR2 INCLUDES 15 PIECE KIT WORTH OVER £20

FROM ONLY **£44.99** EXC.VAT
£53.99 INC.VAT

CR1200

Clarke GRINDERS & STANDS

• Stands complete with bolt mountings and feet anchor holes

6" & 8" AVAILABLE WITH LIGHT

STANDS FROM ONLY **£47.98** INC.VAT

• With Sanding belt
• 8" whetstone & 6" drystone

MODEL	DUTY	WHEEL DIA.	EXC. VAT	INC. VAT
CBG6RP	PRO	150mm	£32.99	£39.99
CBG6RZ	DIY	150mm	£42.99	£51.99
CBG6RSC	HD	150mm	£54.99	£65.99
CBG6SB	PRO	150mm	£54.99	£65.99
CBG6RWC	HD	150mm	£59.99	£71.99
CBG6W*	wet	HD 150/200mm	£56.99	£68.99

Clarke DRILL PRESSES

• Range of precision bench & floor presses for enthusiast, engineering & industrial applications

FROM ONLY **£66.99** EXC.VAT
£80.99 INC.VAT

CDP152B

B = Bench mounted
F = Floor standing

MODEL	MOTOR (W)	SPEEDS	EXC. VAT	INC. VAT
CDP5EB	350/5	5	£66.99	£80.99
CDP102B	350/5	5	£79.98	£95.98
CDP152B	450/12	12	£149.98	£179.98
CDP202B	450/16	16	£189.00	£226.80
CDP10B	370/12	12	£198.99	£238.79
CDP452B	550/16	16	£229.00	£274.80
CDP352F	550/16	16	£229.00	£274.80
CDP502F	1100/12	12	£499.00	£598.80

Clarke JIGSAWS

BEST SELLER

CON750 *DIY Professional

FROM ONLY **£79.99** EXC.VAT
£95.99 INC.VAT

• 50mm max cut thickness
• Air-blower removes dust from cutting area
• Table tilts 0-45°

MODEL	POWER (W)	DEPTH OF CUT (WOOD/STEEL)	EXC. VAT	INC. VAT
CJS380	420W	55/6mm	£15.99	£19.19
CON750H	750W	80/10mm	£27.99	£33.59
Bosch PST700E*	500W	70/4mm	£49.98	£59.98

Clarke 12" 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

£57.99 EXC.VAT
£69.99 INC.VAT

CDTJ12

Clarke ROUTER TABLE

Router not included

BEST SELLER

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

£69.99 EXC.VAT
£83.99 INC.VAT

CRT-1

Machine Mart Xtra

Professional woodworking tools and machinery from Record, Sheppach, SIP and more!

Visit www.machinemart.co.uk for more information

Clarke MULTI FUNCTION TOOL WITH ACCESSORY KIT

• Great for sawing, cutting, sanding, polishing, chiselling & much more • 250W motor
• Variable speed

£39.99 EXC.VAT
£47.99 INC.VAT

CMFT250

Clarke SCROLL SAWS

BEST SELLER

CSS400C

FROM ONLY **£79.99** EXC.VAT
£95.99 INC.VAT

• 50mm max cut thickness
• Air-blower removes dust from cutting area
• Table tilts 0-45°

MODEL	MOTOR RPM	SPEED	EXC. VAT	INC. VAT
CSS400C	1200	400-1600	£79.98	£95.98
CSS16VB	90W	550-1600	£94.99	£113.99
CSS400C	90W	550-1600	£114.99	£137.99

Clarke 12" 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

£57.99 EXC.VAT
£69.99 INC.VAT

CDTJ12

Clarke ROUTER TABLE

Router not included

BEST SELLER

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

£69.99 EXC.VAT
£83.99 INC.VAT

CRT-1

Machine Mart Xtra

Professional woodworking tools and machinery from Record, Sheppach, SIP and more!

Visit www.machinemart.co.uk for more information

VISIT YOUR LOCAL SUPERSTORE

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

BARNESLEY Pontefract Rd, Barnsley, S71 1EZ	01226 732297	EDINBURGH 163-171 Piersfield Terrace	0131 659 5919	MIDDLESBROUGH Mandale Triangle, Thornaby	01642 677881
B'HAM GREAT BARR 4 Birmingham Rd.	0121 358 7977	EXETER 16 Trusham Rd, Ex2 8QG	01392 256 744	NORWICH 282a Heigham St. NR2 4LZ	01603 766402
B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills	0121 7713433	GATESHEAD 50 Lobbey Hill Rd, NE8 4YJ	0191 493 2520	NOTTINGHAM 211 Lower Parliament St.	0115 956 1811
BLACKPOOL 380-382 Talbot Road	01253 205 170	GLASGOW 280 Gt Western Rd, G4 9EJ	0141 332 9231	PETERBOROUGH 417 Lincoln Rd, Millfield	01733 311770
BOLTON 1 Thynne St, BL3 6BD	01204 365799	GLoucester 221A Barton St, GL1 4HY	01452 417 948	PLYMOUTH 58-64 Embankment Rd, PL4 9HY	01202 254050
BRADFORD 105-107 Manningham Lane, BD1 3BN	01274 390962	GLoucester 221A Barton St, GL1 4HY	01452 417 948	POOLE 137-139 Bournemouth Rd, Parkstone	01202 717913
BRIGHTON 123 Lewes Rd, BN2 3QB	01273 915999	HULL 8-10 Holderness Rd, HU9 1EG	01482 223161	PORTSMOUTH 277-283 Copnor Rd, Copnor	023 9265 4771
BRISTOL 1-3 Church Rd, Lawrence Hill, BS5 9JJ	0117 835 1060	ILFRSD 746-748 Eastern Ave, IG2 7HU	0208 518 4286	PRESTON 53 Blackpool Rd, PR2 6BU	01772 703263
BURTON UPON TRENT 12a Lichfield St, DE14 3QZ	01283 564 708	IPSWICH Unit 1 Ipswich Trade Centre, Commercial Road	01473 221253	SHEFFIELD 453 London Rd, Heeley, S2 4HJ	0114 258 0831
CAMBRIDGE 181-183 Histon Road, Cambridge, CB4 3HL	01223 322675	LEEDS 227-229 Kirkstall Rd, LS4 2AS	0113 231 0400	SIDCUP 13 Blackfen Parade, Blackfen Rd.	0208 3042069
CARDIFF 44-46 City Rd, CF24 3DN	029 2046 5424	LEICESTER 69 Melton Rd, LE4 6PN	01522 543 036	SOUTHAMPTON 516-518 Portsmouth Rd.	01702 287321
CARLISLE 85 London Rd, CA1 2LG	01228 591666	LINCOLN Unit 5, The Pelham Centre, LN5 8HG	01522 543 036	SOUTHEAST 1139-1141 London Rd, Leigh on Sea	01782 483 742
CHELTENHAM 84 Fairview Road, GL2 5EH	01242 514 402	LIVERPOOL 80-88 London Rd, L3 5NF	0151 709 4484	SUN-ON-TRENT 382-396 Waterloo Rd, Hanley	01782 287321
CHESTER 43-45 St. James Street, CH1 3EY	01244 311258	LONDON CATFORD 289/291 Southend Lane SE6 3RS	0208 695 5684	SUNDERLAND 13-15 Ryhope Rd, Grangetown	0191 510 8773
COLCHESTER 4 North Station Rd, CO1 1RE	01206 762831	LONDON 503-507 Lea Bridge Rd, Leyton, E10	020 8803 0861	SWANSEA 7 Samlet Rd, Llanisamlet, SA7 9AG	01792 792969
COVENTRY Bishop St, CV1 1HT	024 7622 4227	LUTON Unit 1, 326 Dunstable Rd, Luton L4 8JS	01582 728 063	SWINDON 21 Victoria Rd, SN1 3AW	01793 491717
CROYDON 423-427 Brighton Rd, Sth Croydon	020 8763 0640	MAIDSTONE 57 Upper Stone St, M15 6HE	01622 769 572	TWICKENHAM 83-85 Heath Rd, TW1 4AW	020 8992 9117
DARLINGTON 214 Northgate, DL1 1RB	01325 380 841	MANCHESTER ALTRINCHAM 71 Manchester Rd, Altrincham	0161 942 666	WARRINGTON Unit 3, Hawley's Trade Pk.	01925 630 937
DEAL (KENT) 182-186 High St, CT14 6BQ	01334 373 434	MANCHESTER CENTRAL 209 Bury New Road M8 8DU	0161 241 1851	WIGAN 2 Harrison Street, WN5 9AU	01942 323 785
DERBY Derwent St, DE1 2ED	01302 245 999	MANCHESTER OPENSHAW Unit 5, Tower Mill, Ashton Old Rd	0161 223 8376	WOLVERHAMPTON Parkfield Rd, Bilston	01902 494186
DONCASTER Wheatley Hall Road	01382 225 140	MANSFIELD 169 Chesterfield Rd, South	01623 622160	WORCESTER 48a Upper Tything, WR1 1JZ	01905 723451

28264RH Calls to the catalogue request number above (0844 880 1265) cost 7p per minute plus your telephone company's network access charge. For security reasons, calls may be monitored. All prices correct at time of going to press. We reserve the right to change products and prices at any time. All offers subject to availability, E&OE. *Terms & conditions apply see machinemart.co.uk/finance for more details

DESIGN & INSPIRATION

Get inspired by the great design styles of the past, admire today's award-winning projects or plan your next museum trip

24 Wood Awards winners 2018

We showcase the award-winning work from this year's competition

40 Under the hammer – Private Collections

We take a closer look at some of the best lots sold at the Bonhams auction

48 Telling tales

Derek Jones looks back at a time when putting on the style also meant sending the right message

68 Out & about – V&A Dundee

We visit Scotland's first museum dedicated to design

74 An airbrush with the past

This month we're going back to March 1998 and issue 14 for another look at Mike Cowie's Arts & Crafts-style writing desk



48



Welcome to...

...diversity

Last year I was fortunate to get a behind-the-scenes peek at some incredible items of furniture as they neared the end of years' worth of conservation work. The items, both from the 18th century, weren't really my taste but left a lasting impression nonetheless. Both pieces were built to impress and featured all the whistles and bells you'd expect to find on pieces from this period; gilded bronze, Japanese lacquer, engraved inlay, marquetry, etc. It sounds over the top I know, and by today's standards perhaps it is, but that's only because we've been desensitised by decades of below average workmanship and lacklustre design from mass-produced goods. I don't consider myself the controversial type or indeed over critical of others' work so in a polite 'note to self' kind of way, I'm going to see if I can use 2019 to expand my repertoire of skills and inject a little diversity into my work every now and then.

If you're thinking along the same lines you could do a lot worse than brush up on your restoration skills. Last year the auction houses noticed an increase in the demand for brown furniture as the millennial generation turn their back on the stack 'em high and sell 'em low culture to go in search of something unique instead. It's a trend that could rejuvenate interest in all manner of hand crafts.

We're not without our own influence in this small matter either here at *F&C*, with projects like Israel Martin's wall-hung tool cabinet or Kieran Binnie's tips for getting the most out of low angle planes. Add to this a straight-up review of the latest extraction system from Festool and a look at a new finishing oil from Skelton Saws, and you could say we've got your back once again.

Derek Jones

Derek Jones

derekj@thegmcgroup.com

Classic Hand Tools[®]

Pfeil Carving Tools

We hold the largest stock of Pfeil wood carving tools & accessories in the UK.

Over 2000 tools in stock

Pfeil catalogue on request.

Chris Pye Carving Tools
Kirjes Sanding System
Norton Sharpening Stones
Gransfors Bruks Carving Axes
Ron Hock Carving Knives

Flexcut
Arbortech
Abranet Sanding
King Arthur's Tools
Woodcarving Books
Auriou Rasps & Rifflers

NOW IN STOCK - SABURR TOOTH CARBIDE BURRS
1/8" & 1/4" shanks - all shapes • 2" wheels for Arbortech
4" wheels for Angle Grinders

Free catalogue on request.

CLASSIC HAND TOOLS

HILL FARM BUSINESS PARK, WITNESHAM, SUFFOLK IP6 9EW

Email: sales@classichandtools.co.uk

Phone: 01473 784983 Fax: 01473 785724

www.classichandtools.co.uk

PROJECTS & TECHNIQUES

This month's projects include a wall-hanging tool cabinet, plus we have tests of a bench plane, an extractor, finishing oils and drawer fitting systems

12 Making a wall-hanging tool cabinet

Israel Martin makes a tool cabinet for his hand-tools-only workshop

32 Straightforward joinery for curved work

In an extract from *Joinery*, Jeff Miller describes three techniques for joinery on curves

44 The Festool CT-VA Pre-Separator Cyclone

Geoffrey Laycock tries out the new pre-separator in his workshop

54 One bench plane to rule them all?

Kieran Binnie investigates whether a low angle plane really is all you need

58 The next generation mechanical opening and closing system by Blum

Steve Coonick reviews Blum's new drawer systems

64 Skelton Saws Peacock Oil

David Barron tests the finishing oils developed by Shane Skelton



YOUR F&C

4 Leader

Derek Jones welcomes you to this month's issue of *F&C*

8 Meet the contributors

Find out more about the authors behind this issue's articles

9 Subscribers

Get *F&C* delivered direct to your door and save up to 30%

18 News & events

A round-up of what's going on in the world of furniture

62 Kit & tools

We bring you a selection of the best tools and products to add to your workshop

66 Saws

A showcase of some of the best saws on the market

72 Social media dashboard

A round-up of the best from the online world

80 Next month in *F&C*

Get a peek at what we'll be bringing you in issue 281



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



Woodworking is an inherently dangerous pursuit. Readers should not attempt the procedures described herein without seeking training and information on the safe use of tools and machines, and all readers should observe current safety legislation.

Euro Finishes
Water-based finishes & supplies

GENERAL FINISHES
Official Distributor
supplying UK, Ireland & Europe



Chalk Style Paint - 20 contemporary colours
Milk Paint - interior & exterior, 26 colours



Dye Stains - 14 colours
Wood Stains - new formulation, 16 colours



Glaze Effects - 6 translucent colours
Pearl Effects - 5 pearlescent colours



Flat Out Flat - a true flat sheen top coat
High Performance - clear & extremely durable
Enduro-Var - for an oil look & feel



Stain Blocker - white primer
Accelerator & Extender

Over 50 YouTube technique videos
Full range on our web site

See web for shops & online stockists
Trade & stockist enquires welcome



Tel: +44 131 661 5553 info@eurofinishes.com
Unit 13, Peffermill Parc, 25 King's Haugh, Edinburgh, EH16 5UY
www.eurofinishes.com



the WoodRat



Classic woodworking without compromise, yet the freedom and flexibility to develop your own ideas. Breakout-free routing, **Flightpath Indicator**, special ways of making your dovetail pins fit to their sockets, dovetailing of all sizes and of all kinds, router table work, and straight edge joints, profiling and stopped grooves, raised and fielded panels, fast and accurate mortising using the **WoodRat PlungeBar**, big sliding dovetails for table legs, and housing joints for shelving: impossible on a router table but easy with the 'Rat: and halving joints for lattices, and box joints in big batches: then for dovetailed chests there's working with the **WoodRat Pathfinder™**, and lapped dovetails for five minute drawers, and rounded tenons and twin tenons, unequalled for speed, it's a pleasure to work with it, empowering too, and safe – a tool not a jig – and a key player in every good woodwork shop. That's us telling you, now see for yourself...

www.woodrat.com



AIRPRESS
Veneering and Laminating Solutions



Veneer & Laminate all your flat and curved panels with the UK's No. 1 Vacuum Pressing Systems



Choose from our complete range of vacuum presses to suit your project

Call us for advice and information or see our full range of Vacuum Press systems on our website
www.airpress.co.uk - Tel: +44 (0)1725 514426

Thomas Flinn & Co.

Saw & Hand Tool Manufacturer
Sheffield, England



The UK's last remaining traditional saw manufacturers.

Now also manufacturing Clifton Planes

Garlick E.T. ROBERTS & LEE PAX CLIFTON

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

Meet the contributors



David Barron

David is a fine contemporary furniture maker and the producer of a popular range of hand tools. He also regularly teaches woodworking courses at West Dean College, produces DVDs and uploads videos to his YouTube channel.

Web: www.davidbarronfurniture.co.uk



Kieran Binnie

Kieran's passion for woodwork started at the end of law school when he enrolled at the Totnes School of Guitarmaking. His focus has since expanded to include furniture making as well as lutherie. Kieran writes a regular blog at www.overthewireless.com, and is currently researching and writing a book for Lost Art Press about Welsh Stick Chairmaker John Brown.

Web: www.overthewireless.com



Steve Coonick, MSc

Steve is a classically trained fine furniture designer/maker with a background in engineering. He studied under master craftsmen David Savage and Darren Milman at the internationally renowned Rowden Woodworking School of Fine Furniture, England. The founder of KOOS furniture located in north Cornwall, he is driven by a passion for design, precise craftsmanship, sustainability and endless learning.

Web: koosfurniture.com



Geoffrey Laycock

Geoffrey is a Chartered Safety Practitioner, Chartered Ergonomics Practitioner and Fellow of the Royal Society for the Protection of Health.

Email: geoffrey@otterconsultancy.co.uk



Israel Martin

Israel graduated as a forestry engineer in Madrid in 2000, before deciding to change career. At first he was self-taught but then took some classes about hand tools with a Spanish artisan and with master craftsman Garrett Hack to improve his furniture-making skills. He makes every piece of furniture using hand tools exclusively and also makes tools for his work or for other artisans. Together with other Spanish craftsmen he has been organising the Spanish woodworking event, LIGNORUM, for the past three years.

Web: www.lacabraenlaescalera.com

F&C reflects the interests and aspirations of our customers with some of our best articles coming from readers. If you'd like to propose an idea for an article drop me a line at: derekj@thegmcgroup.com

EDITOR Derek Jones
Email: derekj@thegmcgroup.com
Tel: 01273 402843
DESIGNER Oliver Prentice
SUB-EDITOR Jane Roe
GROUP EDITOR – WOODWORKING Mark Baker
Email: markb@thegmcgroup.com
SENIOR EDITORIAL ADMINISTRATOR Karen Scott
Email: karencs@thegmcgroup.com
Tel: 01273 477374
ILLUSTRATOR Simon Rodway
ADVERTISING SALES EXECUTIVE
Russell Higgins, Email: russellh@thegmcgroup.com
ADVERTISEMENT PRODUCTION & ORIGINATION
GMC Repro Email: repro@thegmcgroup.com

Tel: 01273 402810
PUBLISHER Jonathan Grogan
PRODUCTION MANAGER Jim Bulley
Email: jimb@thegmcgroup.com
Tel: 01273 402810
PRODUCTION CONTROLLER
repro@thegmcgroup.com
MARKETING Anne Guillot
PRINTED IN THE UK
Stephens and George Print Group
DISTRIBUTION Seymour Distribution Ltd
Tel: 020 7429 4000

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

SUBSCRIPTION RATES (includes p&p)
UK Europe Rest of World
12 issues £51.00 £63.75 £71.40
24 issues £102.00 £127.50 £142.80
US subscribers visit www.lightningpublications.com for subscription rates in USD \$.

Cheques made payable to GMC Publications Ltd
Current subscribers will automatically receive a renewal notice (excludes direct debit subscribers).
Post your order to: The Subscription Department,
GMC Publications Ltd, 166 High Street, Lewes,
East Sussex BN7 1XU Tel +44 (0)1273 488005,
Fax +44 (0)1273 402866 Email: pubs@thegmcgroup.com
Website: www.thegmcgroup.com

Views and comments expressed by individuals in the magazine do not necessarily represent those of the publishers and no legal responsibility can be accepted for the results of the use by readers of information or advice of whatever kind given in this publication, either in editorial or advertisements. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the Guild of Master Craftsman Publications Ltd.

© Guild of Master Craftsman Publications Ltd. 2019

Problems finding F&C? Call Jonathan Grogan, our Publisher, on 01273 477374. Alternatively, save up to 20% on the cover price by subscribing. Visit www.thegmcgroup.com/publications

SUBSCRIBE TO **Furniture** & cabinetmaking

NEVER
MISS AN
ISSUE

**Free early delivery
direct to your door**

**Subscriptions
start from
just £25.65**

+44 (0) 1273 488005

www.thegmcgroup.com/offer/furniture

Make the right sharpening choice

Selecting the correct sharpening standard is key to getting the best out of your tools.

With Robert Sorby ProEdge we help you make the right decision. We provide a range of carefully selected abrasive materials – each chosen for its individual attributes, each delivering outstanding high performance and durability.

- Only the finest industrial calibre materials.
- Lasting up to 20 times longer than poor imitation belts.
- 50 years of factory finishing guarantees sharpening peace of mind.

Make the right sharpening choice and choose Robert Sorby.

It's easy with a little know how.

ProEdge
The benchmark in sharpening



Ceramic

Outstanding performance on HSS. Great longevity.



Aluminium Oxide

Perfect for carving and woodworking carbon steels.



Zirconium

General purpose material, ideal for profiling and honing HSS.



