

# Crosscut

◀ Woodwork 1 by Ernie Campbell – a textbook aimed at grade 5 and 6 pupils, first published in 1978.

Secretary: Matt Hoffmann [secretary@wwa.org.za](mailto:secretary@wwa.org.za) Editor: Trevor Pope [tpope@iafrica.com](mailto:tpope@iafrica.com)  
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**Next Turners Meeting on Monday, 4<sup>th</sup> March 2019** from 18h00 at the Living Link Hall —  
 Finishing pens – Frans Joubert.  
**Wood of the Month** – Walnut.

**Next General Meeting on Wednesday, the 13<sup>th</sup> March 2019** from 18h00 at the Living Link Hall  
 Festo Demonstration by a visiting demonstrator from the UK.

## News

**4<sup>th</sup> February 2019 – Turners meeting.** Chris van Heeswijk explained the principles of turning an oval handle using offset turning. He used a diagram to illustrate the effects of offsetting the centres on the oval shape of the handle. On the lathe, he showed how to turn each side in turn without going too far and reducing the overall width of the handle. Chris is shown holding an example of an oval handle fitted to a wooden head, for a knock-through peg toy.



**Woods of the month – Mahogany** – Chris van Heeswijk described

some of the different species of mahogany available. Honduran mahogany is the original, genuine mahogany – *Swietenia macrophylla* was first used for furniture in Europe. Only three species, Honduran, Cuban and *S. humilis* can be called Genuine Mahogany. These are CITES listed due to scarcity. Many alternatives such as plantation grown Burmese mahogany (Burmog) are available as a substitute. Other alternatives are Khaya – African mahogany, Sapele mahogany which is widely used for veneers, Pod mahogany – Chamfuti and Natal mahogany. Burmog is presently available at reasonable prices from Eco Timbers.



**13<sup>th</sup> February 2019 - General Club meeting.** Cancelled due to scheduled load shedding.

## Club Notices

**Hobby-X 2019 – 7<sup>th</sup> to 10<sup>th</sup> March 2019.** The WWA will again take part in the 2019 Hobby-X at the Dome, Northgate, Randburg. The roster of volunteers will be available at the March Turners meeting for inspection – there may still be the odd gap, so if you would like to volunteer, please do. Set-up will be on Wednesday, the 6<sup>th</sup> March with Frans co-ordinating. As a fringe benefit for volunteering, you can wander around the show in between helping on the WWA stand!



**Woodworking 101** – There will be a planning meeting on Saturday, 2<sup>nd</sup> March 2019 at the Albertskroon club house at 09h00 to discuss a series of introductory sessions on Saturday mornings.

**Herman explains:**

Following many years of expressed need for some sort of basic woodworking tuition, the Committee has decided to test the level of interest within the WWA. To this end, there will be a meeting at Albertskroon on Saturday 2<sup>nd</sup> March starting 09h00. We have a champion who has committed to arrange regular beginners sessions on the first Saturday of the month. The issue is whether there is enough interest from WWA membership, **both from learners and potential tutors.**

The agenda is opened ended, the objective being to find common ground that could work. I can foresee anything from members needing help meeting up with some "experts" all the way to formal tuition based on a set program. Let us not look for obstacles, let us see what happens. So will anyone with an interest, either for learning or for tutoring, please come along.

**Crosscut editor's comments:** Issues such as allowing individuals to attend flexibly and miss some sessions; access to tools; and how other people can contribute need to be resolved. It was suggested that a basic tool list be compiled for beginners to start with.

(There is concern about the quality of some hand-tools sold and beginners need to be cautious about what they buy to avoid wasting money. Hand planes are a particular concern with some sold locally being unsuitable. There is enough for a beginner to absorb without being frustrated by tools that are fundamentally flawed. A couple of these issues with hand planes have been documented in past articles in Crosscut. Other examples are squares that aren't square, rulers with graduations not aligned with the end, chisels and plane blades that won't hold an edge, saws that don't cut straight, etc – *caveat emptor!*)

**Eddie Marchio sent us a message:**

APPRECIATION

Time for reflection.

It's been some 15 months since I left Joburg and the WWA. I have joined the Cape club who are predominantly into woodturning. I enjoy the members and meetings but I do miss the benefits of the WWA. What benefits?....

