February 2024

Crosscut

◄ **Inside-out turned ball with finials – a finished example by Poena Coetzee.**

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Next Turners' meeting – **Monday, 5th February2024** from 18h00 at **Made in Workshop** – Turning balls in different ways – methods, tools and jigs.

Next Main club meeting – **Wednesday, 14th February 2024** from 18h00 at **Made in Workshop** – Making bandsaw boxes – demonstration by Graham Swallow.

New WWA Account number. FNB 63026931287 – please make sure that your payment can be identified by adding your full name, perhaps cell number and reason for payment.

News

Turners' meeting. Monday, 6th November from 18h00 at **Made in Workshop** – Poena demonstrated "*Inside-out turning with a twist*". This was a complex demonstration but Poena broke it up into stages and had samples prepared for each stage, so he could go forward without delays.

He started with four pieces of 30 x 30 x 90mm imbuia taped together, that he turned to the profile shown on the above right. You can see the heart shape formed by the groove on the outside. These four pieces were then folded so that the groove was on the inside. With the four pieces glued together, Poena could turn a ball with the heart-shaped cutouts visible. But first, to lighten the piece, he first hollowed out the insides by turning a hollow into pairs of the pieces (see right),

before finally gluing up the two pairs and turning the outside to a ball shape, between centres (below left). To finish off the ends, Poena mounted the ball in a custom-made chuck shown below right. This allows him to turn each end in turn, to either shape a finial or bore a hole for a longer finial to be glued in.

Poena gave detailed measurements and carefully explained each step, so if you were taking notes, you would be able reproduce one at home.

Main club meeting. Monday, 6th November from 18h00 at **Made in Workshop** – Mike Aldous gave a talk introducing the basics of Stanley Bailey pattern hand planes. He explained how the basic design of these planes has essentially not changed over about a century and a half. He explained the workings of the Bailey pattern plane, and how to use and set it up.

It is estimated that Stanley and others made about 250 to 300 million cast iron planes, so these planes are readily available second hand. Aside from premium planes, these used models are generally better than the cheaper planes available new. They may need some attention, but the end results are worth the time spent. And you will have a proper understanding of how your plane works and how to deal with any issues that may arise.