Trizact

Delivers superfine finish and outstanding belt life

Robert Sorby

Athol Road, Sheffield, S8 0PA
Tel: +44 (0) 114 225 0700
Email: sales@robert-sorby.co.uk
Website: www.robert-sorby.co.uk



Router Sets



Router Cutters



Saw Blades



Cutter Sets



Cutter Blocks



CNC Tools



CMT Direct Prices

THE WIDEST TOOLING RANGE

scott+sargeant

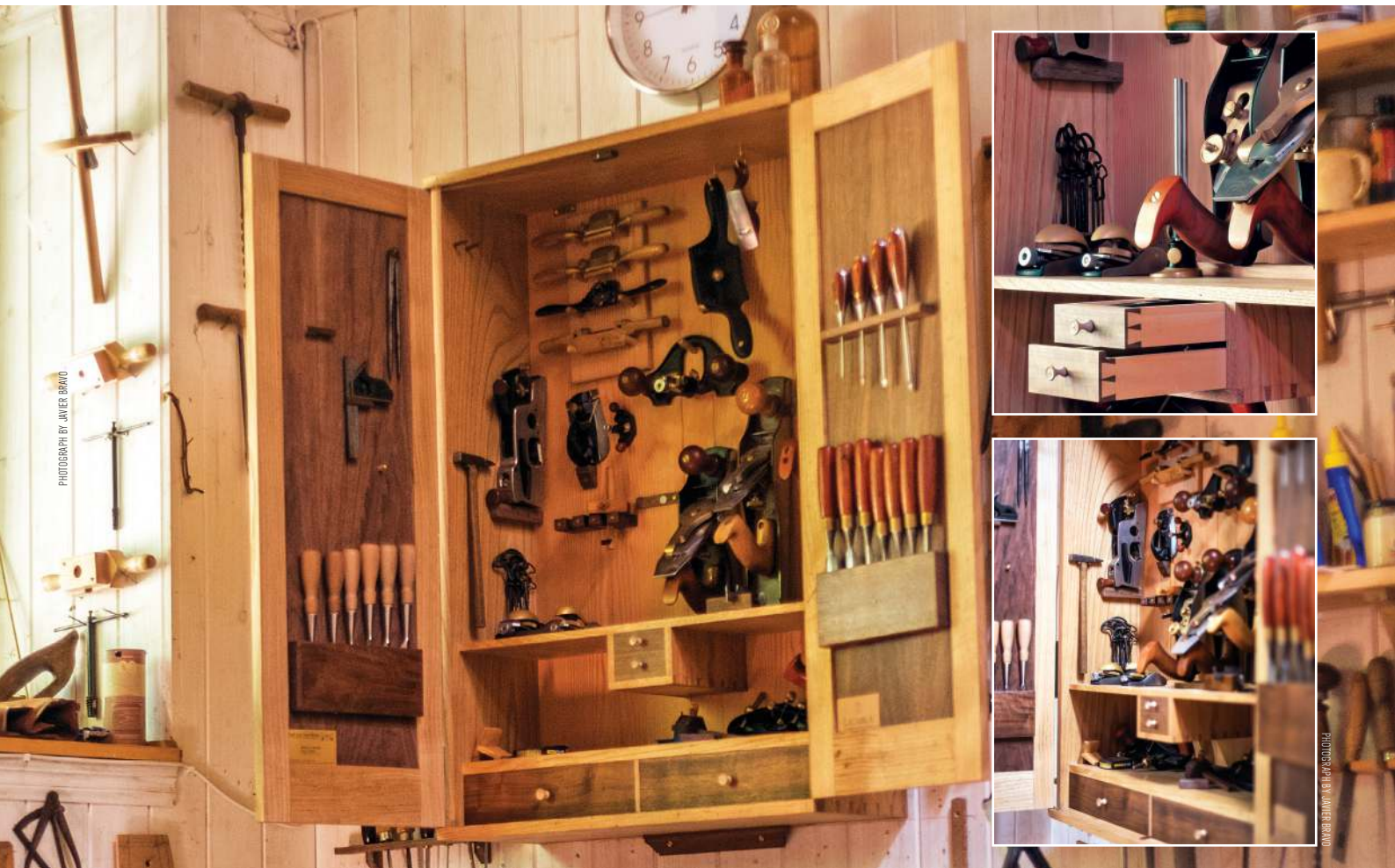
scosarg.com

1 Blatchford Rd, Horsham RH13 5QR

01403 273000

Making a wall-hanging tool cabinet

Israel Martin makes a tool cabinet for his hand-tools-only workshop



In order to keep my tools at hand, protected and well ordered, I decided to make a tool cabinet to hold most of my collection. Thinking about the design of the cabinet, I knew the tools would need to be accessible (at least the ones I use the most), and they would need to be arranged so that I could see where they were with just a quick glance. A tool cabinet is the best way to protect tools from dust, rust and disorder. Given that it will hold a great weight, the timber needed to be strong yet light weight, and also refined but not too expensive. I decided to use some chestnut that I cut and air-dried several years ago as the main wood, with some walnut to add a contrast. I used through dovetails for the carcass and sliding dovetails for the main shelves, thus making a 'bomb proof' cabinet. Because I needed a place for smaller items, such as my marking and measuring tools, I made four drawers. The big drawers are for less used items and the small ones for the smaller marking tools. I used the small drawers as a division for the two spaces on the main shelves. I think a tool cabinet should be dynamic and able to adapt to new tools and needs, so I used simple brass screws with rounded heads to hang some of the tools.



The cabinet keeps the tools accessible and orderly



ELEVATIONS & SECTIONS
Scale 1 to 10

Door frame with haunched mortice and tenon joints top and bottom, panel grooved into frame all round. Hinges are fitted to top and bottom of stiles

Carcass back from 10mm thick tongue and groove chestnut boards fixed in rebate in sides and top

A pair of small drawers, lower drawer with stepped front section to hide drawer runners for top drawer which are let into drawer carcassing, which is also hung from shelf above using stopped sliding dovetail joints

Small cherry tray with quarter sawn red cedar bottom and triangular splines to strengthen corner mitre joints. Tray rests on ebony strips in drawers sides (not shown)

Drawers have 16mm thick walnut fronts with 8mm thick chestnut box lap dovetails at front and grooved into the sides at the back

Lower shelf fixed into carcass sides using stopped sliding dovetail joints

18mm chestnut carcass joined top and bottom with through dovetail joints

Spanish chestnut

When working with hand tools only, the choice of timber is somewhat crucial, and a hand-tools-friendly wood is the best way of not getting frustrated. Spanish chestnut has a nice grain, is lightweight, is very easy to plane by hand and it is soft on the chisels, meaning it doesn't wear the tools so quickly and reduces the need for sharpening. It

also doesn't chip easily when working with chisels, and it is easy to get a mirror finish with the planes. It is like working with pine but it looks more refined. Chestnut was commonly used in the north of Spain for almost everything from beams for houses, to doors, windows and furniture.



The chestnut boards



The chestnut carcass



Close-up of the chestnut grain

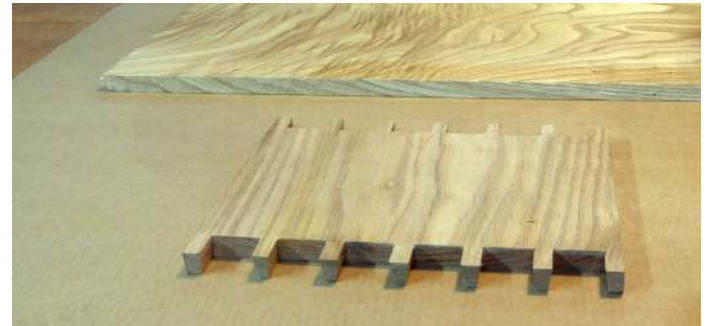
Making the small hanging drawers

To store the small measuring tools that I do not use very often – a small combination square, dovetail markers, etc. – I decided to make two hanging drawers that will also make a division in the first shelf. I made this with through dovetails to join the two sides with the bottom and then sliding dovetails to join the sides to the upper shelf. I then made two walnut runners for the upper drawer that are joined to the

sides in a groove. The lower drawer has a rebate to fit the space of the runners. The drawer fronts were made in walnut to combine with the door panels and the other drawers. In small and narrow drawers like these ones I oriented the grain of the drawer bottoms parallel to the sides because it is much easier, the seasonal movement won't be too big and this way I can use scraps from other bigger drawers.



Detail of the hanging drawers



Pins in the carcass bottom



Gluing the hanging drawers in the carcass



Runner details



Lower drawer rebate detail



Bottom grain direction detail

Making drawers for the tools

I made four drawers for this cabinet, two small ones and two bigger ones. I always start by making the drawer fronts, adjusting their width and then cutting to length. Once they are made I prepare the drawer sides, normally with maple, and I try to use quartersawn wood as much as I can. I cut the tails, then mark and make the pins. Combining a dark wood for the front and a light wood for the sides makes any possible gap almost invisible. I use sliding dovetails instead of through dovetails for the backs, I find it easier to make

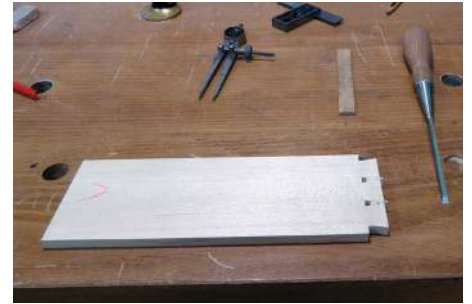
them just with chisels because they are usually very small and short. I also leave the sides a bit longer just to be able to pull the drawer all the way and see the inside and to allow for seasonal movement. Sliding dovetails help keep everything together and square even without glue. Most of my drawer bottoms are made of soft wood but since I had some thin boards of ash left over from another project, I decided to use them instead. I used holly for the pulls to add more contrast.



The walnut drawer fronts in their openings



The maple drawer sides being test fit



Making the tails on the drawer sides



Making the pins on the drawer fronts



The finished drawers

Making through dovetails

There are lots of ways of making dovetails. I've tried several methods and this is what I commonly do. Starting from the tails, I mark them with a knife and saw to the line from the outside of the board, trying to make the tails just a bit narrower to the inside, so when I mark the pins, I always mark them a bit narrower than the top of the tails. I then saw outside the pin lines and adjust them with chisels. This way I have enough wood to adjust the pins with no risk of gaps between pins and tails; this is also faster than adjusting the tails and pins.



Sawing the dovetails



Checking the dovetails



Marking the pins



The dry fit

RIGHT: Assembly

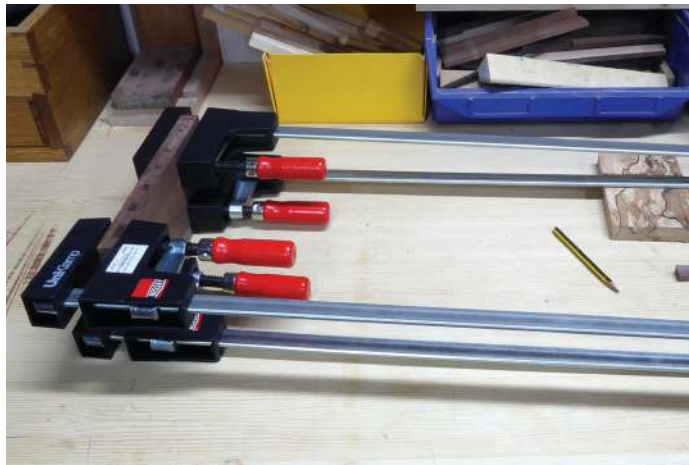


Making a removable chisel rack

One thing I don't usually like about tool cabinets is that every tool has its own place. I consider my chisel set as one tool, so I need to be able to get to all the chisels at one time. I made two chisel racks by sawing one walnut board in two, making the grooves for the chisels and then gluing the two halves together again. I then added a half dovetail on the back of the rack and the other half dovetail on the cabinet doors. This way I can put the entire chisel set on the bench and work with it – easy and effective.



Two racks for two types of chisel



Gluing the two parts of the rack together



A dovetail shaped cleat holds the rack in place



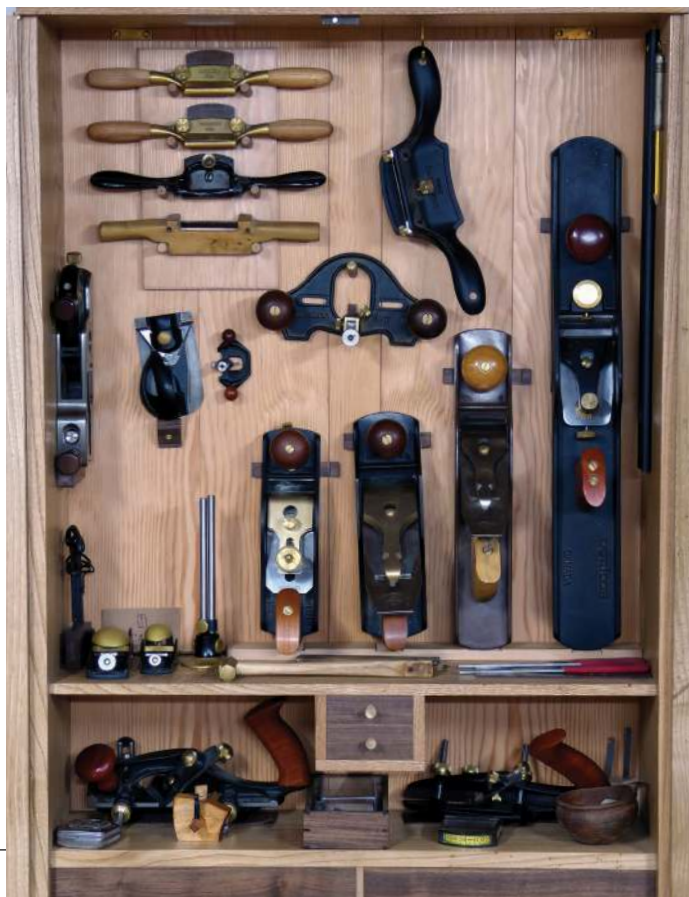
The racks also prevent the chisels from rolling around the bench

Organising the tool cabinet



Tools that are used most often are stored on the lower shelves RIGHT: Rare earth magnets keep the planes in place

There needed to be enough space between the cabinet and the workbench underneath it. However, this meant that most parts of the cabinet would be too high to reach comfortably. So I placed the most-used tools in the more reachable zone and in the top of the drawers, making small trays for the inside of the drawers. I did the same with the doors. As you can see, the plane handles are just reachable on the upper shelf. I used rare earth magnets to keep the planes in place.



Making small trays for tools

One way of getting your tools in better order in the drawers is to make small trays that lie on ebony strips inside the drawer. I made this one with some scrap cherry. The fastest way was by making mitres, gluing them and then adding some splines to add strength to the set. Making the bottom couldn't be more easy; as I was looking at an old tools catalogue, I noticed that small boxes for measuring tools used to have thin quartersawn wood bottoms just glued at the box bottom, so I tried this with quartersawn red cedar. It couldn't have worked better.



Marking and layout tools share the same drawer



Splines are cut into the corners of the tray after the initial assembly



Splines add strength as well as a little detail



Small trays are a great way of organising smaller tools

Installing the door hinges

Probably the biggest challenge of making the cabinet, at least for me, was that I needed to make the doors and add the hinges to the carcass before the carcass was glued up. This meant it was going to be difficult to make further adjustments on these big doors in

order to fit them perfectly. I marked the hinges in place on the dry fit, placing the doors to test their places, and then made the mortises for them. I then assembled the carcass again and marked on the doors. I tested them before gluing everything together. *F&C*



Checking the doors for size before fitting the hinges



Use a small router plane to let the hinge into the ends



Set the hinge parts flush with the surface of the door



Just the knuckle is exposed at the side of the cabinet

News & Events

Contribute to these pages by telling us about matters of interest to furniture makers.

Call Derek Jones on 01 273 402 843 or email derekj@thegmcgroup.com

Please accompany information with relevant, hi-res images wherever it is possible

PHOTOGRAPHS COURTESY OF TRITON TOOLS



LEFT TO RIGHT: April Wilkerson, Frank Kreuger and Matt Cremona are the new Triton Tools ambassadors

Triton Tools trio to champion woodworking

Three of the world's most popular woodworkers have been unveiled as Triton Tools ambassadors. YouTube sensations April Wilkerson and fellow American Matt Cremona will continue to promote the Yeovil-based company, while up-and-coming German YouTube superstar Frank Kreuger is a new addition to the team. All three will appear at key worldwide events with Triton over the next 12 months, as well as contributing regular social media content.

Mark Pearson, Global Brand Manager at Triton Tools, said: 'We are very proud

of our latest ambassador line-up. As a company, we pride ourselves on precision, expertise and engaging with the worldwide community of woodworkers; those qualities shine through with all three individuals in abundance.' He believes Triton's customers will gain a unique insight into how to make the most of woodworking from the trio. 'All three draw huge crowds at shows and are always only too happy to accommodate every single person that wants to meet them and tap into their knowledge', he said.

April has been making woodworking tutorial videos for more than four years

and has a phenomenal 823,600 subscribers on YouTube. Matt's woodworking styles range from modern to classic reproductions and fans love watching him turn self-harvested trees into fine furniture. Frank, meanwhile, is fast becoming a recognisable face amongst the global woodworking community as he shares his bold wood projects, from flamboyant treehouses to stylish poker tables, with informative videos shot in both German and English.

Contact: Triton Tools
Web: www.tritontools.com

Bamboo house wins sustainable architecture prize

Earl Patrick Forlales, a 23-year-old from Manila, has won the Royal Institute of Chartered Surveyors (RICS) Cities For Our Future competition with an idea that will help solve Manila's slum housing crisis. CUBO – a project to build new, low-cost and environmentally friendly housing units – will now receive the £50,000 prize money to start work next year.

Earl was inspired to use bamboo for CUBO's construction by his grandparents' rural house. Bamboo is locally abundant and environmentally friendly, with the waste used as a resource. The bamboo used in CUBO is treated and laminated, meaning its lifecycle is 10 times longer than normal bamboo. CUBO is also affordable and quick to build.

Earl will now work with RICS experts and industry professionals to begin work on the project. He has already identified a suitable plot of land to begin construction, with the hope that it will be used in other cities facing similar crises.

Contact: RICS
Web: www.rics.org/uk/

PHOTOGRAPH COURTESY OF CUBO



The sustainable, affordable CUBO house could be the answer to Manila's housing crisis

Millennials make antiques cool again

There is a growing fashion for buying antique furniture among younger generations, according to the international search engine Barnebys.

Anecdotal evidence indicates that a new generation of homemakers is buying antiques due to concerns about sustainability and re-use, as well as a desire for uniqueness. The Barnebys search engine monitors 2000 auction houses on its website, which hosts more than one million items daily. It is evident that, after years of a slump in brown furniture, there are signs of new interest in antique furniture.

Contact: Barnebys
Web: www.barnebys.co.uk



Items such as this 300-year-old mahogany desk are again becoming popular with consumers

Victorian crafts revived

A new BBC series will see traditional crafts being re-created by modern craftspeople. *The Victorian House of Arts & Crafts* on BBC 2 in January will transport six modern-day craftspeople back in time to live and experience first-hand the ideas and practices of Arts & Crafts visionaries William Morris, John Ruskin and Gertrude Jekyll. Cut off from 21st-century life, the group of six artisans must live and work in a Victorian Arts & Crafts bubble where they will breathe life back into an original Arts & Crafts property.

Contact: BBC Arts
Web: www.bbc.co.uk/arts

BFM helps companies support disabled workers

Together with its EU partners, the British Furniture Manufacturers (BFM) is engaging in the SupportAbility project, an initiative to train managers and provide them with the knowledge of adaptations that may be needed when supporting an employee with a form of disability.

After two years of research, SupportAbility has created a course of activities that lead to the inclusion of people living with physical disability, learning difficulties and people with a history of

mental illness. A pilot version of this course was tested in November by six British employees from companies in the furniture industry, along with six carpentry/furniture students from Spain. Further tests will be conducted in 2019. An e-learning course has also been created.

Contact: BFM & SupportAbility
Web: www.bfm.org.uk & www.supportability.eu

Events

Information correct at time of publication, check websites before planning your visit

FFX Tool Show

The UK's favourite tool show is back! FFX have brought together all the biggest manufacturers to give you the best hands-on tool show for the professional and DIYer. Building on the success of last year's show at the Kent Event Centre, 2010 is set to be the biggest and best so far. Set in approximately 50,000ft² of first-rate indoor exhibition space, you'll be able to enjoy live tool demonstrations from industry experts, see new product releases and have a chance to compete in exclusive competitions from powerhouse brands.

When: 1-3 March
Where: Kent Event Centre, Detling, Maidstone ME14 3JF
Web: www.ffx.co.uk/tools/toolshow/



The FFX Tool Show returns to Kent this March

**EVENT
OF THE
MONTH**

Northpoint

The furniture and interiors exhibition for northern UK returns with over 80 exhibitors covering upholstery, living room, occasional, dining, lighting, accessories, bedrooms, beds, floor coverings and more.

When: 27-29 January
Where: Highland Hall, Ingleston, Edinburgh EH28 8AU
Web: www.thenorthpointshow.co.uk

Irish Interiors Showcase

The Irish Interiors Showcase holds two shows promoting quality Irish furnishings.

When: 4-5 March in Ballyclare; 6-7 March in Dublin

Where: Hilton Templepatrick, Castle Upton, Paradise Walk, Templepatrick, Ballyclare BT39 0DD; and at the Talbot hotel, Stillorgan, Dublin
Web: irishinteriorshowcase.com

The Midlands Woodworking and Powertool Show

The Midlands Woodworking and Powertool Show will include demonstrations, workshops and advice from top power tool brands.

When: 22-23 March
Where: Newark Showground, Notts NG24 2NY
Web: www.nelton.co.uk/midlands-woodworking-power-tool-show.html

Designers in Residence: Dwelling

The Designers in Residence programme at the Design Museum provides emerging designers, from any discipline, with time and space to reflect, research and consider new ways of developing their practice. The theme of this year's programme is 'dwelling' and explores social housing, craft, smart home devices and concepts of time. The designers' collective work will be showcased in an exhibition.

When: until 24 March
Where: Design Museum, 224-238 Kensington High Street, Kensington, London W8 6AG
Web: designmuseum.org

Inspire a young designer this winter – sponsor a School Design Prize



Matthew Pembro, 2018 School Design Prize winner, with his Multi-Functional Cabinet

The Furniture Makers' Company has launched a winter fundraising campaign and is asking for the entire furnishing industry to sponsor a School Design Prize, giving the gift of inspiration to a design student this festive season.

The School Design Prize was launched in 2014 to raise awareness of the furnishing industry among school children. Every year The Furniture Makers' Company asks companies and individuals to sponsor copies of school curriculum textbook *Design of the 20th Century* by Charlotte and Peter Fiell.

The prizes are posted to schools around the country with a certificate for design and technology teachers to present to their most outstanding student.

All of the winners of the School Design Prize are then put forward to a national competition and invited to exhibit at the annual Young Furniture Makers exhibition in October.

This year the charity has a target to give

700 prizes to 350 schools around the UK. For a donation of just £50 (+VAT) the charity will send a school two prizes to reward an outstanding male and female.