Well I enjoyed the years of friendship and the extensive variety of knowledge available in many facets of woodwork amongst the members. The availability of the full workshop at Albertskroon even though I had sufficient equipment at home. The social responsibility of providing toys for charity is unique to the club. Be thankful to the various members who go out of their way to run the club and organise the wonderful prizes for the year-end function. Here I must specially acknowledge Alistair for his extensive efforts. Don't be shy, get involved, participate and enjoy the benefits.

The greater your involvement, the greater the benefit

Regards Eddie Marchio.

**Regular Events:** (email addresses – replace AT with @ to get a valid email address)

**Monday Morning workshop.** (Was toymakers) the first and third Mondays of every month, at 09h00 till 12h00 at the Albertskroon workshop. Meetings will be cancelled if they coincide with a public holiday. Pierre Mouton will open up the workshop. Contact Pierre at 083 308 7917 or [pm9917 AT gmail.com](mailto:pm9917@gmail.com)

**Every Wednesday and Friday** – Graham Rudings will open the workshop, but reserves the right to cancel at short notice. Graham is setting up an email circulation list for announcements and any cancellations. Please email Graham [grahamcr AT mweb.co.za](mailto:grahamcr@mweb.co.za) to be added to the list. Graham can be contacted on 082 900 0242.

**Ken's Saturday Workshop.** Ken Bullivant holds a Saturday workshop at his house in Boksburg. The location is 13 Franklin Avenue, Comet, Boksburg on the first Saturday of the month from 09:00 to 12:00. They decide on an annual project and work throughout the year making it. Individual projects are discussed and problems solved. Ken also offers private lessons too. Contact Ken on 082 809 0020 if you wish to take part.

**SPIRIT OF THE WOOD - WOODTURNERS**

Offering Woodturning lessons, One-on One Training, Classes and Club, Willing to assist persons with limited physical/intellectual abilities. Contact Johan Kramer on 083 251 0183 or [Johankramer300@gmail.com](mailto:Johankramer300@gmail.com)

### Saturday meetings

1. First Saturday – Bobby Bezuidenhout – Woodwork for beginners. Contact Bobby on 083 873 3872 or [milesiabez AT gmail.com](mailto:milesiabez@gmail.com)
2. Second Saturday of month - Herman will open the workshop – all things turning related – 083-631-0501 [hermanpotgieters AT gmail.com](mailto:hermanpotgieters@gmail.com)
3. Third Saturday of month – Contact Pierre at 083 308 7917 or [pm9917 AT gmail.com](mailto:pm9917@gmail.com)
4. Fourth Saturday of month – Graham will open the workshop – 082 900 0242 [grahamcr AT mweb.co.za](mailto:grahamcr@mweb.co.za) If you plan to attend, please send your email to Graham, so that he can send out any last minute cancellations.

**“SHOULD NO ONE ARRIVE BY 10h00 THE WORKSHOP WILL BE CLOSED.”**

**Please can the conveners complete the attendance register on the bar counter, so we can gauge attendance?**

**The closing up instructions must please be followed by the convener when leaving. Graham has placed the procedure in prominent positions in the workshop.**

**Buddy Lawson**, who most members know, has contributed several articles to overseas woodworking magazines. You may enjoy this one, reproduced from the March 1991 issue of the Woodworker magazine, published in the UK.

Buddy is struggling with ill-health at the moment – we look forward to seeing him at a meeting again soon!