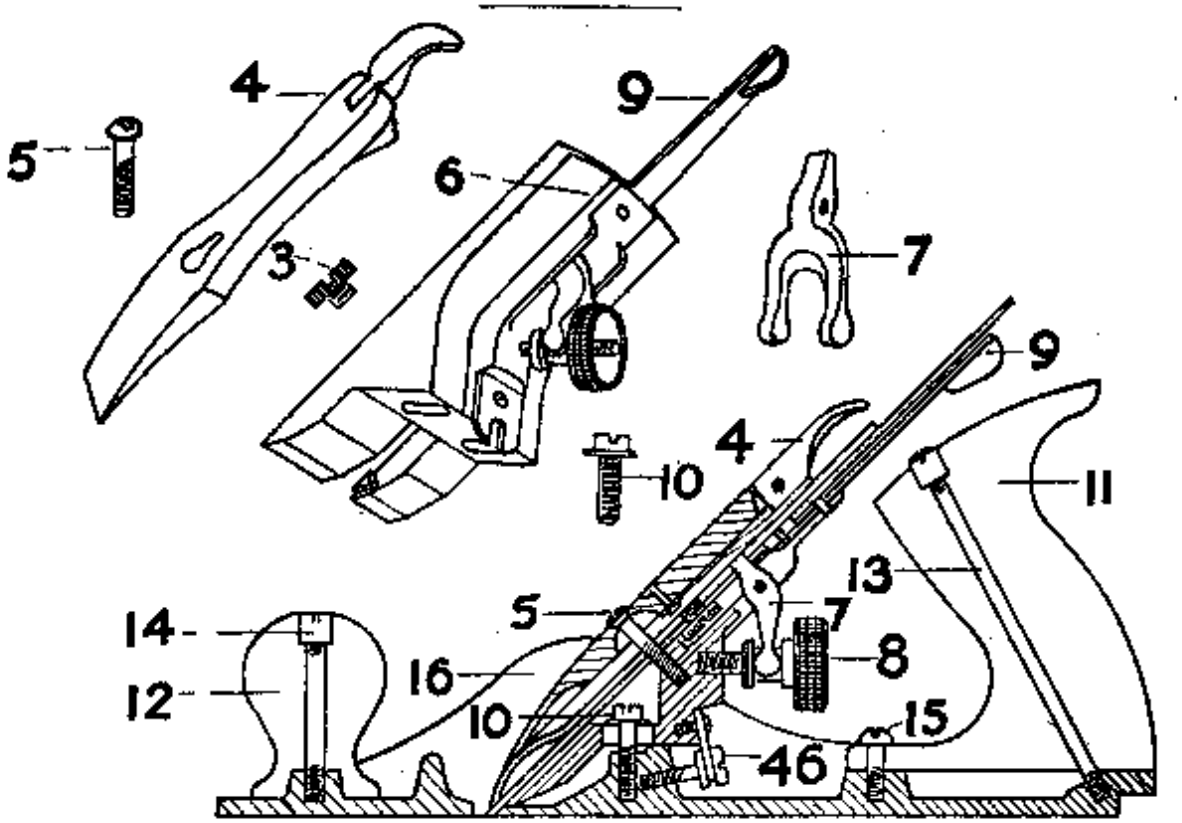


Fig. 22.—Parts of Record Planes.
3—Cap Screw. 4—Lever Cap. 5—Lever Cap Screw. 6—Frog, complete.
7—"Y" Adjusting Lever. 8—Adjusting Nut. 9—Lateral Adjusting Lever.
10—Frog Screw. 11—Plane Handle. 12—Plane Knob. 13—Handle Bolt and Nut.
14—Knob Bolt and Nut. 15—Handle Toe Screw. 16—Plane Body.
46—Frog Adjusting Screw.

Mike also introduced the Stanley #80 scraper plane to the audience as an alternative to sanding for fine finishing of flat surfaces.

The picture shows a Record No. 080 which is the same tool.

Reminder - New WWA Account number. Due to ongoing difficulties in changing signatories and poor service from Nedbank, the committee resolved to change banks. Anesh, our treasurer has opened an account with **FNB** and requests that all payments be made into this new account: **63026931287** – please add this to your beneficiaries list. Please make sure that your payment can be identified by adding your **name**, perhaps cell number and **reason for payment**. Annotations such as "annual subs" or "WWA shirt" without your name are not helpful – Anesh will not be able to trace your payment.

Access times for Made in Workshop for WWA members :

MiW times for WWA members are as follows

Monday, Thursday, Friday and Saturday 9AM to 12AM. However please take note of the following:

WWA members CANNOT just arrive at MiW and use machines unless they have booked them with MiW. This refers to the bookable machines such as the panel saw, thicknesser/planer, drum sander, spindle moulder as well as CNC machines of any kind.

Machines such as the bandsaw and the Triton router table need no booking.

Henry has also asked me to convey that all the major machines may only be used if the WWA member is familiar and fully understands the importance of the correct and safe use of these machines. Speak to Graham regarding training and qualification to use machines.

Bookings can be made during office hours of 8h00 to 17h00, weekdays by contacting one of these numbers:

Henry – 083-269 9505
Josh – 083-768 7853
Trenton – 081-365 6039

Schedule for Regular Events at Made in Workshop

1. Second Saturday of month at 9h00 - Herman – all things turning related – 083 631 0501 hermanpotgieteresq AT gmail.com

This list is subject to change, so please consult your *Crosscut* each month for any updates.