Hayden Davies, Master of The Furniture Makers' Company, said: 'The government's focus on growing the economy and raising productivity by increasing the number of people studying Science, Technology, Engineering and Mathematics (STEM) has

meant a reduction in funding for the arts and fewer students being directed toward designs and technology.

'For less than [the cost of an] evening out, you can help young people learn more about our dynamic industry by sponsoring a School Design Prize.'

Matthew Pembro, 2018 School Design Prize winner, said: 'It was a great honour to receive the School Design Prize and as a result I was invited to the Young Furniture Makers exhibition in London. At the exhibition I was able to talk to other students about their designs, which was both educational and inspiring given the standard of work on display. The advice which I obtained from design professionals and other students at the event will be greatly beneficial to my progression as a designer.'

Emaline Hamnett, 2018 School Design Prize winner, said: 'From the very beginning I knew how important and competitive this award was which only boosted my determination to work as hard as I could. The hard work paid off and I got an amazing opportunity to display my work and meet the most incredible people. It was a truly amazing day and I would like to thank The Furniture Makers' Company for the experience.'

To sponsor a School Design Prize today, go to <http://bit.ly/SchoolDesignPrize2019>. Alternatively, call Laura Garnett, head of fundraising on 020 7562 8527 or email laura@furnituremakers.org.uk.



The Radioactive Bench by Brodie Haward won the 2018 National School Prize



The Furniture Makers' Company
the furnishing industry's charity

The Furniture Makers' Company is a City of London livery company and the furnishing industry's charity.
www.furnituremakers.org.uk

PHOTOGRAPH COURTESY OF THE FURNITURE MAKERS' COMPANY

FFX TOOL SHOW 2019

1ST | 2ND | 3RD MARCH

THE UK'S FAVOURITE TOOL SHOW!

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

The show you don't want to miss! Hundreds of show only bargains! Thousands of free parking spaces! Live product demonstrations *and more!*

1st, 2nd & 3rd March 2019

Kent Event Centre, Maidstone, Kent, ME14 3JF

For more information and to book your free ticket visit:

FFX.CO.UK/TOOLSHOW

READ **Furniture** & cabinetmaking ANYWHERE



© Shutterstock/kozirsky

DOWNLOAD FROM

ONLY
£2.77

PER ISSUE



LOVED IN THE INDUSTRY, CHOSEN BY PROFESSIONALS



EVERYTHING YOU NEED TO DELIVER!



S 45 n

A small Band Saw with great capabilities that is perfect for either the joinery workshop, schools, furniture restoration or renovation



SC 3 CLASS

Robust, professional and a precise circular saw



CU 300 c

Universal combined machine that offers the best value for the everyday workshop



FS 41 elite s

Heavy duty, compact and created to meet all planing demands of workshops



T 55 W elite s

A Spindle Moulder with great versatility for many tasks



ECO 300 D

An efficient low cost dust extractor

Wood Awards winners 2018

Here we showcase the award-winning work from this year's competition

The Wood Awards is the UK's premier competition for excellence in architecture and product design in the world's only naturally sustainable material. The Awards aim to recognise, encourage and promote outstanding design, craftsmanship and installation using wood. The 2018 winners were announced at a ceremony held on 20 November at Carpenters' Hall in London hosted by David Hopkins, Director of the Timber Trade Federation.

For more information about the Wood Awards, including details of the 2019 competition, visit: woodawards.com

Mears Group Gold Award Winner and Commercial & Leisure Winner: Storey's Field Centre & Eddington Nursery

The judges selected Storey's Field Centre & Eddington Nursery in Cambridge as this year's Mears Group Gold Award and Commercial & Leisure winner. The Mears Group Gold Award is given to the 'winner of winners'. Stephen Corbett, chair of this year's buildings judging panel, praised the project's 'winning combination of architectural merit, structural ingenuity and flawless execution'. The principle rooms are lined in oak panelling. The main hall, influenced by the dining halls and chapels of Cambridge colleges, uses an exposed, articulated timber structure. The hall provides a venue for a range of activities and its acoustics can be adjusted to suit.

Architect: MUMA

Client/owner: University of Cambridge

Structural engineer: Aecom

Main contractor: Farrans Construction Ltd

Joinery: C W Fields, M Borley & Sons Joinery Ltd

Glulam structure: n'H International Ltd

Spiral stair: Spiral UK Ltd, David Gilbert Joinery Ltd

Cedar shingle supplier: Marley Eternit

Wood supplier: Brooks Bros, D F Richards, James Latham

Wood species: American white ash, Canadian western red cedar, European oak, spruce



Storey's Field Centre & Eddington Nursery

Bespoke Furniture Winner: CLEFT

CLEFT is a series of cabinets made from different Japanese tree species. Designer Peter Marigold worked closely with Tadanori Tozawa of woodworking manufacturer Hinoki Kogei. The wood chosen for each cabinet was selected carefully according to how it would split and work in relation to the overall cabinet dimensions. The pieces are inspired by the notion of splitting one thing into two and creating bi-symmetrical objects.

Designer: Peter Marigold/Tadanori Tozawa

Maker: Hinoki Kougei

Represented by: Sarah Myerscough Gallery

Wood species: Smoked oak, oak, cherry, jindai sugi, ash, kenponashi, conker, kihada, sen (all Japanese)



CLEFT cabinets

Production Furniture Winner: Ballot Chair

The Ballot Chair is a handcrafted, solid oak design. The most significant challenge was to produce a chair that efficiently stacks while retaining an elegant form. The sections of oak that make up the chair are thin but extremely strong, enabling the back to be narrower at the top. The chair is a simple, tactile and versatile design that is a seamless addition to the collection.

Designer: Barber & Osgerby

Manufacturer: Isokon Plus

Wood supplier: Timber Link International

Wood species: European oak (from Germany)



Ballot Chair

PHOTOGRAPHS OF BALLOT CHAIR BY ADRIAN GARDNER

Student Designer Winner: Objekt Bord

Objekt Bord by Building Crafts College student Ellen Svenningsen is an assembly of two components – an upright curve and a circle. The project was driven by a curiosity to learn and understand the process of laminating and bending plywood, the birch ply offers strong structural integrities yet is flexible enough to smoothly bend. Ellen received a £1000 prize as the winner of this category.

Designer: Ellen Svenningsen
College: Building Crafts College
Wood supplier: Slecuk
Wood species: British birch ply



Objekt Bord



Student Designer People's Choice Award Winner: Super Desk

Super Desk, inspired by Gio Ponti's SuperLeggera chair, is designed to create a sense of space and openness in small domestic settings. Ben Smith received £500 for winning the Student Designer People's Choice Award. Voting took place at the London Design Fair.

Designer: Ben Smith
College: Building Crafts College
Wood supplier: Tyler Hardwoods
Wood species: British olive ash



Super Desk

Education & Public Sector Winner: Sultan Nazrin Shah Centre

The Sultan Nazrin Shah Centre in Worcester College, Oxford houses a large lecture theatre, a student learning space, seminar rooms and a dance studio. The building is raised on a podium and has been designed as a theatre within a garden. A curved, stone auditorium opens directly onto an oak-ceilinged foyer that extends out to pergolas and terraces.

Architect: Niall McLaughlin Architects
Client/owner: Worcester College
Structural engineer: Price & Myers
Main contractor: Beard Construction
Joinery: Barn 6
Furniture: Benchmark, David Colwell Design
Timber flooring: Junckers
Wood supplier: Inwood Developments, Brooks Brothers
Wood species: European oak, Siberian larch

Sultan Nazrin Shah Centre



Interiors Winner: Royal Academy of Music Theatre & New Recital Hall

The 309-seat cherry-lined Susie Sainsbury Theatre now forms the heart of London's Royal Academy of Music. Inspired by the curved shapes of string instruments, it has been acoustically refined to deliver excellent sound qualities. Above the Theatre, the 100-seat Angela Burgess Recital Hall provides additional space for student rehearsal, public performance and recording. The Recital Hall is entirely lined in pale, lime-washed European oak.

Architect: Ian Ritchie Architects Ltd
Client/owner: Royal Academy of Music
Cost consultant: Equals Consulting
Structural engineer: WSP
Building services: Atelier Ten
Acoustic engineer: Arup
Main contractor: Geoffrey Osborne Ltd
Joinery: James Johnson & Co. Ltd
Specialist theatre electrics & lighting: Push The Button
Wood supplier: Hardwood Sales Ltd, Brooks Bros Ltd, Lathams
Wood species: North American cherry, European oak

Royal Academy of Music Theatre & New Recital Hall





Old Shed New House

Private Building Winner: Old Shed New House

Old Shed New House is a timber framed and clad home in North Yorkshire. The steel portal frame and ground-slab have been enlarged and infilled with a new timber frame clad in varied widths of shot-blasted timber and galvanised steel. The rhythmic façade reads like the bark of silver birch trees found on the site. A tall south-facing library evokes a forest clearing in the heart of the house. The environmental approach was to create a highly insulated and airtight building that follows the passivhaus strategy. Timber solar louvres were integrated into the cladding system to limit solar gain.

Architect: Tonkin Liu

Structural engineer: Rodrigues Associates

Main contractor: Vine House Construction

Joinery: Image Developments Northern Ltd

Wood supplier: Arnold Laver

Wood species: Siberian larch, Latvian birch, Scandinavian spruce

Small Building Winner: Look! Look! Look!

Look! Look! Look! is a pavilion within an 18th-century walled garden originally designed by landscape designer Lancelot 'Capability' Brown in the grounds of Berrington Hall, Leominster. The birch ply and fabric structure is a contemporary version of the 'follies' featured in 18th- and 19th-century landscaping. The sculptural form is based on a rectangle of paper that has been folded in a way that gives it structural stability and creates a sense of shelter. The artists used engineered ply, cut using a five axis CNC, to create the individual components later to be assembled in the workshop.

Architect: Studio Morison

Artists: Ivan Morison, Heather Peak

Client/owner: The National Trust

Structural Engineer: Artura

Wood supplier/CNC cutting: WUP Doodle

Wood species: Birch ply, Douglas fir



Look! Look! Look!

Structural Award Winner: The Macallan Distillery & Visitor Experience

The Macallan is built on a Scottish estate that has been creating single malt whisky since 1824. The scheme's five domes mirror the surrounding landscape but also allow height for the stratification and exhaust of hot air. The timber is reinforced with steel to act compositely where needed. All the timber elements were fabricated in Austria using advanced CNC machinery.

Architect: Rogers Stirk Harbour + Partners

Client/owner: Edrington

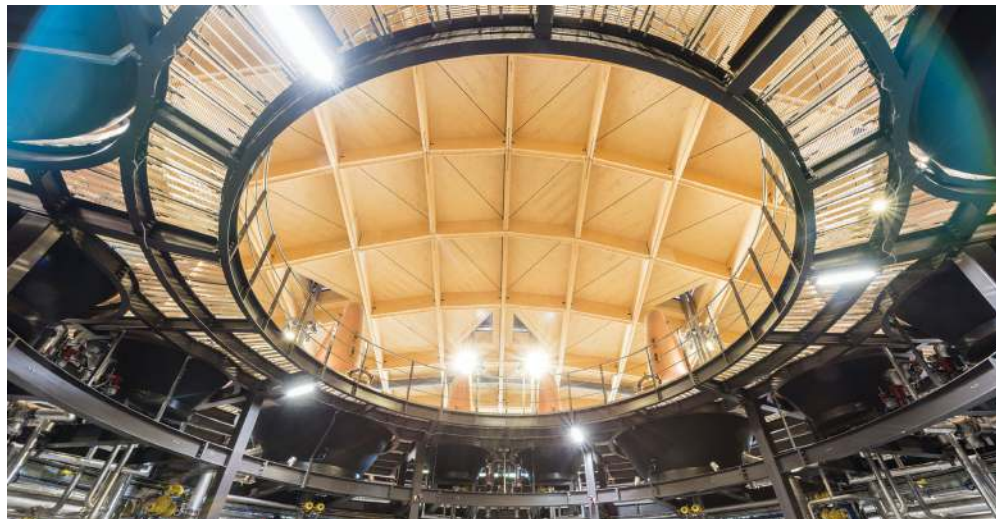
Structural engineer: Arup

Main contractor: Robertson

Installation: L&S Baucon GmbH

Joinery/wood supplier: Wiehag

Wood species: Norway spruce



The Macallan Distillery & Visitor Experience

Judges' Special Award Winner: Woodland Classrooms, Belvue School

The Judges' Special Award is discretionary. Woodland Classrooms, Belvue School in Northolt stood out on the strength of its achievement for the schoolchildren who have been rewarded with an unforgettable, life-changing learning environment. Belvue School is a secondary school for students with moderate to severe learning difficulties and a range of other needs. The Woodland Classrooms provide space for calm, extracurricular activities such as learning about nature.

Architect: Studio Weave

Client/owner: Belvue School

Structural engineer: Timberwright

Main contractor: IMS Building Solutions

M&E consultant: Arup

Project managers: Jackson Coles

Roofing sub-contractor: VMZinc

Wood supplier: T. Brewer

Wood species: Western red cedar (Canada)

Woodland Classrooms,
Belvue School





SUBSCRIBE TO SCROLL SAW WOODWORKING & CRAFTS

Catering for scrollers of all skill levels from beginner to expert, this magazine is a wonderful resource for anyone enthusiastic about scroll saws. Each issue includes assorted projects and patterns and combines inspirational pieces with invaluable instruction and brilliant features. There are technical articles and basic for those starting out and the latest news, book and wood reviews for those more experienced woodworkers.

Get Scroll Saw Woodworking & Crafts from the USA delivered FREE to your door 4 times a year for £17.95!

CALL +44 (0)1273 488005
VISIT www.thegmcgroup.com

Order
code
A4072

Overseas prices: £22.50 for Europe and £40.50 for the rest of the world (excluding USA and Canada). Offer expires 30/04/2019.



COME & JOIN US

AT ONE OF THE UK'S BIGGEST MAKERS EVENTS. A TWO DAY FAMILY-FRIENDLY EXHIBITION OF INVENTION AND CREATIVITY. BRINGING TOGETHER 1000s OF CRAFTERS, MAKERS, HOBBYISTS AND INVENTORS FROM AROUND THE WORLD – PEOPLE WHO LOVE TO MAKE STUFF AND WANT TO SHARE THEIR PASSION WITH OTHERS.

SATURDAY 11TH MAY – SUNDAY 12TH MAY 2019
NEC BIRMINGHAM

THIS YEAR'S
HEADLINE
MAKERS:



COLIN FURZE



JIMMY DIRESTA



BOB – I LIKE TO MAKE STUFF



BOBBY DUKE ARTS

- LIVE DEMONSTRATIONS
- Q&A WITH MAKERS
- GET INVOLVED & DISCOVER NEW CRAFTS

- KIDS WORKSHOPS
- PRIZE DRAWS
- SHOP FOR TOOLS, SUPPLIES & HAND CRAFTED PIECES

BROUGHT TO YOU BY:

NICK ZAMMETI



SPONSORED BY:

RECORD POWER
ESTABLISHED 1909

triton
Professional Power Tools

BUY YOUR TICKETS ONLINE NOW AT WWW.MAKERSCENTRAL.CO.UK

INTERESTED IN EXHIBITING AT THIS MAKERS SHOW? CHECK OUT THE WEBSITE FOR MORE INFO



SM210 SPINDLE MOULDER

Building on over forty years' experience in the design and manufacture of spindle moulding machines, our latest entry level machine lives up to its proud heritage, offering outstanding build-quality, performance, reliability and value for money.



FEATURES INCLUDE:

- Cast iron horseshoe assembly, bearing housing, rise & fall assembly and motor mounting. 850x650mm table with anti-friction planed finish.
- Fully adjustable precision-ground steel fence plates with movement indicators.
- Interchangeable top spindle - allowing the choice of 30mm and 1 1/4" tooling, as well as the flexibility of optional router and tenoning spindles.
- Robust steel cutter guard; shaw guard set with hexagonal mountings and steel ratchet handles; twin dust extraction outlets; automatic braking; emergency footstop and power feed socket.
- Optional Sliding Table; Tenoning Hood; Table Extensions & Ring Fence and Safety Guard.



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

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

E: admin@sedgwick-machinery.co.uk

Tel. 0113 257 0637

Fax. 0113 239 3412

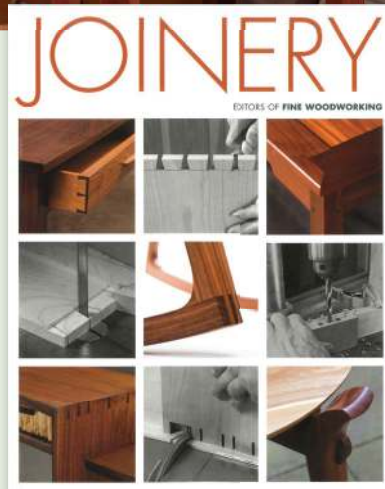
Straightforward joinery for curved work

In an extract from *Joinery*, Jeff Miller describes three techniques for joinery on curves



My first saw was a bandsaw, so from the very beginning of my woodworking career, I found myself working with curves. If you've only been a straight shooter until now, you'll find that curves not only open up a world of design possibilities, but they also offer plenty of chances to expand your repertoire of woodworking skills: from laying out eye-pleasing shapes to cutting and smoothing those shapes, or even bending them (with steam or by lamination).

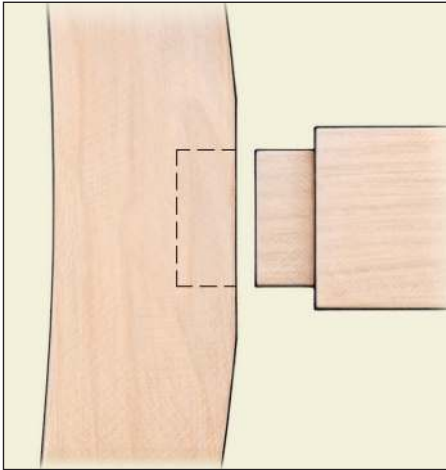
What stops most people, however, is the prospect of cutting and fitting joinery on these curved parts. I'll show you three techniques that I've used over the years with great success. There's nothing exotic or difficult about them, and once you see them in action, you'll soon be adding graceful curves to your own work.



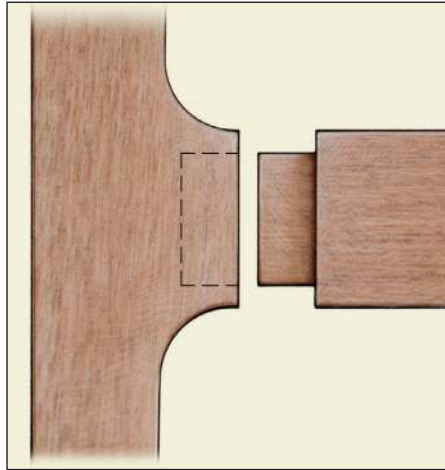
Joinery

By the Editors of *Fine Woodworking*, published by The Taunton Press, £21.99. Available from www.thegmcgroup.com

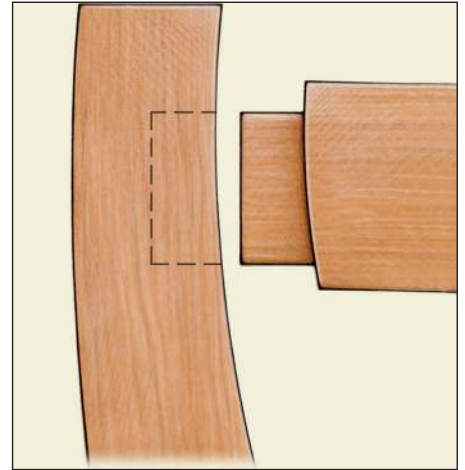
Three Joinery Options



1. Create a subtle flat as an easier landing spot



2. Make the flat stand out for a curved transition



3. For inside curves, scribe the tenon shoulders

Creating a flat spot on the curve

The simplest way to join two pieces when one of them is curved is by leaving or creating a flat area on the curved work where the mortise is to be cut.

If you are cutting the curved piece out of square stock, it's easiest to locate and cut the mortise while the workpiece is still square. Then you can leave the area around the joint flat when cutting the curve. The tenon on the mating rail can then be cut and fitted just as for any other mortise-and-tenon joint. When creating the flat, be sure to extend it $\frac{1}{8}$ in or so beyond the rail both above and below the joint to accommodate any expansion across the width of the rail. When the piece is glued up, you can sand lightly to ease the transition from flat to curve, leaving about $\frac{1}{16}$ in flat.

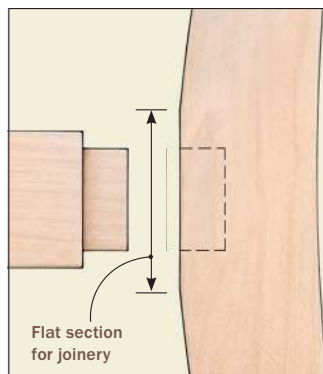
Things get more challenging if you're cutting several identical parts from square stock. If you want to minimize waste, you'll need to "nest" the layout of the parts and cut them all out before doing anything else. This means you'll then have to create the flat—and cut the mortise—in an already curved part. To do this, I make a simple jig that holds the work while I create the flat spot and then cut the mortise.

Clamp the curved piece into the jig so that the area to be flattened projects above the jig's fence. Now you can create the flat spot, using a handplane to remove the projecting material and bring the part flush with the top of the fence. To use the jig with a router, screw on a top plate to support the router. Use a spiral up-cut bit or a straight bit, set to cut flush with the top of the jig's fence. The first cut should be a clockwise pass around the area to be flattened; this is a climb cut to avoid tearout.

To mortise with the same setup, equip a plunge router with a fence that will ride along the back of the jig. Adjust the fence to locate the mortise on the thickness of the workpiece. Rout between the layout lines in shallow passes (perhaps $\frac{1}{32}$ in of added depth per pass) until you reach the desired depth.

Option 1: For Shallow, Outside Curves, Create a Flat

This works best with shallow curves so the flat spot won't stand out. It's good for joining straight rails to curved posts on a chair or bed, or straight aprons to curved legs on a table.



Leave a section of the stock's square edge intact when cutting the workpiece to shape. Mark the flat's boundaries on the pattern and let that section hang over the stock's edge when tracing the layout.