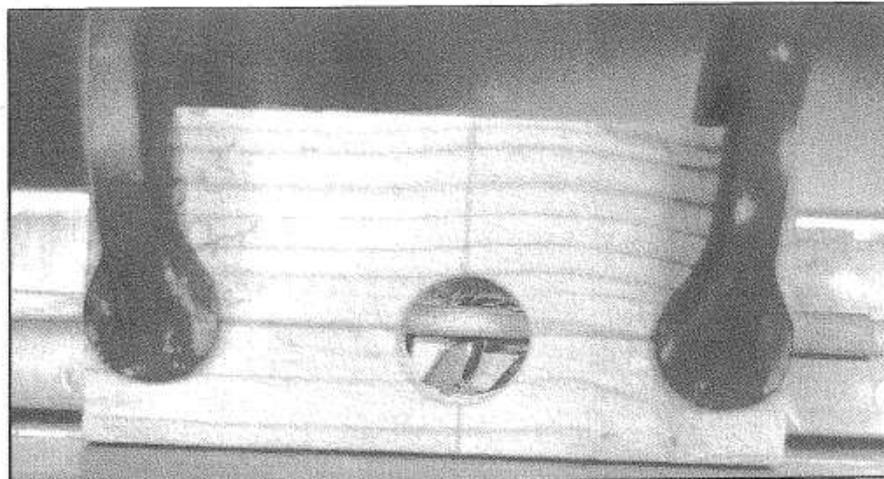
## MAKING DOWELS

To produce dowelling of a specific, nonstandard diameter or from a particular timber, or to a high degree of accuracy, Hugh Lawson turns to his own circular saw or plunging router

**E**very now and again you may need a dowel of a certain diameter, or one made from a specific type of wood, that is not commercially available.

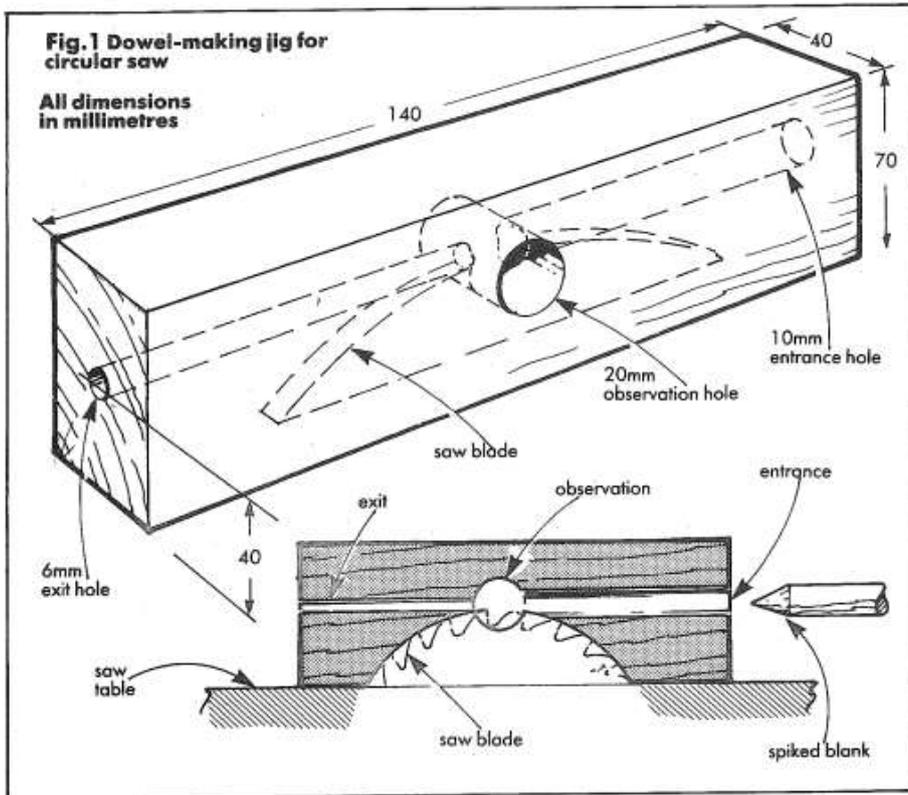
Should you wish, maybe, to peg a mortise and tenon joint, using a dowel made from the same timber as the stile or rail. When a dowel of unusual diameter or length is required it is possible to make dowels from 1.5mm diameter to as large and as long as you may wish. You can also accurately reduce the size of a large commercial dowel to the diameter of your choice. Or when a dowel is required of suitable hardwood and appropriate size which will accept the machining needed for making wooden screws. These screws are useful in toy-making, and are an essential component of the classical carpenter's 'chops'.

Provided that care is taken,



Dowel-making on the circular saw. Note that care is essential with guard and riving knife removed

# ROUND CUTTING



the plunging router or circular saw will make equally effective dowels. The high speed router is especially useful for making dowels less than 3mm in diameter. The principles in both cases are identical. The sizes of the jigs described are suitable for a 6mm dowel, but can be adjusted to your specific need. The entrance hole should always be a few millimetres larger than the exit hole, which should be the size of the dowel that you are making.