Show & Tell meetings are held at Hardware Centre every Friday Morning at 09:30. All WWA members welcome. Contact Eugene on 0824953394 or eugene@antlerfin.co.za

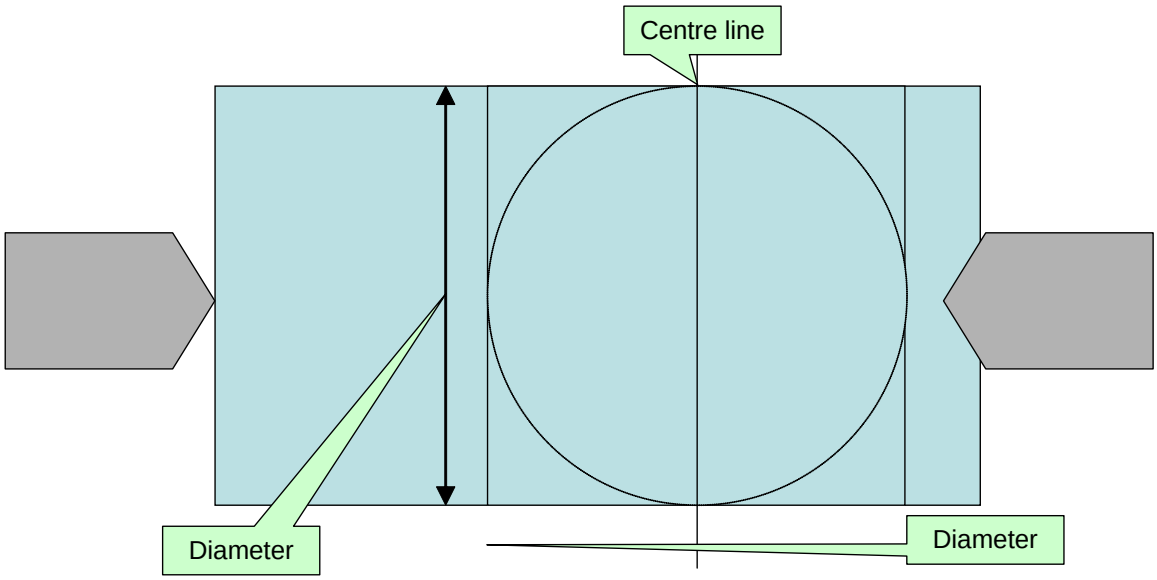
Turning Balls – an analytical approach.

At the April 2013 turners' meeting Chris van Heeswijk demonstrated a precise method of turning an accurate ball on the lathe. The hand-out that Chris provided is reproduced below: This is just one approach, there will be others shown the next turners' meeting.

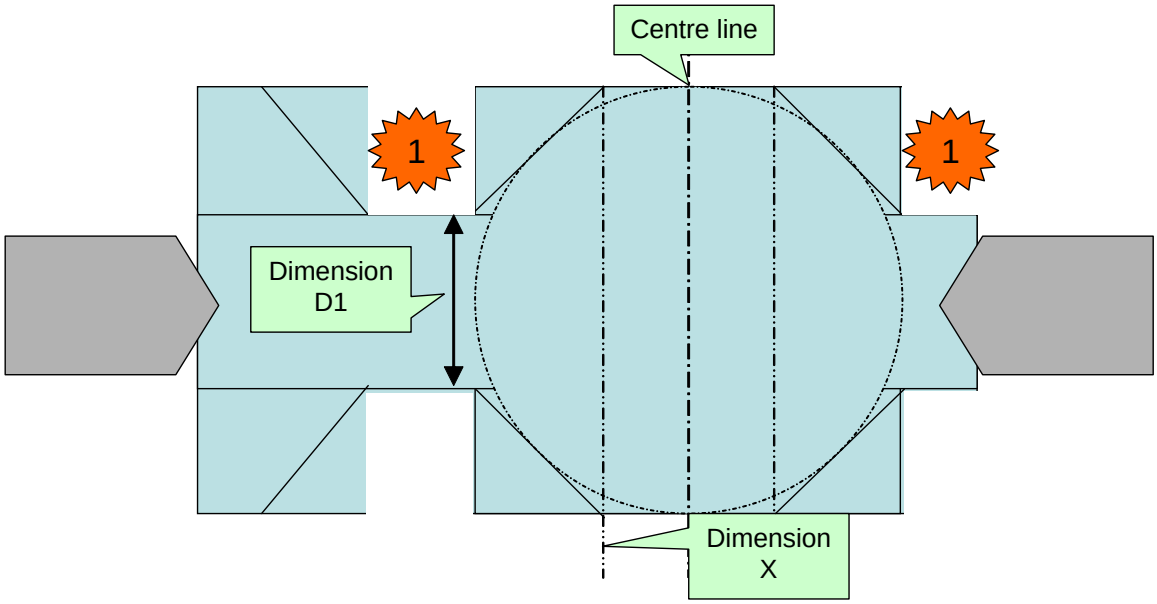
Diagrams showing steps in turning a ball