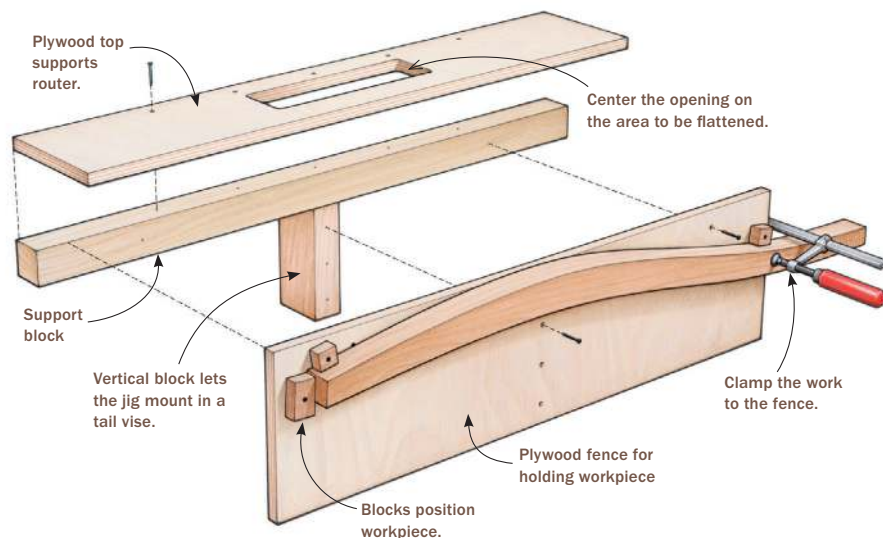
Saw the piece to shape. But before bringing the work to the bandsaw, go ahead and cut the mortise—a task that's much easier while the stock is still square.



Or rout a flat on nested parts. “Nesting” curved parts saves material. However, it also makes it impossible to leave a precise flat when sawing each part. So Miller uses a simple jig to shape the flat afterward.

Simple Jig Can Flatten and Mortise

The assembly is based on a piece of thick, wide stock screwed to a vertical plywood fence so the mating edges are flush.



Create a flat that stands proud

Some designs call for seamless curves that flow from one part to the next, regardless of whether the parts themselves are curved.

In these cases, don't shape the curve, or much of it anyway, on the end of the tenoned piece. The outer tips of the curved ends will consist of very fragile short-grained stock. Instead, leave a raised area on the mortised part, and form the transitional curves there. Just rough them in, and then refine the transitions after gluing the joint together. A well-known example of this technique can be

seen on the leg-to-rocker joints of a Sam Maloof rocking chair.

Here's a final point to consider when using this type of joinery: It makes a lot of sense to use quartersawn wood for the rail. This is because after the joint has been smoothed to seamlessly flow together, seasonal expansion and contraction of the rail across its width could create minor misalignment between the parts. Quartersawn stock, which moves less across its width than flatsawn material, will minimize this problem.

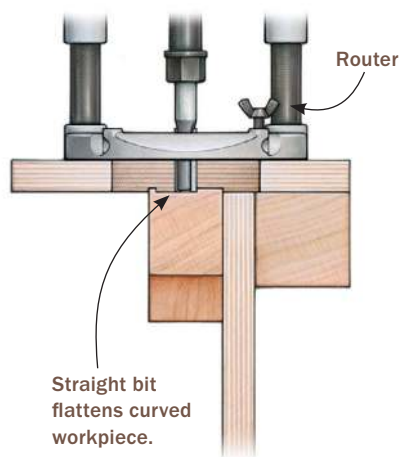


Hold the jig in a bench vise. The workpiece clamps to the jig's fence. Three hardwood stops locate the workpiece so that the section to be milled protrudes above the fence.



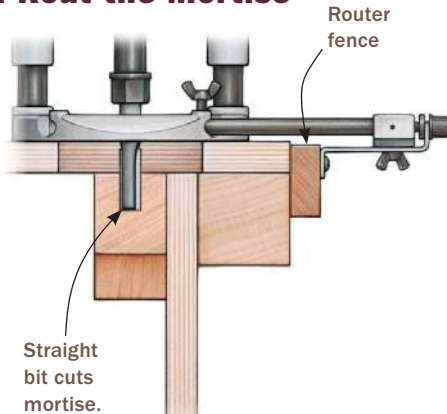
Add a top plate to support the router. Use $\frac{3}{4}$ in plywood and make the plate opening larger than the desired flat by $1\frac{1}{2}$ in in each direction.

1. Rout the Flat



Rout the workpiece flush. Set the bit depth even with the top of the jig's fence.

2. Rout the Mortise



The same jig lets you mortise, too! Attach the router's fence to guide it and locate the mortise.

Match the shoulders to the curve

When you're joining a tenoned part like a chair's crest rail or a table apron to a concave section of curve, it won't work to create a flat spot on the curve. The simplest approach is to scribe the tenon shoulders on one piece to exactly match the curve of the adjoining piece. By the way, this is another instance where a quartersawn rail is a good idea. Excessive wood movement can cause gaps to appear in a scribed joint, because expansion or contraction will actually change the curvature of the shoulder.

The task of cutting the mortise and tenon is roughly the same as before. You can use the jig again to cut the mortise, although you may need to use a curved offcut as a brace between the jig and the workpiece to help hold the work squarely when clamping.

The real trick in this technique lies in shaping the tenon shoulders to tightly hug the curve of the mating part and create a gap-free joint. This process will be simpler

if, when cutting the tenon, you angle the tenon shoulder so that it generally follows the direction of the curve to which you'll be scribing. You can do this with a tablesaw tenoning jig, clamping the workpiece in the jig against a precut wedge. Cut the tenon to normal length to fit in the mortise.

Start the scribing process by inserting the tenon fully into the mortise. Next, use a marking knife to ride along the curved workpiece and scribe a line into the shoulder of the mating part. It's ideal if the scribed line is made with a single-bevel knife so that the straight side of the cut is toward the shoulder—this will leave a very crisp edge to pare toward. Facing the knife that way often will create the offset you need to transfer the full curve to the shoulder, while ultimately shortening the tenoned part as little as possible. But you can use a shim of some kind (an automotive feeler gauge or a small scrap of wood) to increase

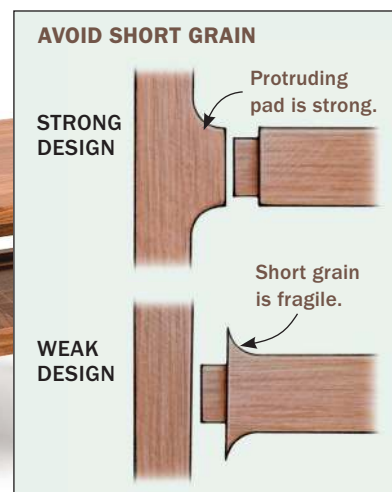
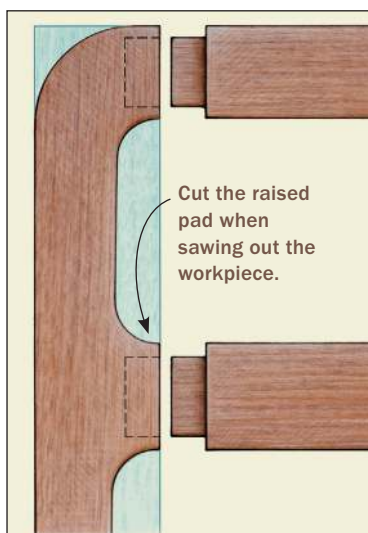
the scribing offset for deeper curves.

The paring requires a very sharp chisel with a flat back. Nibble a little bit away at a time, until you are just one or two paring cuts away from the scribe line. Now put the chisel's edge right in the scribed line and pare down. The easiest way to keep the cut perfectly on your line is to make each cut after the first one with only the leading quarter of the chisel, registering the rest of the chisel against the existing shoulder. A gentle twist of the chisel, applying a little extra force against the existing shoulder, should keep you from inadvertently crossing the line. It also helps to undercut the shoulder a little. Just be careful not to do that at the corners, where undercutting from one side will leave unsightly gaps on the adjacent face.

As you trim back the shoulders, you might also need to trim the tenon length back so the final depth is about $\frac{1}{32}$ in less than the depth of the mortise. This leaves room for excess glue.

Option 2: For Flowing Curves, Add a Pad

For curves that flow into each other, there is a right way and a wrong way. This table by Chicago furniture maker Chris Bach shows how it should be done.





PHOTOGRAPHS BY KRISTINA WILSON

Cut the joint while the stock is square. Then saw the shape as shown, making sure that the flat surface is $\frac{1}{8}$ in or so wider than the rail.

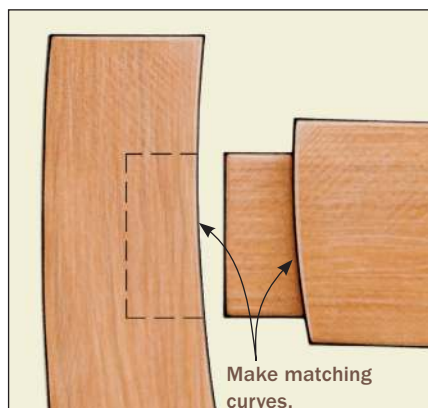


PHOTOGRAPHS BY KRISTINA WILSON

Finish by hand. After the joint is glued, remove the excess material and create a smooth transition using a round or half-round wood rasp (left), followed by a card scraper (right).

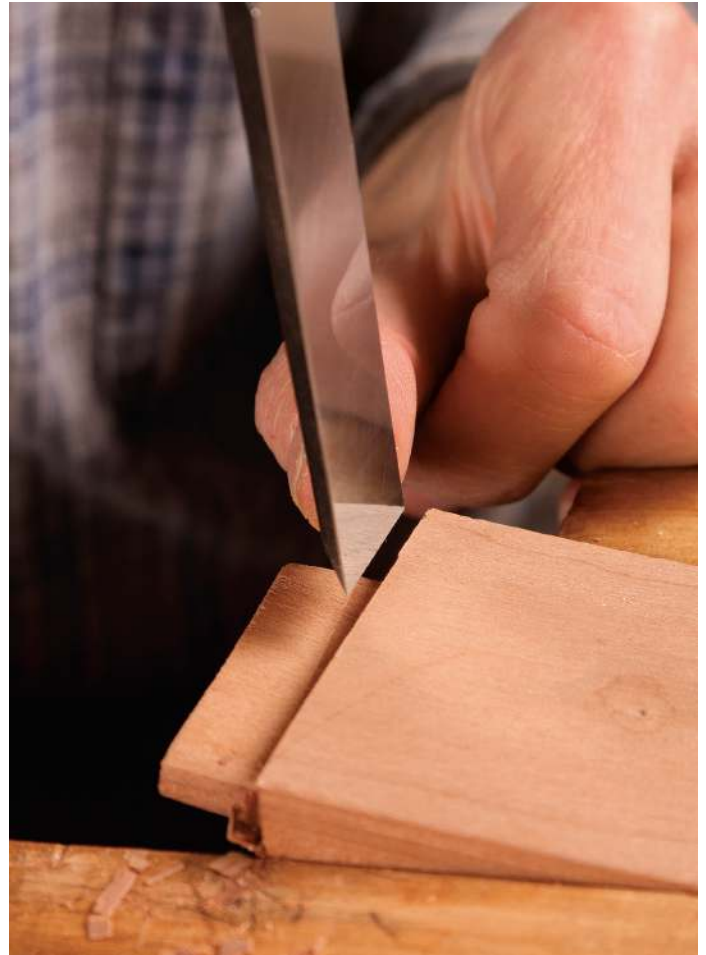
Option 3: Inside Curve? Scribe a Shoulder

This technique creates tight joints between two pieces when one of them is a concave curve.





A curved shoulder starts on an angle. When cutting the tenon, angle the shoulders to follow the arc of the curved mating piece. Aim for a close fit to minimize the paring.



Pare to the scribe line. Nibble away most of the waste, then seat the chisel in the scribe line and pare straight down. Use overlapping cuts, advancing only a quarter of the blade with each new stroke.

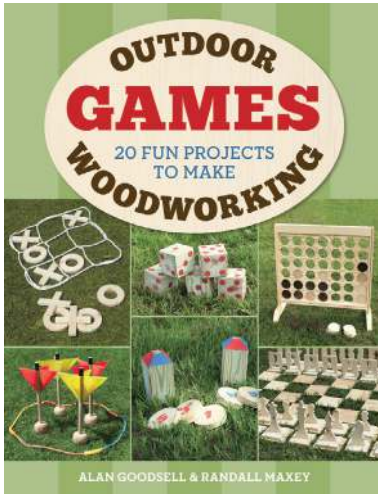


Mark the shoulder. An automotive feeler gauge hugs the curve when transferring the layout to the shoulder. Use a wood scrap for a wider gap.

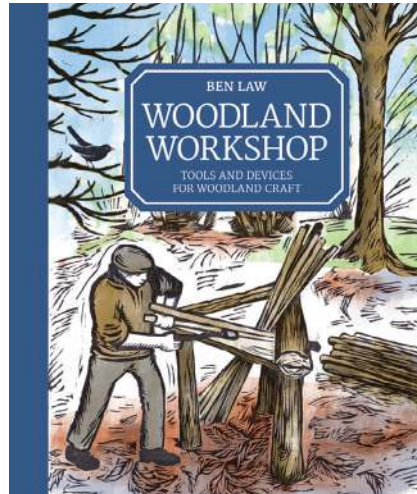


Bring the joint home. You may need to shorten the tenon slightly to allow the shoulder to seat completely. With the shoulder pared carefully, the joint should come together with no gaps.

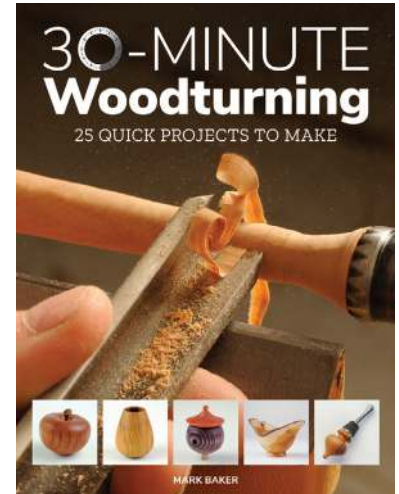
WOODWORKING BOOKS



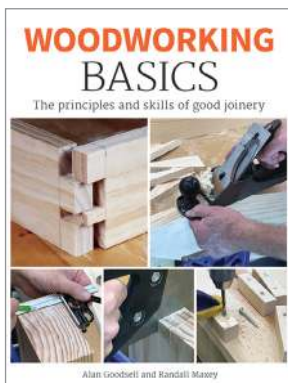
Quick Find Code: 27873
OUTDOOR WOODWORKING GAMES
£14.99 • Paperback



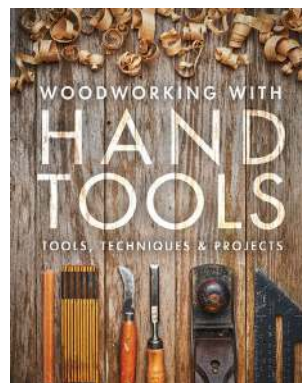
Quick Find Code: 27111
WOODLAND WORKSHOP
£25.00 • Hardback with jacket



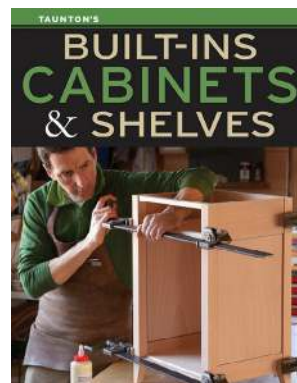
Quick Find Code: 28086
30-MINUTE WOODTURNING
£16.99 • Paperback



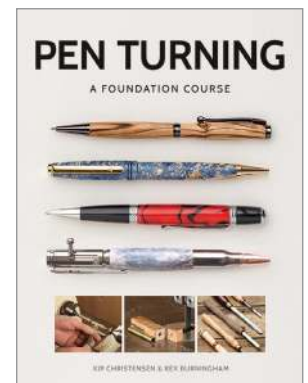
Quick Find Code: 28403
WOODWORKING BASICS
£14.99 • Paperback with flaps



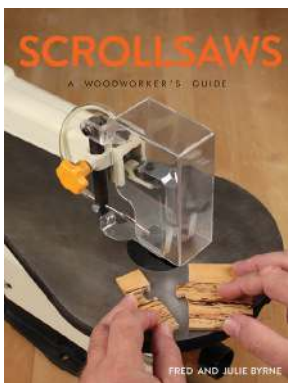
Quick Find Code: 29034
WOODWORKING WITH HAND TOOLS
£21.99 • Paperback



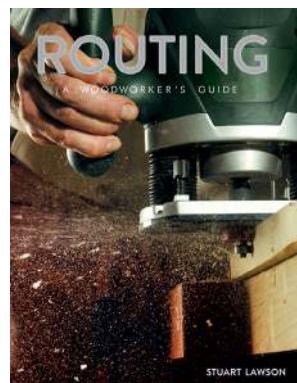
Quick Find Code: 28860
BUILT-INS, CABINETS & SHELVES
£18.99 • Paperback



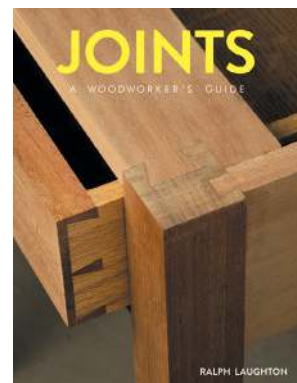
Quick Find Code: 27788
PEN TURNING
£14.99 • Paperback



Quick Find Code: 28810
SCROLLSAWS
£16.99 • Paperback



Quick Find Code: 28811
ROUTING
£16.99 • Paperback



Quick Find Code: 28812
JOINTS
£16.99 • Paperback



Quick Find Code: 29032
52 BOXES IN 52 WEEKS
£21.99 • Paperback

HUNDREDS OF INSPIRING WOODWORKING BOOKS AVAILABLE
VISIT WWW.THEGMCGROUP.COM OR CALL 01273 488005

POSTAL CHARGES APPLY



www.boatbuildingacademy.com



Boat building, woodworking and more

Why not learn a new skill for the New Year



Find us on Instagram @fandcmagazine

DESIGN · INSPIRATION · PROJECTS



TECHNIQUES · TESTS · NEWS · EXCELLENCE

Furniture
& cabinetmaking

Powerful. Iconic **SUPERJAWS XXL**



**PORTABLE CLAMPING
SYSTEM**

SJA 100XL



Engineered Precision

SuperJaws XXL is a tough, portable workstation with a powerful 1000kg clamping force and controlled clamping pressure.

Constructed from strong, powder-coated steel, **SuperJaws XXL** boasts a 1000mm clamping width and will securely clamp almost anything from timber and bikes to doors and fence panels.



FIND YOUR NEAREST STOCKIST

tritontools.com



triton
Precision Power Tools

UNDER THE HAMMER:

Private Collections

We take a closer look at some of the best lots sold at the Bonhams auction

The Private Collections auction brought together items from four private estates. The first lots came from the Belgravia home of Veronica, Dowager Countess of Lucan. Lady Lucan's infamous husband, the 7th Earl of Lucan, was officially declared dead in 2016. The proceeds from the sale of Lady Lucan's estate were donated to the charity Shelter. Next under the hammer were the selected contents of a Swedish Lake House. The owner of this house has spent over 30 years building up a collection of 18th-century furniture and art. The remaining lots came from the contents of Beverston Castle in Gloucestershire, and the estate of the late Victor, 3rd Viscount Churchill. The auction was held at Bonhams' London salesroom in October 2018.



£16,875

A French 19th-century walnut and cut pewter inlaid 'Boule' bureau Mazarin, in the Louis XIV style, from Beverston Castle. It is profusely inlaid throughout with scrolling foliage, and has seven drawers enclosing the kneehole and a central cupboard door.

£10,000

An early George III carved mahogany sofa in the manner of Thomas Chippendale, from the Swedish Lake House.

The serpentine back is carved with scrolled acanthus leaves and C-scrolls above scrolled arms and an undulating apron on cabriole legs. There are two 'cramp' marks to the underside of the back rail, a feature found in furniture made by top London cabinetmakers, including Thomas Chippendale. The design and shape of this sofa, especially the use of scrolled acanthus leaves, is similar to one of Chippendale's designs published in *The Gentleman & Cabinet Makers Director*.





£10,000

A George III mahogany and ebonised line inlaid drum top library table, from the Swedish Lake House. The circular top is inset with a brown leather writing surface, which sits above four drawers and four dummy drawers on a flared concave support and reeded base.



£2000

Two from a set of four Regency rosewood grained and gilt decorated chairs, from the estate of Lady Lucan. The top rails are centred by lion masks above trompe l'oeil swags. The front of the chairs features simulated bamboo. The legs are tapered and splayed.



£5250

A George II mahogany side table, from the Swedish Lake House. The table has a rectangular top above a frieze drawer. The chamfered legs are flanked by open fretwork sides.



£525

A mahogany and gilt brass-mounted commode, from the Swedish Lake House. The commode was made in the 18th-century style, the grey marble top sits above three drawers, which are flanked by fluted tapering corners.



£1125

A George III fiddleback mahogany and rosewood-banded side cabinet, from the Swedish Lake House. The cabinet features a frieze drawer above a pair of pleated silk panelled doors, flanked by reeded tapering pilasters.



£4000

A George II walnut chest on chest, from Beverston Castle. The ogee-moulded cornice sits above two short and three long drawers, which are flanked by reeded canted corners above three further drawers.



£1875

A George III mahogany secretaire bookcase, from the Swedish Lake House. The ogee moulded cornice sits above a pair of astragal-glazed panelled doors enclosing glass shelves, which were added later.



£687

A near pair of George I walnut dining chairs, from the estate of Victor, 3rd Viscount Churchill. The chairs have pierced solid vertical splats and drop-in seats. The cabriole legs on both chairs are joined by shaped and turned stretchers.