**Dowels made on the circular saw**

Use a sharp combination blade with fine teeth. Make a jig of solid wood but for safety purposes it is essential that the jig is long enough to cover the saw blade completely, when the saw is raised about 50mm above the table.

Use a drill press for accuracy to make the entrance and exit holes, and let the two holes meet in the centre of the block, the exit hole being about 40mm

above the saw table. Where the two holes meet, drill an observation hole 20mm in diameter in the side of the jig.

Drop the saw blade to the level of the table, and using the fence, centre the jig so that the saw blade is accurately underneath the centre of both the entrance and exit holes. Secure the jig to the fence with two G-clamps. The use of two clamps is essential, again, for security and safety. Switch the saw on and raise it gradually. Watch it as it enters the observation hole and continue to raise it well into the exit hole, though the exact height is not important.

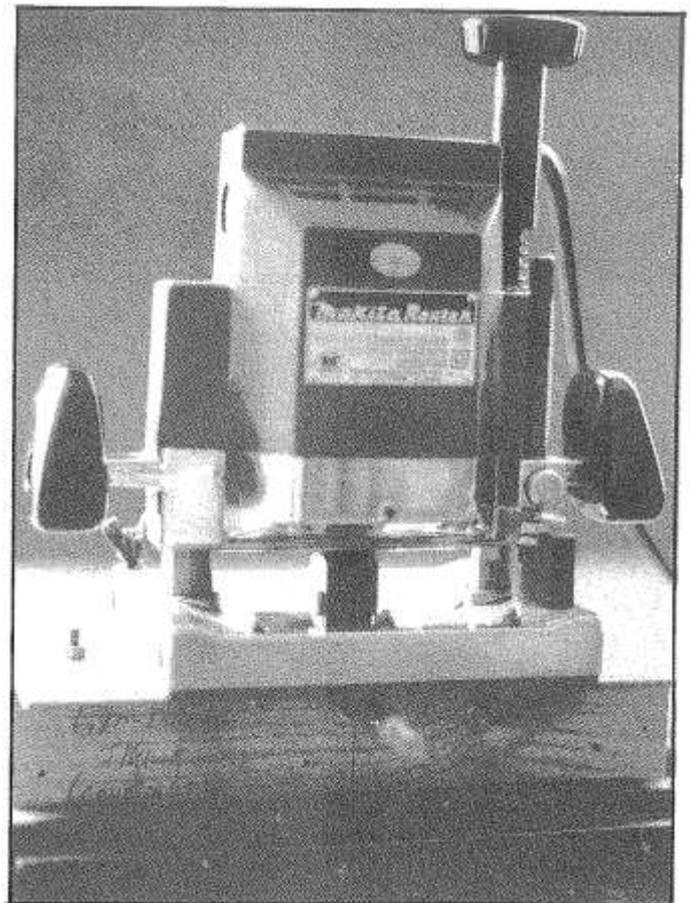
Now prepare your stock, either a 10mm commercially-made dowel whose size you wish to reduce, or a 500mm length of the wood of your choice, 12mm square. Plane the corners so that the stock fits comfortably into the entrance hole. On the disc sander shape one end of the stock like the point of a pencil, so that it can enter the exit hole and centre the stock. At the other end prepare a 10mm-diameter spigot about 20mm long, also with the disc sander.

The diameter of the dowel will depend on the exact height of the saw blade. To set the saw blade height it is convenient to