Taken from Chris van Heeswijk's presentation at the April 2013 Turners' meeting and reformatted for the newsletter.

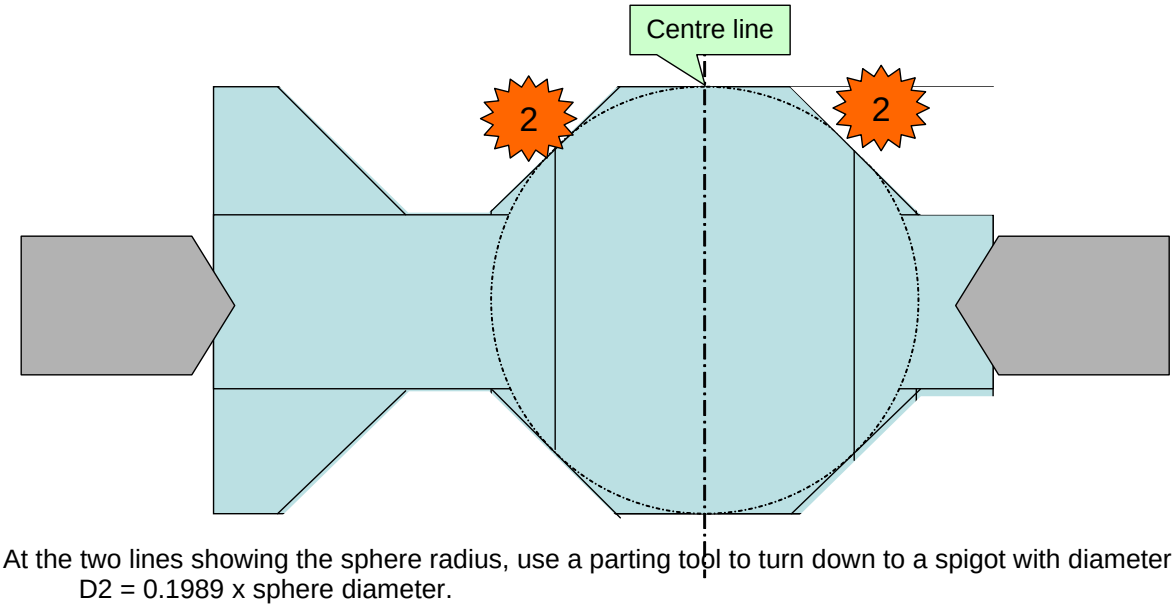
To start, prepare the blank: Turn cylinder to the diameter of the desired sphere. Mark off the sphere's centre line, and the sphere radius each side of the centreline.



Step 1: At the two lines showing the sphere radius, use a parting tool to turn down to a spigot with diameter D1 = 0.4142 x sphere diameter.
Mark off the two lines either side of the centreline, where X1 = 0.2071 x sphere diameter.