The Festool CT-VA Pre-Separator Cyclone

Geoffrey Laycock tries out the new pre-separator in his workshop

There has been a certain amount of hype about the appearance of the CT-VA Pre-Separator and there have been mixed reactions to it but I purchased one as a means to hopefully make life easier in my new workshop. I will primarily use it with a Festool CTL26 extractor and for collection of waste from routing, sawing and sanding. It is quoted as being compatible with CT L- and M-rated extractors. It definitely will not fit the CT17 but it does sit nicely on the CT MIDI; unfortunately the manual states it is not suitable for this extractor – possibly due to flow rates? I tried mine anyway.

Setting up

The CT-VA is well made with the main section looking like a conventional Systainer. On opening, you find the connection hose inside and that the base section is very substantial. This base will fit older extractors with slide clips or the newer ones with T-LOC fixing. The separate clear plastic bin is also substantial and built to last – a good thing as a replacement or extra is £61!

Setting up is simple with the base sitting on the extractor, the bin in the base and Systainer top containing the separator 'cyclone' on top of the bin. The supplied hose links the extractor to the separator and the extractor hose then plugs into the separator. All the 'cyclone' components can be easily removed for cleaning. Once set up it does look a bit of a 'Heath Robinson' arrangement – why wasn't the bin designed with Systainer fixings moulded on the bottom and do away with the supplied base? The connection hose can make using the on-board power socket slightly awkward and the manual shows there is provision in the top Systainer to add a socket which then connects to the extractor socket, making access easy and a convenient height. The only problem at the moment is no one stocks it and it does not even appear on the Festool UK website!

The user manual is the expected collection of diagrams and written instructions, which are mostly straightforward. The section on fitting the plastic bag into the bin has defied my understanding as it says to install the bag and press out air, fit the bin lid, pull up the bag edge, then remove the lid and fit the separator. No reason for or proper explanation of how. It did not help that I was told to see the diagram on the – one only supplied – plastic bin bag, which had no



The Festool CT-VA in use with the CTL26 extractor

diagrams printed on it. Another omission: an explanation of using the extractor hose to extract air from the plastic bag before sealing – a great idea to reduce its size and stop dust bellowing out when trying to seal. Shame they don't point out that you have to reconnect the extractor hose to the CTL26 first otherwise it won't work, it's obvious common sense but judging by some online comments that isn't always used. While on the user manual, it says the CT-VA can be

used for collection of liquids but there is no explanation or instruction at all on this use, nor any information on the website.

Testing

Now bear in mind this was a crude workshop test and definitely what I would describe as 'quick and dirty'. It is possibly accurate within 10% but without repeating and more carefully controlled procedures, that's about as confident as I could be. I had a mixture



The base unit will store the connection hose



The collection bin and the lid, which is used to fit the bag and for secure closure when full



First attempt at installing a plastic collection bag



The separator unit locked onto the bin



There is no storage provision for the bin lid but I found with the workshop handle fitted to the CTL26 it would happily sit here. Otherwise it's another bit of kit floating around to get lost



The separator cyclone components. Note on the end there is a removable panel between the two hose connections to allow fitting of a mains socket which plugs into the extractor outlet, purely for convenience of the height

of wood debris but started with a box of reasonable size softwood chips from routing.

Using the CTL26, with a new filter bag, collecting the chips I measured what was in the bin and the filter and it worked out that just over 50% was collected in the pre-separator. Rather disappointing but see later!

I started again and this was more representative of a good day in the workshop with very fine dust – probably down to 240 grit – some fine, narrow plane shavings, some larger chips. This time collection in

the pre-separator bin was about 89% and I was rather more happy about that. The strange thing is these two results seemed the reverse of what Festool suggest.

The third test was using my MIDI and for this I had mixed all the previous material together and the result was about a MIDI filter bag sized volume so I really wanted to see how that would work out. The end result was around 74% in the pre-separator bin and 26% in the MIDI filter bag. The MIDI has a smaller diameter hose and an extra 90°

Filter bags

The cost of Festool filter bags does defy belief at around £5 for the MIDI and £6.50 for the CTL26 although some other manufacturers make this look reasonable. Some users decide the long-life reusable bag is worthwhile, even though £130 is a ridiculous price, but a word of caution to anyone thinking of buying. Read the Festool information carefully – it is not for use with any dust that may be hazardous to health. So that rules out woodworkers using it, and anyone preparing substrates, or just about anything else! Why Festool say this I do not know but suspect it's because there is the possibility of failure of the end closure of the bag, or wrong closing, both of which could result in dust escaping. If you are in a work situation using this bag, or modify a standard one to re-use, you would not be in compliance with the Control of Substances (Hazardous to Health) Regulations.

bend at the end so the lower airflow may play a part and Festool do say it isn't compatible. If you are thinking it would team up with the CT-SYS, then don't.

I should point out that one dealer in the USA has a video online that demonstrates almost 100% collection of material that is a mixture of sizes from planing through sanding. Particle size will affect separation and so will humidity but I still couldn't understand how my results with a brand new system could be so at variance. So I started again.

One thing I noticed with the video was no plastic bag used in the collection bin – apparently they were not available at the time. So I decided to use the CTL26 with new filter bag and no plastic collection bag. I had a large box of mixed wood debris, very representative of workshop dust, shavings and chips.

I began with 3.7kg in a box and vacuumed this up as slowly as I could tolerate. In real use the volume of air versus debris would be many factors greater than in an artificial test such as this. Revelation, after that exercise I had 92% in the collection bin, only 8% passing into the CTL filter bag. Next I repeated the exercise but with the plastic bag in place – this time being far more careful to get it smoothed to the sides of the bin. I had noticed in my first test the bag was pulled by suction towards the centre of the bin and I think this was preventing debris being able to fall into the bottom. After this repeat exercise, with exactly the same debris sucked up the same way I had 72% in the plastic bag and 28% in the CTL filter bag, better but still not good. It appears that how the collection bag is fitted is crucial to performance and I don't seem able to get it quite right yet. Without the bag I get repeatable good results.

The plastic bags are described as the ideal shape for the CT-VA collector bin but

they look like other mass-produced bags and at around £1.90 each, they are not cheap. At the time of writing I could only find one distributor stocking the bags. The unit can be used without the collector bin – with the two Systainer components locked together and waste collecting in the base unit but this does have a very small capacity and you cannot see how much is in there without removing the top section.

Overall performance

This unit will never reach the performance and collection levels of conventional design cyclones, which have a similar top section with tangential airflow in, but then have a long cone which is the vital bit for slowing down and collecting small particles. Festool quote up to 95% of coarse materials and 80% of mineral dust can be separated. The important little words here are 'up to'. A properly designed and built cyclone will achieve much closer to 100% and can be designed for specific dust particle sizes. Having written that, it is intended to reduce the filling and extend the life of the CT filter bags and that also means that as the bag does approach full capacity it will have operated more efficiently for longer so overall dust collection is to a higher level. It worries me that correct bag fitting seems to be so critical for it to work properly, I will continue to experiment with bags to see if I can get it right. I can't see any reason why other substantial plastic bags should not be used in the pre-separator, or none at all if like me you have a very large compost heap the wood waste can be added to. The longer fill time for the filter bags will reduce costs if you always fit a new replacement when full.

F&C verdict

It works as suggested and performance should be around that quoted by Festool but it does seem overly sensitive to incorrect collection bag fitting. It will save money on replacement filter bags and it should save time if you can afford the eye-watering £61 for a second bin so you have one prepared in readiness. It is nicely made but does look a bit 'cobbled' together and once set up, the assembly on top of the CTL is not rigid enough to push or pull as the bin only sits in its base, it tips forward too easily if you pull on the hose but does not fall off.

This unit is expensive and you need to be a sustained user to justify its high price, you would have to use over 40 filter bags to equal the purchase price and you then still need further bags anyway. Confirmed Festool enthusiasts will find it helpful and possibly a 'must-have' and those wanting to maintain top professional appearances will not be disappointed. In the hobby workshop however, there are numerous cheap conventional design cyclones available online and one of these with a bit of thought and playtime are likely to produce a similarly efficient collector for a fraction of the price and 40 filter bags may last you a long, long time.

Price: From £269.95 *F&C*



The disassembled cyclone, no tools required



The complete assembly as tested with Mirka hose



The type of shavings and dust used to test



The Pre-Separator installed on the Festool MIDI



The difference to the CTL26 – the hose inlet is in the storage area



Who needs a

BANDSAW

anyway?



www.badaxetoolworks.com/kpfs-Roubo



www.norfolksawservices.co.uk

Visit us on-line or in-store for Woodwork Machinery, Power Tools & Accessories
from the UK's top brands



Norfolk Saw Services, Unit 7, Whiffler Road Industrial Estate,
Norwich, Norfolk, NR3 2AW Tel: 01603 898695

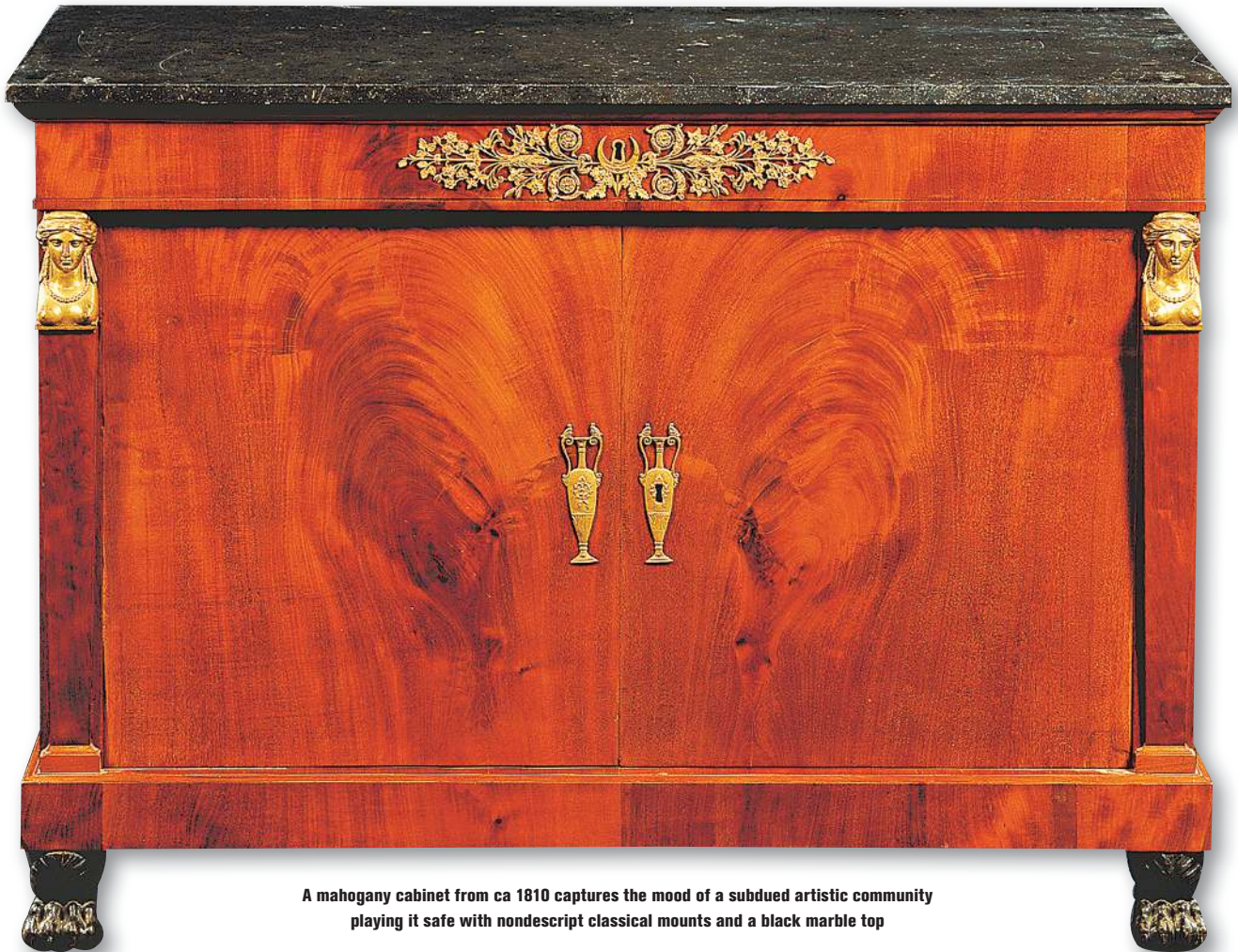


E-mail: sales@norfolksawservices.co.uk



Telling tales

In the evolution of furniture design, nothing ever really happens by accident. Derek Jones looks back at a time when putting on the style also meant sending the right message



A mahogany cabinet from ca 1810 captures the mood of a subdued artistic community playing it safe with nondescript classical mounts and a black marble top

In many ways reading a piece of furniture is not that different to reading a book. And just as there's a story behind every picture, if you take the time to learn the language of furniture design you'll often discover a plot with all the twists and turns of a bestseller. There's no guarantee, of course, that you'll arrive at a happy ending every time – upcycling has a lot to answer for in my opinion – but there's always the chance you can have the last word and restore justice where needed.

On the campaign trail

At a recent sale I came across a campaign chest (see photos top right) made out of teak in what you might describe as being in a dilapidated condition. Covered in bird poo and other nasty stuff, it had obviously been kept in a barn or loft for some time without much protection. It's not often good pieces like this turn up but when they do I'm often

tempted to rescue them. The single top drawer was fitted out as a writing desk with pigeon-holes and drawers; in other words a typical example. On close inspection, however, there was something definitely not quite right about the piece.

Old furniture has a feel about it that comes from being used. The corners and edges have always been softened through decades of handling and then there's the usual battle scars, like ink or water stains and scratches. Less obvious but equally telling are the hidden surfaces that wear through use such as drawer runners, knuckle joints, pivots and slides. While it's desirable to find pieces with as few miles on the clock as possible, it's also important to make sure the signs of wear and tear are consistent throughout and for this chest that wasn't the case.

Although the main drawers weren't running smoothly, it wasn't because of wear. The small desk drawers were similarly difficult

to open and close and again not because of excessive use but rather the opposite; they'd never been used and I doubt they'd ever been truly fitted to their openings. There were a couple of other tell-tale signs that led me to this conclusion. The front vertical faces were in a much better condition comparatively than the horizontal surfaces and the writing surface, although prepared for leather, was missing its skiver.

My hunch, and without further investigation it can only be a hunch, is that this piece was never entirely finished before being mothballed. On the plus side, teak is quite able to withstand damp conditions so I doubt there's much wrong that couldn't be sorted out with a few strategically placed shavings. In fact you could almost carry on where the last chap downed his tools and hung up his apron.

The question we should be asking is, is that the right course of action?



A fairly typical campaign chest from the outside...



... the inside, however, tells a different story

The age of Empire

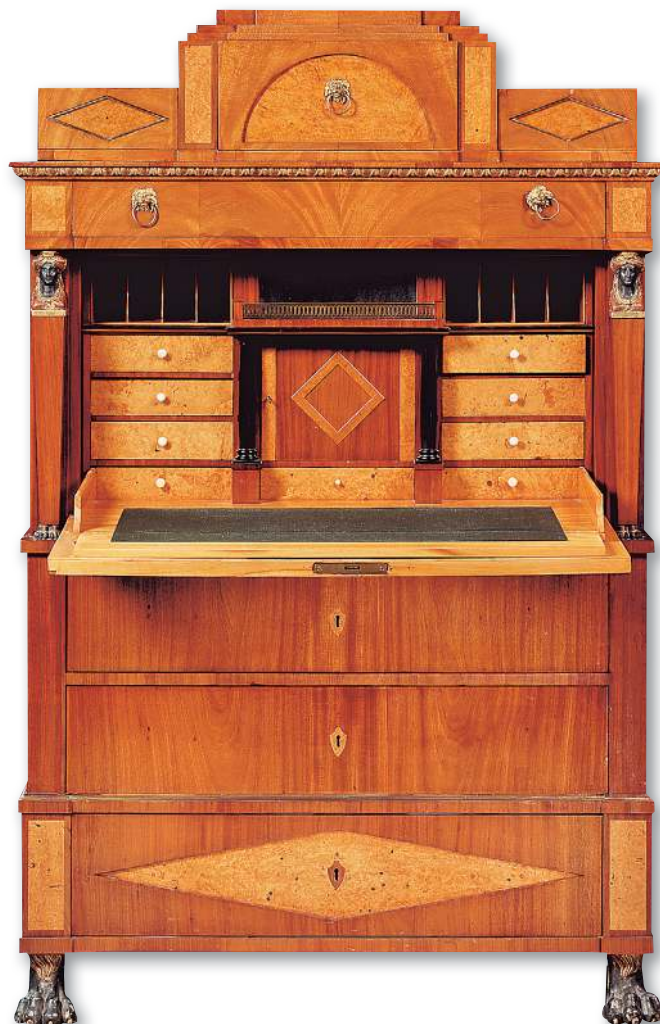
In the few decades preceding the construction of this campaign chest, the future was uncertain for furniture designers and makers throughout Europe. The continent was at war, with French cabinetmakers in particular finding themselves in an uncomfortable position with their clientele either stripped of their wealth, or worse. The guilds that had once imposed and enforced the rules about who was allowed to make furniture in France had been abolished as part of the revolution. Though it was no longer necessary to train as an apprentice and be elected maître before selling one's work, proceeding without a structure wasn't that straightforward either. To avoid persecution, furniture designers took their lead from their new leader. Napoleon was a military man who was in awe of the past empires of Rome, Greece and Egypt, and he promoted his agenda by aligning his tastes with these ancient civilisations. In support of the new order, some makers created pieces with spear and laurel leaf motifs that celebrated the revolution. Others took a more subtle and holistic approach to avoid any risk of association with the aristocracy and shifted away from using motifs and materials made popular during the Ancien Régime altogether. Walnut and mahogany were replaced with light woods such as elm, cherry, birch, satinwood and maple and the copious amount of Rococo swags and ornaments were exchanged for tasteful but more importantly neutral reproductions of classic forms. As Napoleon's grip on the continent loosened, so did the restraints within the artistic community as a whole and a gentle revolt against the influences of Empire began to take place. With a king back on the throne in France in 1814, the style shifted once again towards motifs celebrating triumph and victory but this time with depictions of classical figures such as Nike, the Greek goddess of victory, telling the story. The laurel leaf was replaced with an olive branch in a gesture of peace and scales were used as a symbol of justice and fair play. These symbols, albeit with less potency, influenced



The leather skiver or baize has never been fitted and the vertical surfaces are not in keeping with the amount of dirt that's accumulated on the horizontal ones



The handles have good patina but the surrounding areas don't appear to have had much human contact



Could this mahogany and burr walnut bureau cabinet in the French Empire style ca 1810 be the forerunner to Art Deco?

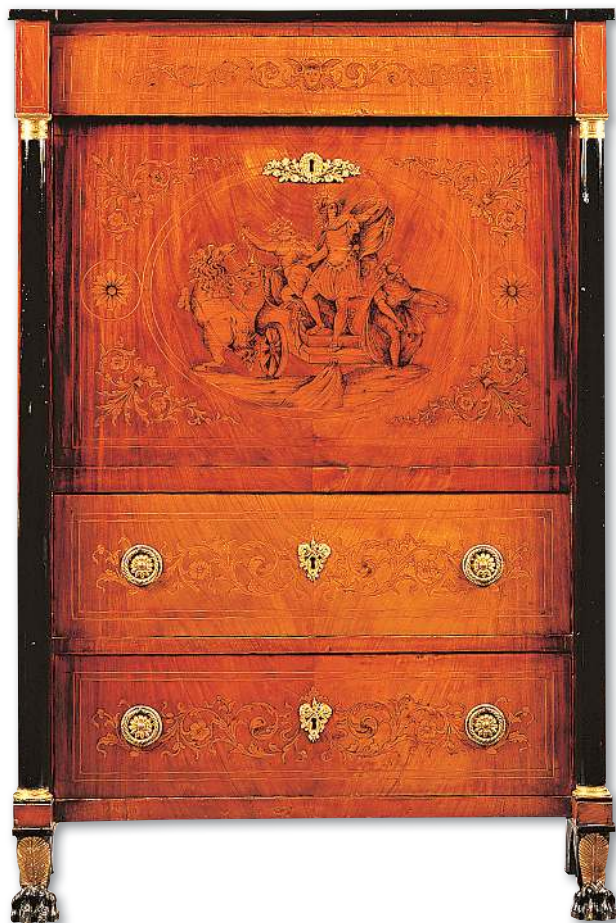
the style of Regency furniture in England and resurfaced again almost a hundred years later in the form of Art Deco as decorative icons.

By the time our chest was made, around 1840, the new middle class was well established in most parts of Europe and the demand for stylish furniture began to grow. Makers looked towards mechanisation to solve their problems and for the first time we start to see machine processes dictating the style of furniture. Exhibitions were more about displaying the technical advancement of the day such as carving and veneer slicing machines, than adhering to a political ideal.