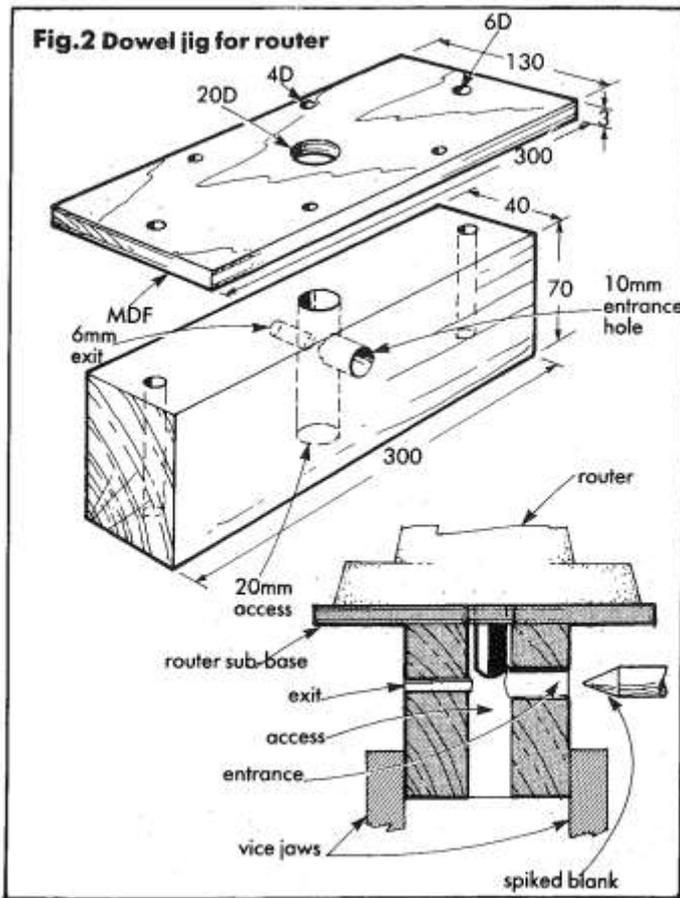
place a 6mm dowel through the entrance and exit holes, and with the saw off, raise the blade gradually so that it just touches the bottom of the dowel, as viewed through the observation hole. Withdraw the dowel, turn on the saw, and gradually insert the prepared stock through the entrance hole, rotating by hand. A fine adjustment of the blade upwards or downwards may be necessary to produce an accurate diameter. You will feel the emerging dowel rotating easily in the exit hole when the diameter is correct. Check for accuracy with a Vernier calliper.

Rotation by hand has the disadvantage that inevitably the rate of rotation cannot be constant, and unwanted spirals may appear on the dowel. A hand drill can be used to rotate the stock, but what worked best for me was a cordless drill (the type that uses a rechargeable battery), at its lowest speed. A mains powered drill rotates the stock too rapidly, and burning may occur especially at the exit hole.

As soon as the correct size of dowel has been obtained, stop the saw, withdraw the dowel, and put the 10mm spigot end into the drill chuck. Turn on both the saw and the drill and carefully insert the rotating stock. Advance the stock slowly, at an



Plunge into dowelling: the jig for the router in a vice



even rate across the saw, and you will obtain a perfect dowel of the correct diameter, and length, from the exit hole.

### Dowels made with a plunging router

Prepare a jig from solid wood long enough to be held firmly in the bench vice. Prepare entrance, exit, and access holes with the entrance hole about 10mm below the upper surface of the jig. The access hole is positioned at the junction of the entrance and exit holes on the upper surface of the jig, and again, must be deep enough to 'deroof' these two holes.

It is best to secure a 3mm masonite MDF sub-base to the router, and then to attach the sub-base to the jig with two 6mm bolts passing through both jig and sub-base. Drill a 20mm hole in the centre of the sub-base so that the router cutter can be plunged through this hole, and into the access hole of the jig. Prepare the stock exactly as before, and place a cove cutter bit in the router.

As previously, put a 6mm dowel through the entrance and exit holes, and adjust the router depth so that the cove bit just touches the upper surface of the dowel. Now turn on the router, insert the stock, and commence

the cut rotating by hand as described for the circular saw, adjusting the router fractionally up or down as necessary. When the correct diameter is obtained, switch the router off, and use the cordless drill technique, again as described, and you will have an accurately-made dowel.

### Some general points

- Always turn the saw on before inserting the stock.
- Stand to the side of the saw; should the blade hit an unsuspected knot it can propel the dowel towards the operator somewhat like an arrow from Robin Hood's bow!
- Don't use the side of the saw blade against the side of the dowel, as has been suggested; the full width of the teeth against the lower edge of the dowel gives best results.
- Do not use the bottom of a straight cutter instead of the cove cutter; most straight cutters do not have a cutting surface over the whole diameter of the bottom surface, and will therefore tend to leave a spiral mark on the dowel.
- Don't use the side of a straight cutter against the side of the dowel; again, the cove cutter working as described, will give better result. ■