After the turbulent years of the early 19th century, perhaps the biggest change in the way furniture was styled was that rules were open to interpretation. In the century before, proportion and design were both calculable and followed a logical progression based on classical architecture. Design was a way of advertising one's intellect and was only accessible to the enlightened and privileged. By the middle of the 19th century, however, things had changed and what the public wanted was furniture that was not only easy on the eye but also easy on the intellect and even more easy on the pocket. *F&C*



A mahogany cupboard ca 1820 shows the signs of artistic freedom returning to France. The gilt bronze figure is of Nike, Greek goddess of victory, and the sides are adorned with laurel leaves, another symbol of victory



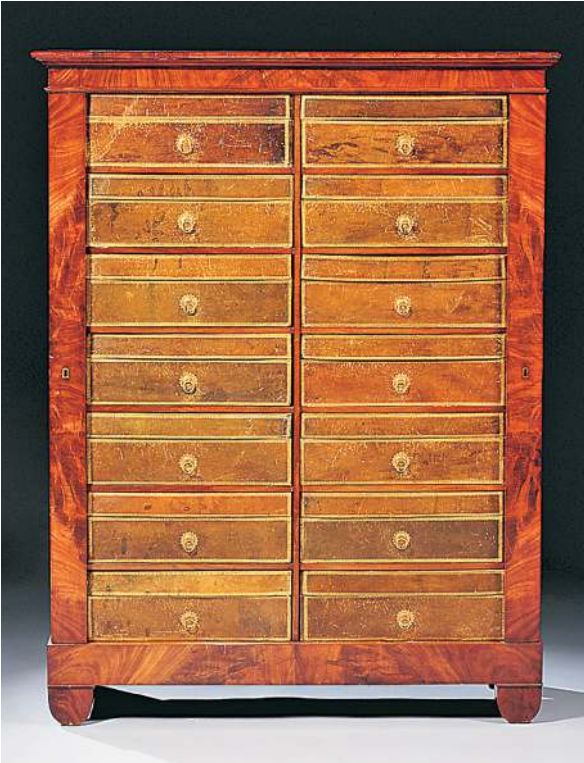
A walnut secrétaire from Austria ca 1820, clearly influenced by the French Empire style



A cherry pedestal desk from Italy ca 1820, which mimics the French Empire style albeit with English influences; the shield escutcheons are a late 18th-century feature from England



A Charles X burr walnut and gilt-mounted dressing table from ca 1830 demonstrates a return to more curvaceous forms but minus the Rococo decoration associated with the previous kings of France



A mahogany chest of drawers from the Restoration period with lockable side columns without gilt mounts. The drawers are faced with green leather



This centre table from ca 1830 is one of a pair made for a German palace in the High German Greek revival style. It signals the end of purity of style and the beginning of a period where anything and everything goes



Another item from the Restoration period ca 1830 in the Empire style with figured mahogany and meagre gilt mounts

SUBSCRIBE TO OUR OTHER TITLES FROM ONLY £11.48



From
£22.95
(6 issues)

Monthly publication



From
£22.95
(6 issues)

Monthly publication



From
£11.48
(3 issues)

Bi-monthly publication

Save up to 30% on any of these magazines
+44 (0) 1273 488005
www.thegmcgroup.com/offer/woodwork

DESIGNED, MANUFACTURED & PROVEN IN  MADE IN GERMANY

Forsa 9.0

3.2m Professional Panel Sizing saw



Scheppach Forsa Series professional panel sizing saws are distinctively German from head to toe. German technology - German innovation - German quality - and five models to choose from offering between 1.6m and 3.2m length of cutting stroke. All Forsa Series come complete with patented integral motorised cast iron pre-scoring unit whilst still retaining a 107mm depth of cut for ripping solid timbers plus micro rip fence setting to within 1/10mm. The precision sliding beam can be equipped with optional professional sliding table carriage with telescopic arm and table width extension (TWE) as illustrated. (Both included in prices quoted below.)

Forsa 3.0

1.6m Panel Sizing Saw



Forsa 4.0 & 4.1

1.6m & 2.1m Panel Sizing Saw



Forsa 8.0

2.6m Panel Sizing Saw



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
Forsa 3.0 - P1	Workshop	Inc Professional STC + TWE + TLE + Scorer	5.2 / 1.0 / 415v	87 mm x 1.6 m	£2,895.00	£3,474.00
Forsa 4.0 - P1	Workshop	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 1.6 m	£3,895.00	£4,674.00
Forsa 4.1 - P1	Workshop	Inc Professional STC + TWE + TLE + Scorer	6.5 / 1.0 / 415v	107 mm x 2.1 m	£3,995.00	£4,794.00
Forsa 8.0 - P3	Professional	As Illustrated above	6.5 / 1.0 / 415v	107 mm x 2.6 m	£5,420.00	£6,504.00
Forsa 9.0 - P3	Professional	As Illustrated above	6.5 / 1.0 / 415v	107 mm x 3.2 m	£5,575.00	£6,690.00

One bench plane to rule them all?

Kieran Binnie investigates whether a low angle plane really is all you need



PHOTOGRAPHS BY KIERAN BINNIE

When it was first unveiled in 1905, Stanley's No. 62 bench plane must have caused quite a commotion. Looking like nothing else in production, the No. 62 married the bevel-up blade orientation of a block or mitre plane to a bench plane sized body, measuring 14in long by 2in wide. While Stanley ceased manufacturing the No. 62 in 1942, bevel-up bench planes have enjoyed something of a modern revival, thanks in large part to Karl Holtey's revolutionary No. 98 smoothing plane, which prompted a reconsideration of bevel-up designs as being highly practical instead of an evolutionary dead end. So popular has the bevel-up concept become that premium plane manufacturers Veritas and Lie-Nielsen now manufacture a whole



Processing oak for a chair crest rail using the toothed blade

range of bevel-up smoothing, jack and jointer planes. Returning to the plane that started it all, there are woodworkers who claim that the No. 62 is so versatile that it can replace the full set of traditional bevel-down planes. Never one to shy away from a challenge, I decided to test this claim by putting away my usual set of planes and spend several months using just a No. 62.



Jointing oak for a chair crest-rail

An introduction to blade geometry

Before we delve into the test, it is worth explaining blade geometry, and the claimed benefits of a bevel-up bench plane. Traditional bench planes orientate the iron so that the bevel is facing downwards towards the bed of the plane, and the back surface of the iron is facing to the front of the plane. In this arrangement the cutting angle of the iron is determined by the angle of the frog of the plane, rather than the angle of the bevel honed on the iron. In contrast, a bevel-up orientation places the back of the iron against the bed of the plane, and the cutting angle is derived from adding

the bed angle to the angle of the bevel.

Blade orientation itself does not affect the performance of the plane – the wood does not care whether your plane is bevel-up or down, all it sees is the cutting angle. But different cutting angles will have different effects on the planed surface, and this is where the benefits of a bevel-up plane become apparent. A low cutting angle of 37° is effective for cutting end grain, while a high cutting angle of 62° will help to smooth difficult interlocked or figured grain. Because the cutting angle of bevel-down planes is determined by the frog angle, changing the

cutting angle requires fitting a new frog, or honing a back-bevel to the plane's iron. In contrast, the cutting angle of a bevel-up plane can be adjusted by honing a different bevel angle to the iron, or keeping a set of irons with different bevels for different tasks. Woodworkers enamoured with bevel-up planes suggest that having a single plane and collection of irons to achieve different cutting angles saves both space and cost when compared to a set of traditional bench planes, and by swapping out the irons, can achieve the same level of utility as a set of three bevel-down planes.



The No. 62 can be used as a very effective shooting board plane



Jointing the maple seat blank



Flattening the seat blank



With a 25° bevel, the No. 62 is perfect for trimming end grain

The challenge

My usual stable of planes consists of a No. 3 smoother, No. 5 jack and No. 8 jointer – see 'Curing Plane Addiction' in *F&C* 250 for a detailed explanation of how to select a set of bench planes, and the purposes each one fulfils. Replacing those planes was a Lie-Nielsen No. 62 kindly loaned to me by Classic Hand Tools. The Lie-Nielsen plane is of comparable dimensions to the Stanley plane on which it is based, and the same size as a No. 5 bench plane – 14in long with a 2in wide iron. The mouth aperture is easily adjustable by twisting the front knob to allow the front plate to be slid forward or back for a tighter or more open mouth. The bed angle is 12°, which means that honing a

35° bevel (as I do for most of my planes and chisels) achieves a 47° cutting angle very close to the 'common pitch' cutting angle of most bevel-down planes 45°. This low bed angle also explains why bevel-up planes are also commonly referred to as 'low-angle planes'. Honing a primary bevel of 25° results in a cutting angle of 37°, which gives excellent results on end grain, and a 50° bevel results in a 62° angle for smoothing tasks. A 90° bevel effectively converts the plane into a large scraper.

So much for the theory, but what I wanted to know was would the No. 62 be able to discharge all of the tasks I used my familiar set of planes for?

In use

Broadly speaking, bench plane work falls into three categories – coarse, medium and fine work such as flattening rough stock, jointing edges for gluing, and smoothing surfaces for finishing (see 'Coarse, Medium & Fine' in F&C 252 for more detail). In order to give the plane a thorough test I needed to press it into service on all three categories of work. Fortunately, I was about to start building a child-sized stick chair in hard maple, as well as preparing larger sized stock for a pine cabinet, and a bookcase in maple. Between these projects, and working on an oak chair I was finishing off, the No. 62 would get plenty of use across a number of different operations.

Coarse work

First up were the coarse operations – flattening hard maple for the seat blank, and the larger pine and maple boards. Opening the mouth wide and setting the iron (honed with a 35° bevel) to a rank cut, I found that the No. 62 works as a respectable jack plane to hog off material and flatten rough stock. As with a bevel-down jack plane, a cambered blade makes processing rough stock a more efficient experience. The toothed blade definitely helps tame difficult grain at a 'common pitch' cutting angle, and would be invaluable if rosewoods or heavily figured maple were part of your daily workflow. As it was, flattening stock was a straightforward process for both maple and pine, and I didn't miss my usual Clifton No. 5 jack plane in the slightest.

Medium work

Next came the 'medium' work. Jointing the maple seat blank was also straightforward, closing the mouth and using the same 'common pitch' cutting angle iron made short work of getting a square and straight joint on 2in wide, 17in long boards. At 14in long, I found the No. 62 a bit too short to use as a dedicated jointer plane on larger stock – the bookcase required 42in long edge joints to glue up panels, and while it is certainly possible to do this with a shorter plane, I did long for my 24in long No. 8 jointer for this work. One advantage of the No. 62 over my usual planes was the centre of gravity. The lower angle of the iron together with the lack of frog, means that the centre of gravity of the No. 62 is lower than for a bevel-down plane. While not critical for many operations, this lower centre of gravity was a real boon when planing 45° chamfers around the perimeter of the chair seat – a task I find can be awkward with a bevel-down jack plane.

Fine work

Finally, there was the 'fine' work, and it was when shaping the chair seat and legs that the No. 62 really came into its own. The seat is trapezoidal in shape, with nearly 12in of end grain on each side to plane. I smoothed the top of the seat with an iron honed to 50°, and quickly achieved that familiar glassy surface that can only be the product of a really sharp smoother on hard maple. Switching to a 25° bevel angle rapidly cleaned up the large expanse of end grain and left a very clean surface behind. The lower centre of gravity was also really beneficial when shaping the legs into tapered octagons, as it was easier to balance the plane on the narrow faces of the workpiece and plane at a consistent angle. Smoothing the larger pine and maple panels was an equally satisfying experience, and the No. 62 worked really well as a large smoother.



The low centre of gravity makes for a very comfortable experience when planing chamfers



Levelling chair legs with the No. 62 held in my bench vice



Shaping chair legs into tapered octagons



The finished leg

The only bench plane you need?

So, is the No. 62 truly the only plane you need? To be honest, given the variety of approaches to woodworking, this is an almost impossible question to answer. But here is what I found during my two months spent using only the No. 62. It performs well as a jack plane, and excels at planing end grain and working as a large smoother. The ability to swap out blades to make an immediate change to cutting angle is very effective, and certainly represents a cost-effective way of adding smoothing and jack planes to your tool chest. The No. 62 does handle a little differently to bevel-down planes, particularly the tote angle and the location of the adjuster (which I found less intuitive). If unsure which you prefer, I would recommend testing a No. 62 before purchasing. Once I had got used to the feel of the plane compared to my regular jack plane, I enjoyed working with it and found it very easy to use.

At 14in long, the No. 62 is larger than I would really want for a smoother to follow my hand-planed surfaces, and a bit too short to serve as a dedicated jointer for furniture casework. Ideally a smoother should be small enough to reach any subtle hollows in a hand-planed surface, and a long smoothing plane will remove the top of any undulations, requiring more passes before it can reach the low spots. This is less of an issue for stock that has been machined straight and flat, but makes the No. 62 a little less efficient as a smoothing plane for a woodworker who wants to do all of their own planing. The toothed blade was very helpful for dealing with truculent interlocked grain, and would be invaluable if working difficult exotics as a daily part of your workflow (I have a toothed blade for my No. 5 for exactly this purpose).

In short, if I had a machine shop to flatten, thickness and joint rough stock, then I could easily see the No. 62 being my most used plane. Similarly, if most of my work was building chairs or musical instruments, then the No. 62's ability to handle both end and difficult grain would make it a key tool. I would not want to be without a full-sized jointer plane for jointing long pieces, but again, if you had access to a jointer machine this would be less of a drawback.

As it is, the No. 62 has definitely earned a place in my tool chest (particularly for chair making where it really excelled) but wouldn't tempt me to sell my existing smoothing, jack or jointer planes. For the machine-based woodworker who is looking to add a quality hand plane to their set-up, a No. 62 would be just the ticket. *F&C*



The mouth aperture can be adjusted by twisting the front knob and sliding the mouth plate



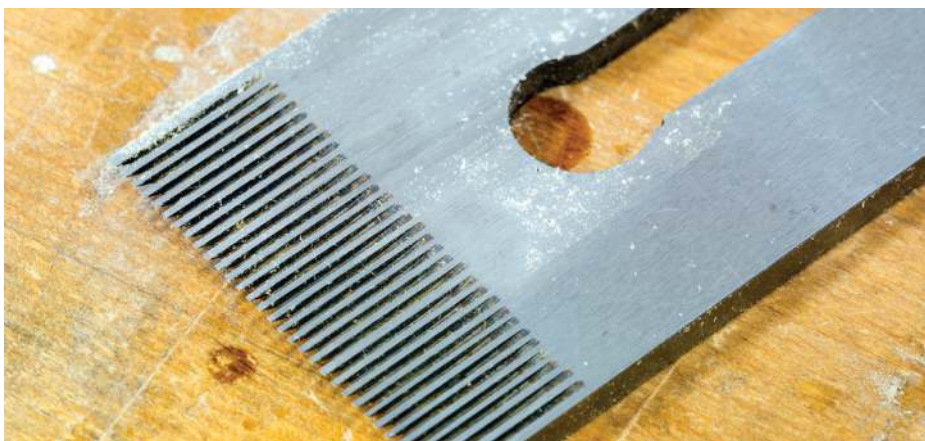
Twisting the front knob unlocks the mouth plate



The iron is orientated with the bevel facing up, and held in place with a large cap iron



The knurled adjuster changes the depth of cut



A toothed blade helps to tame difficult grain

The next generation mechanical opening and closing system by Blum

Steve Coonick reviews Blum's new drawer systems



PHOTOGRAPH BY STEVE COONICK

You may have seen, fitted or used previous iterations of Blum's opening and closure systems, known as TIP-ON and BLUMOTION. The TIP-ON title is used for Blum's mechanical push to open system and BLUMOTION for their soft close products. These two systems are well established and have been used independently in many products that will be familiar to many makers.

It is worth clarifying at this stage, that Blum have two variations for

essentially the same technology. One system, known as LEGRABOX, is a family of products designed to be used with their in-house metal drawers. The other system, known as MOVENTO, is Blum's premium runner designed to work with wooden drawer boxes. The MOVENTO S-Runner is a highly adjustable drawer runner, which offers cabinetmakers four-dimensional adjustment to help achieve a perfect fit and is the subject of this article.

Features of the new systems

Previously you may have seen, or used, the older version of the TIP-ON system, which could be used in conjunction with a standard runner but had no soft close functionality. Even though the system was innovative, it was not easy to fit or adjust.

In general terms the main issue with these types of systems (from any manufacturer) is that push to open and soft close mechanisms will invariably try to work against each other. The two mechanical forces of the closure system technologies oppose each other when they try to perform their independent primary function. What Blum has achieved with this 'next generation' product is to have these two functions working in unison. The result is a well-balanced and easily adjustable system.

Blum have also taken a huge step forward with respect to the simplification of installation. This next generation product fits to their new MOVENTO S-Runner. This runner has been designed as a universal product incorporating the function of BLUMOTION technology. If you require the additional mechanical one-touch opening of TIP-ON, then these parts simply 'click on' to the runner. This is a 'tool free' upgrade and the components can be fitted in well under a minute. If you are familiar with the existing MOVENTO runner you will also be pleased to hear that all new accessories still fit in a void under the base of a drawer box, neatly out of view.

Several other features will also be of benefit to the traditional cabinetmaker. These runners have high stability and sag values. Drawers can be 254–1400mm wide with a runner length of 250–750mm. Side stabilisation is available as an accessory to ensure a smooth straight drawer opening. The biggest step forward is that one runner (the S-runner) now covers all motion technologies (760Hxxx0S 40KG capacity and 766Hxxx0S for 60Kg capacity), this helps the smaller workshop with stock ordering and storing.

For wider drawers, a synchronisation rod can be fitted, which is simply cut to length and fitted between the two runners. The purpose of the rod is to transfer any 'pushing' force through both runners, providing a balanced drawer closure from any point on its face. Asking a client to only close a drawer from its middle is a futile request – this synchronisation negates the need for this conversation.

A few last things to note are that all these next generation products come with Blum's lifetime warranty, which does not just cover the primary owner. Blum are so confident about their products, that even if a piece of furniture is passed on to secondary, or even tertiary owners, they will still stand by their warranty. Also, I have found that Blum's UK-based technical team are excellent. Makers cannot be experts in everything, so it's great to be able to pick up the phone and talk to people who know these products inside out, some of whom are former cabinetmakers themselves.



The push to open accessory



Push to open adjustment



How the latch set attaches to the runner

Conclusion

This is a premium mechanical push to open and soft close system. The performance, adjustment and fittings have all been simplified and improved. The MOVENTO S-runner with incorporated BLUMOTION works seamlessly with the TIP-ON system and other accessories. The system does not interfere with any of the standard adjustment features of the already excellent MOVENTO runner. If you're looking for a versatile push to open system, then this runner will not disappoint. *F&C*

Blum systems

For more information about BLUMOTION and MOVENTO, visit: www.blum.com



Only a small grey adjustment tab is visible in the installed Blum runners

TOMACO

THE TOOL MARKETING COMPANY

DISTRIBUTORS OF QUALITY PRODUCTS



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

narex[®]

Quality range of woodworking hand tools made in Europe.

COLT[®]

PROFESSIONAL TOOLS

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

T TOMAHAWK TOOLS

A quality range of professional tools and accessories.



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

CMT ORANGE TOOLS[™]

Quality cutting tool range which includes Router cutters, Spindle Moulding, saw blades, holesaws and many more from Italy.

FOR YOUR NEAREST STOCKIST VISIT
www.tomaco.co.uk

KIT & TOOLS

HAVING TROUBLE SOURCING
THE RIGHT TOOL FOR THE JOB?
HERE'S A SELECTION OF NEW
AND ESSENTIAL EQUIPMENT
FOR THE WORKSHOP

ALL STERLING PRICES INCLUDE VAT,
CORRECT AT TIME OF GOING TO PRESS



From
£41.99



Rotate the collar at the base of the handle to unlock it



Flip the handle through 90° to gain more purchase
and increase clamping pressure

MINI TEST

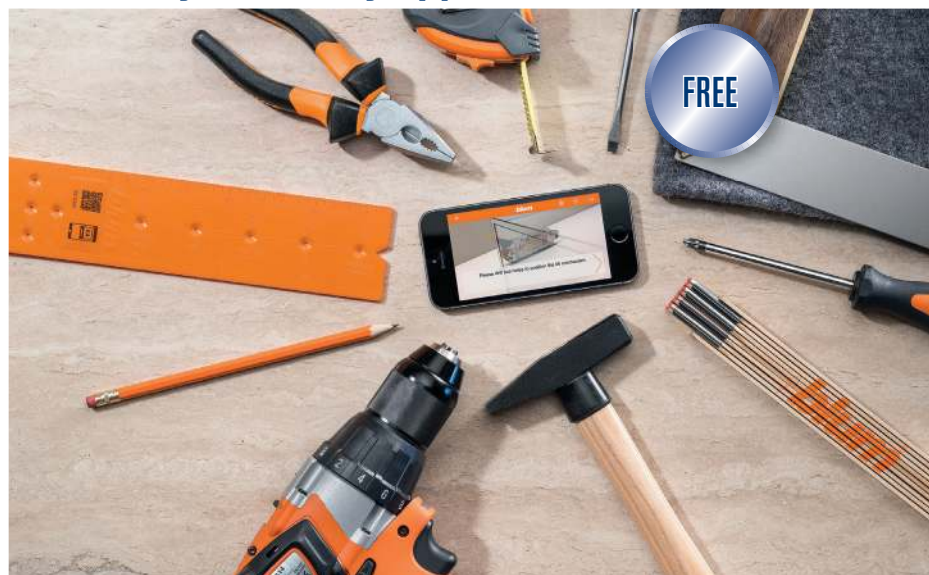
Axminster Trade Clamps HD Parallel Jaw Clamp

What's that they say about clamps? You can never have too many. Even though I've got my reservations about that statement, as regular readers will know, I have no problem relating to the sentiment. In case you've missed it in the past my take on that idea is that if you've run out of clamps halfway through a glue-up either your parts don't fit together that well or you need to get better at thinking through the entire build process. And before we get into the whole pots and kettles debate, yes I've also been there. Quite a few times as it happens. So in a quest for a little clarity let's revisit that mantra to see if we can make it make a little more sense.

In preparation for a class this month I happened upon some new clamps in the rack that I haven't used before, the Axminster Trade Clamps HD Parallel Jaw Clamp to be precise. Yes, I know it's a bit of a mouthful, but stay with me. There are times when, quite frankly, any clamp will do and then there are times when the right clamp makes the job so much easier to do and you wonder why all clamps aren't made the same way. The Axminster HD Parallel Jaw Clamps are designed to fit that brief. Not dissimilar to the Bessey K body clamps, they have a zinc-plated and profiled bar designed to resist bending under strain and maintain parallel clamping faces between jaws. The moveable head has a patented non-slip mechanism and can be removed and rotated to turn the clamp into a spreader. The large heads are encased in a glue-resistant moulding designed to minimise marring of the work – all good and useful features. The best bit though, and once again it couldn't be simpler, is the introduction of a rotatable/flipover grip so that you can get some real purchase on the business end. The pros and cons in that order are as follows. You're less likely to blister your hands on multiple glue-ups, able to release a tight clamp much easier after the event and position clamps closer together and be able to tighten them up. The only downside, more like a note to self really, is to go easy on the tightening. All that extra leverage means greater clamping force and the risk of dents on thin edges. Do it once and you'll have learned your lesson. The range consists of 600mm, 1000mm and 1500mm so perfect for most carcass assembly.

From: www.axminster.co.uk

Blum Easy Assembly app



Fittings supplier Blum has implemented a variety of services for fitters, designers and manufacturers over the last few years, with the most recent being the EASY ASSEMBLY app. An essential digital tool for anyone working with Blum components, the app provides information on how to install fittings safely, how to quickly locate fixing positions and how to set the fittings precisely. The app also has an offline mode meaning that relevant assembly information is immediately to hand and always up to date. The app is available for both iOS and Android.

From: www.blum.com/eaapp or search on your phone's app store



Makita expands its 18V LXT range

Makita has added two new products to 18V LXT range: the DTW180 Brushless LXT Impact Wrench and the DCL181FZW Vacuum Cleaner. The Impact Wrench will drive home M8–M16 standard bolts and M6–M12 high tensile bolts. It can deliver 180Nm of tightening torque and 310Nm of nut busting torque while the two-stage impact power selection delivers up to 3600ipm in hard mode, 2000ipm in soft, with a no load speed of 2400rpm in hard mode and 1300rpm in soft mode. It has a brushless motor allowing double the run time compared to a standard brushed motor, less friction and more power. It also benefits from an electric brake, variable speed trigger, forward/reverse rotation and a handy LED job light.

The new Vacuum Cleaner is bagless and features a capsule that's efficient and easy to empty. Producing 30 watts of suction power in Hi mode and 11 watts in Lo mode, with a maximum airflow of 1.4m³/min, the DCL181F has a maximum sealed suction of 4.2kPa. The rubberised ergonomic soft grip handle features a touch button switch where high/low suction power settings can be easily selected. It has a run time of 40 minutes when used in Lo mode with a 3.0Ah Lithium-

Ion battery, and 20 minutes in Hi mode. The efficient collection filter will allow a dust capacity of 0.65 litres and also featured on this vacuum is a convenient LED job light for those dark corners. It is available as body only to utilise existing Makita 18V batteries. It comes with floor and sash nozzles for a variety of applications.

From: www.makita.co.uk



Skelton Saws Peacock Oil

David Barron tests the finishing oils developed by Shane Skelton



Peacock Oil

Available from: www.skeltonsaws.co.uk

Price: £14 for 100ml, £24 for 250ml

If you've ever seen and felt the finish on the handles of Shane Skelton's wonderful saws then, like me, you'd be dying to try some. Using his background in gunstocks, Shane has produced a range of three traditional oils, blending oils, resins and waxes to give a finish that is breathable, water repellent and figure enhancing.

The three finishes are Clear Honey, which maintains the wood's natural colour; Antique Amber, which produces a deeper colour; and Regal Red, which elevates the veins and highlights the grain in darker woods.

On test

For my test I used the Clear Honey on some rippled ash, Antique Amber on some Cuban mahogany and oak, and Regal Red on some beautiful English walnut. The preparation involves hand sanding through to 600 grit and then raising the grain and sanding again with 800 grit.

The first coat of oil is applied liberally and left to soak in for 15 minutes. This is repeated every 15 minutes until four coats have been applied and the wood can absorb no more (the walnut took six coats). Leave to stand for an hour before removing all the excess oil with a paper towel and buff dry. This is then left for 48 hours to fully dry (I left mine four days to be sure), then de-nib with 0000 wire wool before applying another very thin coat. After an hour, remove any excess with a paper towel and leave for 24 hours. This is repeated twice more (I applied four more for the walnut) and then it's left for 1–2 weeks to harden.

The results were very impressive providing protection for the wood, a silky natural feel and really popping the grain. The colour of the mahogany and the contrast in the figured walnut (a typical gunstock wood) were my favourites.

Conclusion

A combination of the intensive preparation and the price makes these oils more suitable for smaller items such as boxes, turned goods and carvings and of course tool handles and gunstocks. If you want the best oil finish you can buy, then this is it. *F&C*



Clockwise from top left: Antique Amber on Cuban mahogany and oak, Clear Honey on rippled ash, Regal Red on English walnut



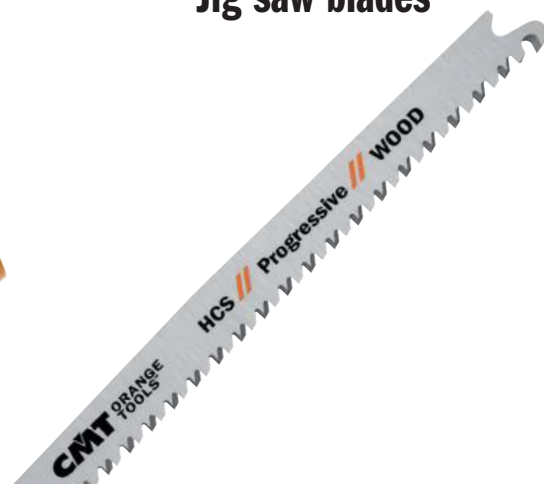
Saw blades



Hole saws



Jig saw blades



Sabre saw blades



**Tools with bore
& knives**



**Router bits
& sets**



THE WIDEST TOOLING RANGE



For more information and to find your nearest stockist
please visit www.tomaco.co.uk

Tenon saws

There's no denying it, there's no greater pleasure known to man than having the right tool for the job. Or at least that's what we've gotten used. It's a concept no doubt formed many decades ago by toolmakers for which we should at times be grateful but not quite so duplicitous in its application. Depending on your line of work, you may consider a tenon saw to be an essential item, in which case this little round-up should prove invaluable. Whether it's a dedicated rip and cross cut you're after or a hybrid suitable for both tasks, we've tracked down something to suit every budget.

Lie-Nielsen Tapered Tenon Saw



This back saw from Lie-Nielsen features a slight tapering of the blade from toe to heel, which gives the user better control over precise cuts. When you reach the gauge line on the front of your timber, the blade is slightly above the line on the back side, which reduces the risk of sawing past your line. You may find that when holding the saw back parallel to the bench the teeth will give an upward angled cut enabling faster cuts with less effort. With less material at the toe of the blade the point of balance is moved back, improving the handling of the saw.

The Tapered Tenon Saw is similar to the standard 16in tenon saw but with a $\frac{1}{8}$ in taper along the length of the blade. The cutting depth is 3in at the toe and $3\frac{3}{4}$ in at the heel. The saw plate is 0.020in thick. Teeth are filed rip cut, 10tpi, set at 0.004in per side. The overall length, including handle, is 21 $\frac{1}{4}$ in, with a blade length of 16in, and the overall height is 7in.

From: www.axminster.co.uk



Victor Tenon Saw

The Victor Tenon Saw's high quality alloy steel blade is clenched into a heavy brass backing and screwed onto the varnished hardwood coloured handle, which should ensure that this saw will maintain its accuracy over many years of faithful service. The three screw fixings on the handle allow for re-tightening over the years, and the generous depth of the blade will guarantee an accurate cut. The blade length is 12in, and with a 15tpi cross cut pattern.

From: www.axminster.co.uk



Dorchester 14in 13tpi Tenon Saw

Roberts & Lee Dorchester backsaws are a pleasure to work with, the teeth are set and sharpened by hand and cut smoothly with very little effort. This saw is a new and improved version with a walnut handle finished with Danish oil.

This 13tpi saw is designed for ripping along the grain to cut the cheeks of tenons and bridle joints. If you do have to dovetail thicker boards for chests, benches or tables it's nice to be able to bring out something with a bit more power than a fine delicate dovetail saw. The 14in blade gives a long, efficient stroke and is supported by a folded brass spine. It is best used on material up to an inch in thickness but will cope with occasional thicker material.

Backsaws use gravity and the weight of the spine to perform efficiently, they are far more accurate and easier to use if the wood is oriented and the saw kept vertical.

From: www.workshopheaven.com

Pax 1776 14in 13tpi Heavy Tenon Saw

Commissioned by Workshop Heaven and intended specifically for the cabinetmaking market, the new Pax 1776 heavy tenon saws are toothed for working in hardwoods. The blade is a full 14in long for smooth, flowing strokes and has a generous 3 1/2in depth. The heavy, hand polished, folded brass back gives the saw its power – once the kerf is established you can allow the full weight of the saw to rest on the timber and just let it purr through the cut.

The maple handles are CNC cut, then hand carved and sanded before being finished with Danish oil; if you want to adjust the shape slightly, just re-coat with oil and the alterations will blend in invisibly. An occasional wipe over with oil will help the handle to develop an even harder surface and eventually form a beautiful rich patina.

The blades are 3 1/2in deep with hand filed and correctly set teeth (please don't stone the set off, it is necessary on this type of saw to ensure a free and smooth cutting action) the teeth should be re-set every other time you sharpen the saw.

From: www.workshopheaven.com



Bad Axe 16in Hybrid Tenon Saw

Tom Fidgen of The Unplugged Workshop calls this best-selling saw from Bad Axe his 'Jack Saw'. This saw features a 4in deep by 16in long premium-grade Swedish spring steel sawplate, a firearms-grade, hot-blued carbon steel. It has a black walnut handle.

The team at Bad Axe advise new users to start out with this saw in 11 or 12 ppi filed x-cut or hybrid cut, then when you're ready to purchase a dedicated ripping saw, consider the Jack saw in 11 ppi rip or the 18in Beast in 10 ppi rip.

From: www.classichandtools.com



London Long Stroke 18 1/4in Lightweight Fine Tenon Saw

Featuring a closed handle and elegantly formed traditional tongue, the London Long Stroke from Skelton Saws is lightweight and gives a very long stroke of cut. Although 18 3/4in long, in the hand it balances the same as a standard carcass saw. With its longer length and thin plate you can make a deeper cut and gang up multiple tenon shoulders.

It features a uniquely tapered and shaped brass back. The closed handle can be made in a range of timbers and, while it's available in sizes medium to large, other sizes can be custom made.

From: www.skeltonsaws.co.uk

Veritas Tenon Saws

The unique designs of the Veritas carcass saws and dovetail saws have proved to be extremely popular and Veritas have now introduced two superb tenon saws to complement their range. They combine the best characteristics of this fine classic joinery saw with those of state-of-the-art materials and construction methods.

The tooth pattern on the thin high-carbon steel blade provides a good balance between cutting action and surface finish. The design of the bubinga wooden handle has been developed to give good power transfer while still allowing a three or four finger grip for precise control.

The crosscut version is excellent for trimming parts to length or for use with a mitre box, while the rip saw is optimised for the fast accurate cutting of tenon cheeks and similar cutting operations with the grain. The crosscut saw has 12tpi with a 15° rake and an included angle of 60°, set is 0.06720mm per side. The teeth are filed at an alternating 75° angle to the blade, which creates a 15° bevel on each tooth. The rip saw has 9tpi with a 14° rake using the typical 60° included angle, set is the same as on the crosscut saw.

From: www.classichandtools.com



Out & about: V&A Dundee

**This month we visit Scotland's
first museum dedicated to design**

V&A Dundee opened to the public on 15 September 2018. It is the first dedicated design museum in Scotland and the first V&A museum outside of London. As well as celebrating the past and present of Scottish design, it also showcases the best of design from around the world. The museum is part of a £1 billion transformation of Dundee City Waterfront, which stretches 8km alongside the River Tay and its estuary over an area of 240 hectares, in a 30-year development that began in 2001.



The stepped interior walls are lined with hanging oak-veneered panels, pierced by slot windows

History

In 2007 Professor Georgina Follett, Dean of Duncan of Jordanstone College of Art and Design, suggested bringing a branch of the V&A to Dundee to Sir Alan Langlands, Principal of the University of Dundee. A pitch was made to the V&A in London, making the case that the museum could help regenerate the waterfront area in Dundee. In 2010 an international architectural competition was

held for the building design and, after a public display of the shortlisted designs, the unanimous winner was Japanese architect Kengo Kuma. Taking inspiration from the waterfront location, Kuma's museum is designed to be 'a connector between the river and the city'. Its form is inspired by the cliffs on Scotland's north-eastern coastline, with the cast concrete cladding creating patterns of shadows which change with the

weather and the time of day. V&A Dundee's appearance is of two inverted pyramids which are separate at ground floor level, and then twist to connect at the upper galleries floor. This creates an open archway through the centre of the museum, reconnecting the city with the river and framing the view of the River Tay.

In the run-up to the museum opening, V&A Dundee organised a series of events and



The Scottish Design Galleries were designed by architectural and exhibition design practice ZMMA



exhibitions in schools and communities, aimed at introducing people to design. This included the Scottish Design Relay, a national project featuring objects that would later form part of the museum's permanent collection, one of which was a 100-year-old hooded Orkney chair. The opening weekend in September 2018 was marked by a two-day festival celebrating design, music and performance.



Chest-on-chest attributed to Thomas Affleck. Born in Aberdeen, Thomas Affleck worked in Edinburgh and London before emigrating to Philadelphia in 1763 and establishing a shop. He became known as one of the state's finest craftsmen, benefitting from commissions secured through his Scottish emigrant and Quaker networks. This mahogany Chippendale-style chest-on-chest is on loan to the V&A Dundee from the Philadelphia Museum of Art.



This lavish throne was designed by Robert Home. It is made of wood with gilt brass and gilt gesso; the velvet upholstery is from a later date. Home spent much of his life in India and served as court artist to Nawab Ghazi-din Haider of Oudh (now Awadh). As part of his duties he also designed barges, carriages, howdahs and other court trappings, such as furniture.



Bookcase designed by George Logan for the 1901 Glasgow Exhibition. It is an example of the Glasgow Style, the most significant modern design movement to have originated in Scotland.

What to see

V&A Dundee has 1,650m² of gallery space and hosts regular temporary exhibitions, workshops, talks and courses. The Scottish Design Galleries form the heart of V&A Dundee's permanent collection. The galleries display around 300 objects representing a wide range of design disciplines, from the decorative arts – including furniture, textiles, metalwork and ceramics – to fashion, architecture, engineering and digital design.

The first section of the Scottish Design Galleries, The Story of Scottish Design, looks at design as a collaborative process. It also shows how Scotland's design reflects its history, politics and geography, and explores how trade, fashion and migration have helped it achieve international impact. It looks at the rise of influential movements such as the Glasgow Style.

The second section, Design and Society, focuses on how design influences and shapes the places we live and the way we do things. It looks at how designers aim to create solutions to problems and highlights how design can transform communities, organisations, businesses and services.

The final section, Design and the Imagination, explores how design can be used to tell stories and spark the imagination. It also shows how it makes the world more beautiful and fun.

At the centre of the galleries stands Charles Rennie Mackintosh's magnificent Oak Room, designed for Miss Cranston's Ingram Street tearooms in Glasgow, which has been in storage since it was salvaged from its original location almost 50 years ago. The tearoom has been restored, conserved and reconstructed in a major partnership with Glasgow Museums and Dundee City Council.



The reconstruction of Charles Rennie Mackintosh's Oak Room is one of the museum's highlights



PHOTOGRAPH BY ROSS FRASER MCKEAN

Inherently fragile, much of the wavy lathe of the Oak Room had been damaged. Some parts could be conserved, others were beyond repair but provided enough information for the creation of replacement sections.



PHOTOGRAPH BY ROSS FRASER MCKEAN

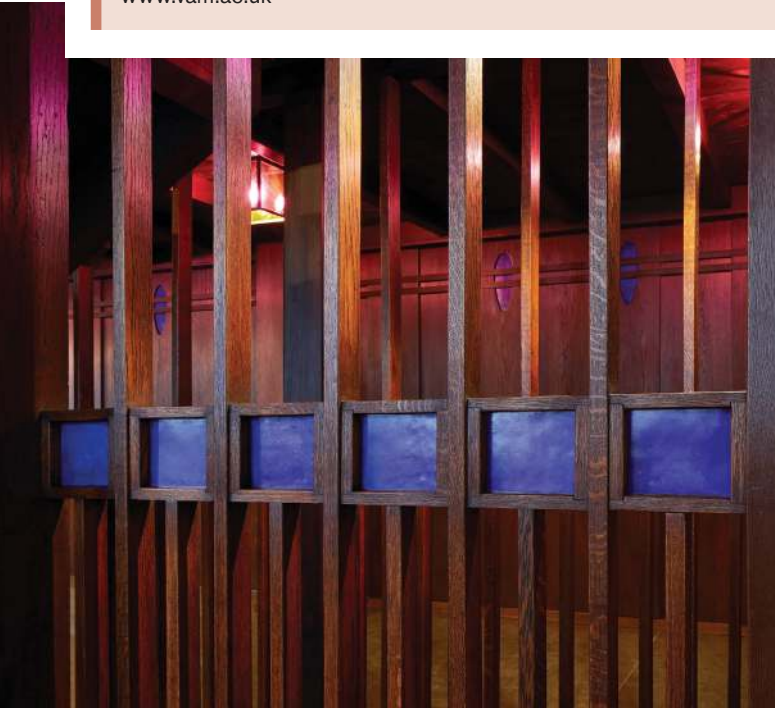
Detail of the Oak Room's stair balusters

WHERE ELSE TO SEE... V&A Museums

V&A at Design Society, Shekou
Shenzhen, China
www.vam.ac.uk/info/va-at-design-society-shekou

V&A Museum of Childhood
London, UK
www.vam.ac.uk/moc/

V&A South Kensington
London, UK
www.vam.ac.uk



PHOTOGRAPH BY ROSS FRASER MUSEUM

The Oak Room conservation work included the inspection and repair of the enamelled and coloured glass inserts from the wall panelling. Each piece was individually numbered to correlate with its partner panel.

V&A East

The V&A East project will create two interconnected sites in Queen Elizabeth Olympic Park, London – a brand new museum at Stratford Waterfront, and a new collection and research centre at Here East. Scheduled to open in 2023, V&A East will also host a partnership between the V&A and the USA's Smithsonian Institution.

The new museum at Stratford Waterfront, designed by Dublin-based architects O'Donnell + Tuomey, will provide a panoramic view of the designed world, and offer contemporary and cross-cultural perspectives through its diverse programming. A programme of major exhibitions will sit alongside new commissions, installations and interdisciplinary collaborations and projects.

At Here East, visitors will be shown how and why objects are collected, how they are cared for, conserved, researched and displayed, and how they help make sense of our past, present and future. The centre will be a purpose-built home for 250,000 objects and an additional 917 archives spanning the breadth of the V&A's collections. Highlights of the collection will include Frank Lloyd Wright's 1930s office design for Edgar J. Kaufmann – a unique and complete 20th-century plywood interior – and a 15th-century marquetry ceiling from the now-destroyed Altamira Palace near Toledo, Spain. Here East will be designed by New York-based practice Diller Scofidio + Renfro (supported by Austin-Smith:Lord).

For more information, visit:
www.vam.ac.uk/info/the-va-east-project



Artist's renderings of the exterior and interiors of V&A East

IMAGES BY O'DONNELL + TUOMEY/AMERIGO, 2018

Information for visiting

Address: 1 Riverside Esplanade, Dundee, DD1 4EZ

Website: www.vam.ac.uk/dundee

Opening hours: Open 10am–5pm every day except 25 and 26 December

Charges: Free entry, some exhibitions carry a separate charge

Information correct at time of publication, check the museum's website before making your visit

Social media dashboard

Bringing you a round-up of the best from the online world, plus a selection of the latest projects that have caught our eye

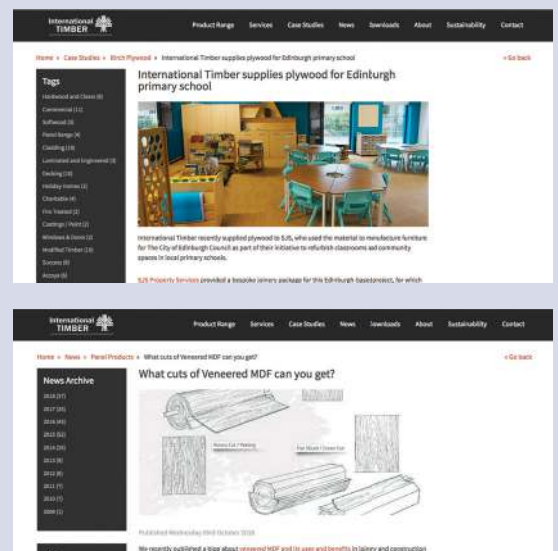
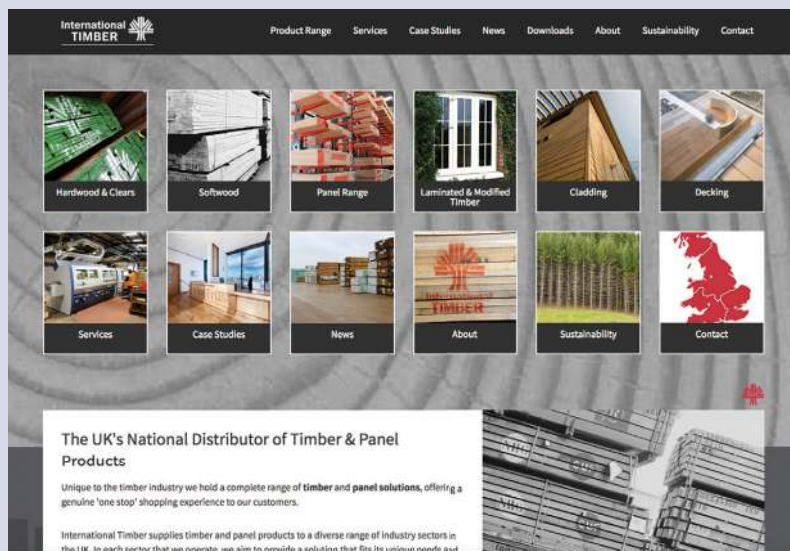
In this section of the magazine we bring together the best furniture and woodworking related content from social media. Here we'll recommend who to follow, where to comment and which online communities to join. We also feature projects we love, readers' letters, comments from the Woodworkers Institute forum and pictures of readers' work. If you'd like to see your furniture on these pages, email derekj@thegmcgroup.com

Website: International Timber

International Timber is the largest supplier and distributor of timber and panel products in the UK. Its website is a great hub for information about different types of wood and wood products such as veneers and mouldings. You can also find

the latest news about the industry, useful downloads, sustainability information and there's plenty of inspiration to be found in the website's extensive case studies section.

Address: www.internationaltimber.com

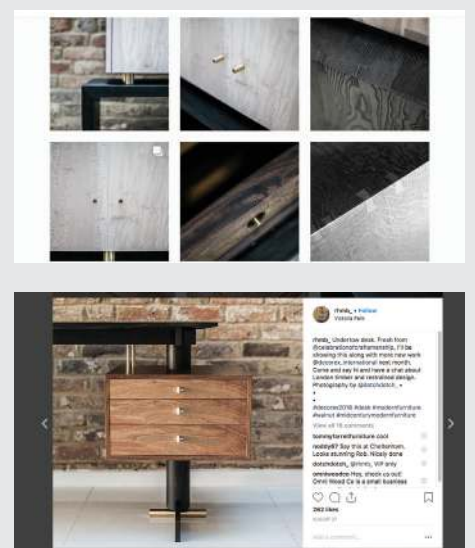
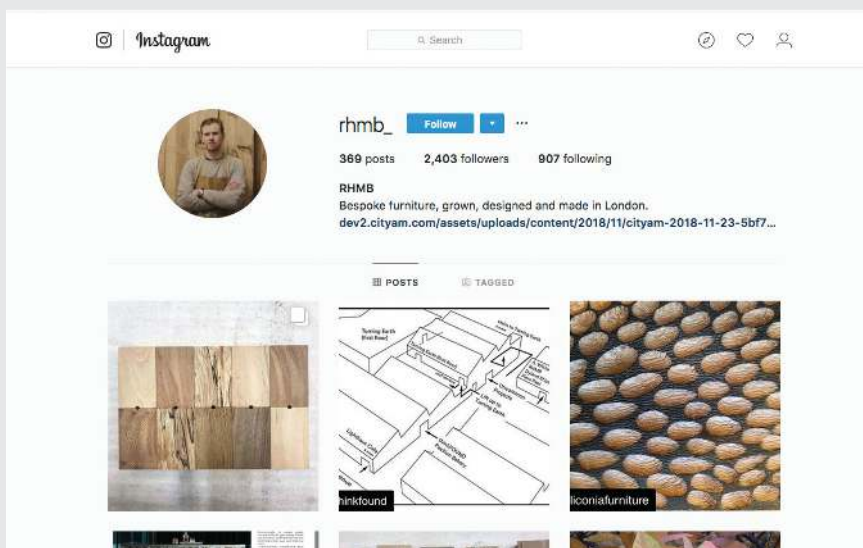


Instagram: RHMB

Rob Brain, the man behind RHMB, designs and makes bespoke furniture using timber from London trees. This means he can be incredibly specific about the provenance of his work – each piece of furniture can be traced back to a particular London

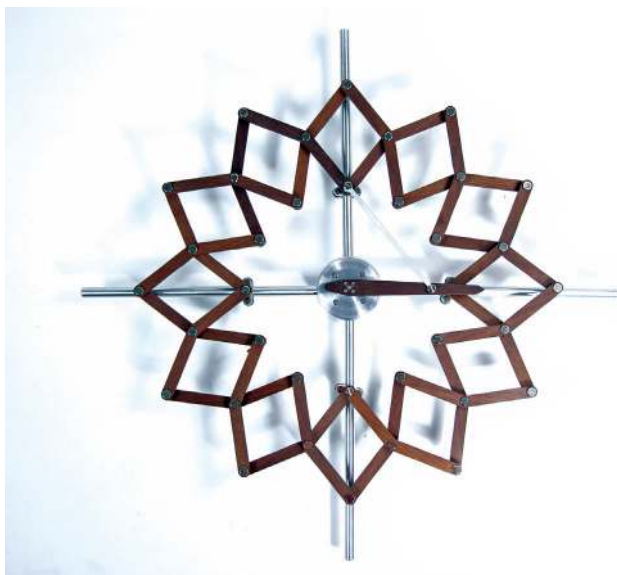
street or park where the tree once stood. You can discover his work and find out more about his design and making processes on his Instagram feed.

Address: [@rhmb_](https://www.instagram.com/rhmb_)



Projects we love

Here we highlight the latest furniture and woodworking projects from around the world that we think deserve to be shared with our readers. If you're a member of a collective or a student group and would like to see your work here, then submit a story to: derekj@thegmcgroup.com



Animaro kinetic furniture

Animaro was founded in London in 2016 by Matt Gilbert. Matt's aim was to create beautifully made kinetic furniture for the home. His background is in architecture and design from which he draws much of his inspiration. Animaro combines art and engineering to make furniture that can move and change shape.

The Crane Lamp (shown here in oak) is a movable desk lamp handcrafted from solid hardwood and brass. The body of the lamp continuously changes shape when the lamp is moving, creating limitless patterns of structure and shape. It is inspired by the shape of the crane bird extending its neck to catch prey.

The Solstice Clock, currently raising funds on Kickstarter, is a moving clock that changes shape throughout the day, when the sun is higher in the sky (midday) the clockface is at its biggest. In the evening (6pm) the clock is at its smallest.

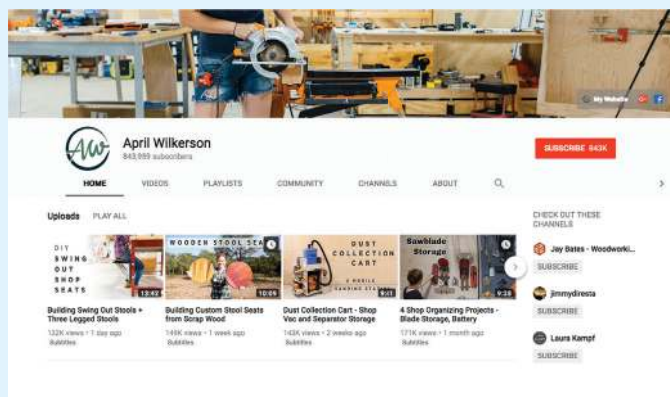
You can find out more about Animaro on their website or look out for their products at the marketplace of one of the Modern Shows.

www.animarodesign.com

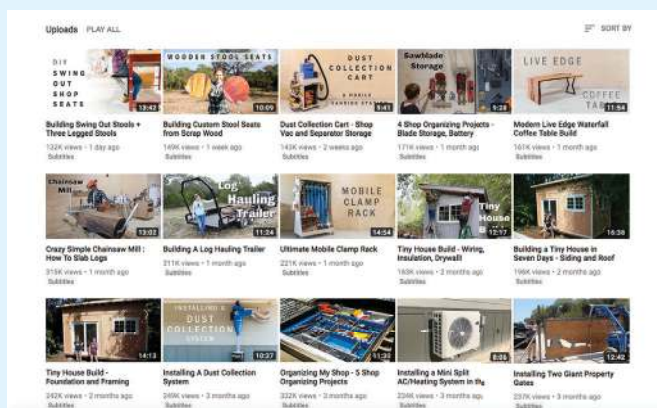


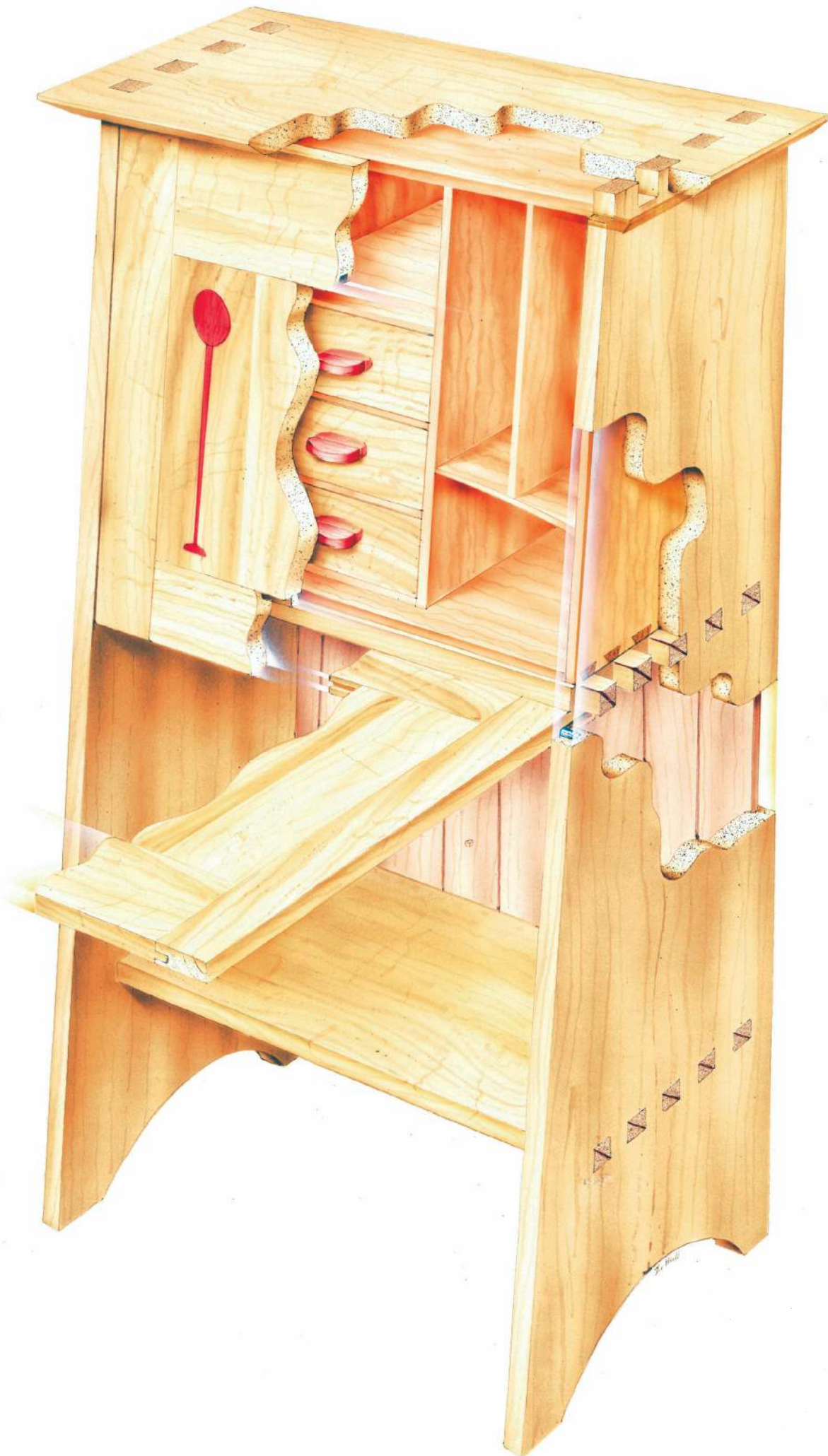
YouTube: April Wilkerson

One of Triton Tools' ambassadors, April Wilkerson is a self-confessed 'obsessive DIYer and woodworker'. Her videos cover a range of DIY projects from milling logs and learning to weld, to making three-legged stools from scrap wood.



Address: www.youtube.com/user/AprilWilkersonDIY/featured





An airbrush with the past

This month we're going back to March 1998 and issue 14 for another look at Mike Cowie's Arts and Crafts-style writing desk

Part bureau, part bookcase, this style of desk was a popular design in homes of all shapes and sizes from the beginning of the 20th century. Although not an original concept (escritoirs and similar drop-leaf designs were around much earlier), the form was given a modern twist by makers following the Arts & Crafts movement, often combining exposed joinery and handmade ironmongery. Influenced by the honest construction and decorative details, Mike Cowie, a City & Guilds trained cabinetmaker, made his version while channelling the leading exponent of the American Craftsmen style, Gustav Stickley. Throughout this series I've enjoyed looking back at the original articles and noticing how some of the descriptions regarding methods

of construction and techniques for layout are simpler than you'd find today. Either we've gotten into the habit of overcomplicating things or maybe life was indeed much simpler back then. Take Mike's approach to finding the perfect curve for example, 'The semi-circular cut-out on the sides is achieved with the aid of a suitable-sized dinner plate and bandsaw!', or his admitting to using a plastic pepper pot from the supermarket to mark out the inlay design.

Beneath all that however, is a design that's full of subtle details. Take, for example, the number of wedged through tenons that appear on the sides of the cabinet or the raised ones that pierce the top. Make a mess of these and it will be on display for eternity. A detail that's not apparent from Ian

Hall's drawing is that the cabinet interior is dovetailed together as a separate carcass and features sloping sides that match the front edge of the cabinet sides. The drawers also have sloped fronts that match the incline.

The cabinet is made from wide boards of quartersawn English oak and chestnut for the back and interior components with padauk for the inlay and wedges. With a limited amount of timber at his disposal, Mike decided to harvest veneers from the best board of solid oak to make up the centre panel in the drop-down lid. The core is MDF making the component more stable than one made entirely out of solid timber.

Were I in need of a desk at home I'd be happy to follow Mike and channel my inner Stickley.

Next month

Next month we're heading back to March 1999 and issue 26 for another look at David Gregson's expanding dining table.



WATERS & ACLAND

The Furniture School
in the Lake District

www.watersandacland.co.uk

01539 822852 info@watersandacland.co.uk

robinson house studio
furniture schoolBedside Table by Josh Milton
one year student3, 6, 12 & 24 month courses
Now booking September 2019www.robinsonhousestudio.co.uk
01273 513611 info@marcfish.co.uk

JOHN LLOYD

2019 Short Courses



www.johnlloydfinefurniture.co.uk

01444 480388 | Sussex

David Charlesworth

Tool tuning &
fine furniture making coursesRevolutionise your hand tool skills with David's
five day courses: Tool Tuning, Dovetailing,
Drawer Making & Fitting and Mortice & Tenon.David is a legend of the UK woodworking scene
and has a wonderful teaching workshop in an
idyllic location in Hartland, North Devon.See website for full course details and release
date of David's new **Mortice & Tenon DVD**Call David on 01237 441288 or email davidcharl@aol.com
www.davidcharlesworth.co.ukWILLIAMS & CLEAL
FURNITURE SCHOOLBE INSPIRED
DESIGN
CREATEwww.williamsandcleal.co.uk
01984 667555

YOU BRING
PASSION
ENTHUSIASM
COMMITMENT

WE SUPPLY
A LIFE
CHANGING
EXPERIENCE



**LEARN FROM
THE BEST™**

courses@ibtc.co.uk

www.ibtc.co.uk

01502 569663



GIFT VOUCHERS AVAILABLE
Quote FC10 for a 10% discount
on short courses



01538 715 060

Furniture Wood • Dimension Blocks &
Squares • Instrument Woods • Longbows
Cues • Pen Blanks • Knives • Lumber &
Planks • Veneers • Wood Specials

**Come and visit
our warehouse at
Megcroft Farm
and see our
great selection of
exotic and native
hardwoods.**

www.exotichardwoodsukltd.com
kirk.boulton@btconnect.com

Exotic Hardwoods UK Ltd
Megcroft Farm, Onecote Road, Ipstones,
Stoke-on-Trent ST10 2NB



W.L. West & Sons Ltd
Selham, Petworth, GU28 0PJ
t: 01798 861611 f: 01798 861633

- Hardwoods
- Wood finishes
- Australian Burrs
- Exotic Timbers
- Woodturning Blanks
- Woodworking Tools
- Fencing, Gate & Decking Products
- Bespoke Garden Furniture

**Timber, Tools & Machinery
for D.I.Y. • Carving
Woodturning • Furniture Projects**
shop@wlwest.co.uk

Off A272 Midhurst to Petworth road opp The Halfway Bridge Inn

Open: Mon-Fri 8-5

www.wlwest.co.uk

MAIL ORDER
NARROW BANDSAW BLADES
MANUFACTURED TO **ANY** LENGTH
PHONE **NOW** FOR IMMEDIATE QUOTATION
OR WRITE TO US FOR A PRICE LIST

TRUCUT

Spurside Saw Works, The Downs, Ross-on-Wye,
Herefordshire HR9 7TJ

Tel: 01989 769371 Fax: 01989 567360

www.trucutbandsaws.co.uk



Router cutters
Spindle tooling
CNC tooling/collets/toolholders
Bandsaw blades, jigsaw blades
Circular saw blades

www.wealdentool.com



Kendal Tools & Machinery

Try our wood cutting Band Saw Blade Service

Any length, width or tpi

Order online, fast efficient service

www.kendaltools.co.uk Tel. 01539 733774



DAVID STANLEY AUCTIONS

1,000 LOTS OF ANTIQUE & MODERN WOODWORKING TOOLS AT:

**HERMITAGE LEISURE CENTRE,
WHITWICK, LEICESTER LE67 5EU**

on Friday 1st February 2019

AT 9.30am prompt

Viewing Thursday 12 noon till 6.30pm
& on morning of sale from 7.30am

CATALOGUES £5 FROM DAVID STANLEY AUCTIONS, OSGATHORPE,
LEICESTER LE12 9SR

Tel: 01530 222320 Fax: 01530 222523

Catalogue@davidstanley.com

www.davidstanley.com

D B KEIGHLEY MACHINERY LTD

New and second hand machinery.

Spares, repairs, tooling, blades, router cutters, power tools,
blade and cutter resharpening, glues, abrasives etc.

Vickers Place, Stanningley, Pudsey, Leeds, West Yorkshire LS28 6LZ

Tel: 01132 574736 Fax: 01132 574293

Website: www.dbkeighley.co.uk



**Want to find out how to advertise in a magazine
that is referred to time and time again by its readers?**

Then contact Russell on **01273 402821**
or russellh@thegmcgroup.com

TIMBERLINE

Suppliers of fine and rare timbers
Veneers and inlays, tools and sundries
For the craftsman in wood

Unit 7, Munday Industrial Estate,
58-66 Morley Road, Tonbridge, Kent TN9 1RP
Tel: 01732 355626 Fax: 01732 358214
email info@exotichardwoods.co.uk
www.exotichardwoods.co.uk

Allan Calder's Ltd Sandpaper Supplies

Unit 2B Churnet Works, James Brindley Road, Leek, Staffordshire ST13 8YH



We are supplying top
quality brands of
sanding abrasives for all
types of wood turners.

Web: www.sandpapersupplies.co.uk

Email: sandpapersupplies@yahoo.co.uk
Tel: 01538 387738

Speed Genie

"Keeping wood turning at different
speeds since 1997"



CL2/3 kits

- 1.5HP kit
- Digital speed readout

NEW!!!

1HP kit from £469
1.5HP kit from £569
Retro fit digital readout £119.99
Kits available for all other makes
and models – just ask!

S. Haydock

Spring Bank Farm, Goosefoot Lane, Preston, PR5 0UU.
Tel: (01254) 851918/07849 725195

www.haydockconverters.co.uk
haydockconverters@gmail.com



Ockenden Timber

SPECIALIST WOODTURNING & CARVING SUPPLIERS

Est. 1987



Ockenden Timber are leading retailers of specialist woodturning and carving supplies, offering an extensive range of products including tools, finishes, timber and machinery. Thousands of 1st grade timber blanks are in stock and available for delivery throughout the UK and Europe. All turning and carving blanks are produced to the highest standards and subject to individual quality checks.



Timber



Tools & Accessories



Machinery



Finishes



Sharpening



Adhesives



Safety Equipment



Abrasives

Visit our website for more information and to view our full range of products.

www.ockenden-timber.co.uk



SPECIAL SUBSCRIPTION OFFER FOR USA READERS



SUBSCRIBE FOR 12 ISSUES

For less than \$75*

SAVE UP TO 38%!

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



Offer ends 04/30/2019

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

Next month in

Furniture & cabinetmaking

ISSUE 281
ON SALE 14 FEB

Project

Make David Barron's Krenov inspired jack plane



Tool tech

The Collector's Guide to dividers

Design inspiration

An introduction to Welsh
Stick Chairs by John Brown

Gallery

Waters & Acland's students'
work on display

On test

Walke Moore Tools 2500
router plane





FESTOOL

Copes with **high volumes** of dust.

Efficient, simple and reliable.
The new CT pre-separator with cyclone technology.

Large sanding areas and large quantities of dust place a great amount of strain on the main filter, which in turn affects the suction power. Mineral sanding dust from renovation sanders or long-reach sanders such as RENOFIX and PLANEX clogs the pores of the filter system and consequently reduces the suction power. The CT pre-separator separates and collects approx. 80% of the accruing quantity of dust before it reaches the mobile dust extractor. This takes the strain off the main filter and guarantees consistently high suction power throughout the entire work process.

For more information, go to www.festool.com

Coronet Herald Heavy Duty Cast Iron Electronic Variable Speed Lathe

"I found the lathe a delight to use. Functionality wise, it did everything I asked of it without fuss and components stayed put when locked in place...I think it is a great midi-lathe which will suit many turners' needs, capacity and space wise."

Woodturning 317



"With large blanks mounted you can use the variable speed control to keep the machine stable and vibration free...Would I recommend this lathe? Yes without a doubt, it's well designed and built to a high standard."

Online Review



Heavy-duty spindle lock and 24 point indexing



Features the latest motor technology to deliver huge amounts of torque from the 750 W output motor



Rotating headstock features accurate angle stops and can swivel 360°



Specifications

Maximum bowl diameter:	533 mm
Maximum between centres:	508 mm
Maximum swing over bed:	355 mm
Spindle speeds:	96-3890 rpm
Motor input P1:	1000 W
Motor output P2:	750 W
Thread:	M33 x 3.5
Taper:	2 Morse taper
Weight:	48 kg
Size:	W870 x D290 x H252 mm



"The new Herald - Sets a new standard"

It surpasses my expectations by a country mile! The size is ideal for the turner with limited space, has outstanding capacity for its footprint and is very quiet indeed... Record Power most certainly have a winner."

Online Review



**ONLY
£999.99
Inc. VAT**

Shown with optional leg stand.

BUY SAME TIME

16011 Cast Iron Bed Extension	£149.99	Save £30
16013 Cast Iron Outrigger	£39.99	Save £10
16015 Tubular Stand	£129.99	Save £20
16012 Bench Feet	£59.99	Save £10

Prices valid until 31.08.2019. E&OE.

RECORD POWER
ESTABLISHED 1909®

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

Over
100
years

Experience • Knowledge
Support • Expertise

RECORD POWER
ESTABLISHED 1909

STARTRITE

CORONET

CamVac

BURGESS

Incorporating some of the most famous brands in woodworking, Record Power's roots stretch back over 100 years.