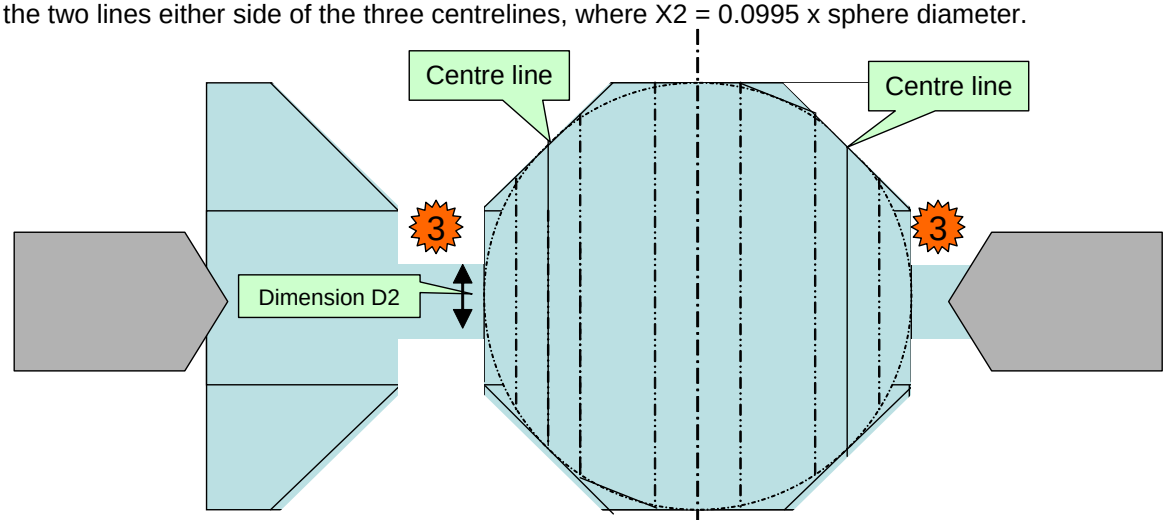


Step 2: Remove the material between the two new lines and the spigot, taking care not to undercut the facet, and to leave the line visible. The shape is now octagonal. Mark off the two centre lines of the newly created facets.

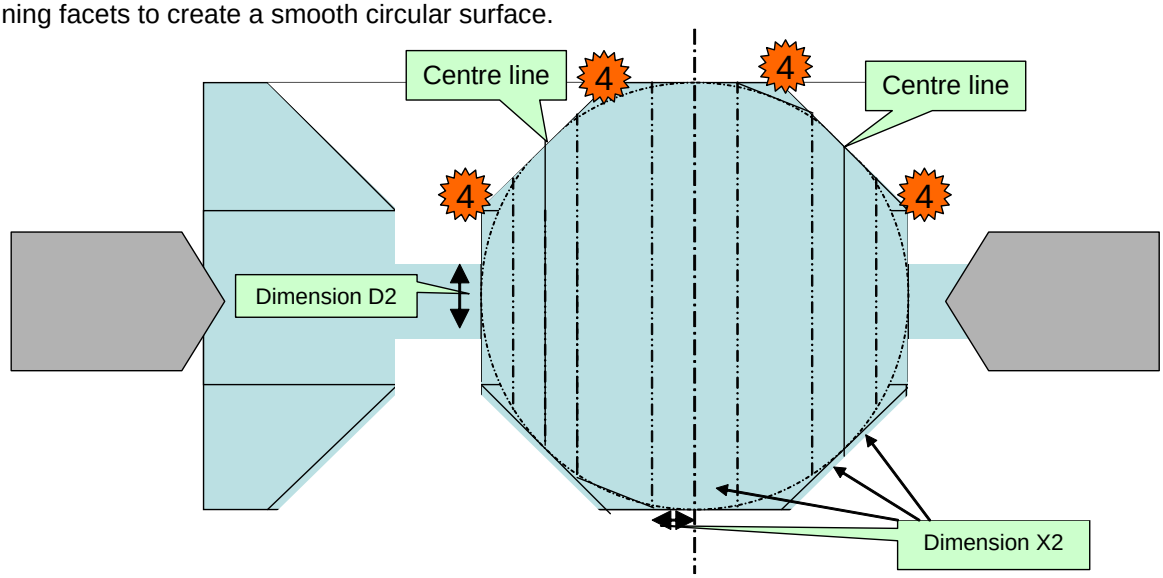


Step 3: At the two lines showing the sphere radius, use a parting tool to turn down to a spigot with diameter D2 = 0.1989 x sphere diameter.

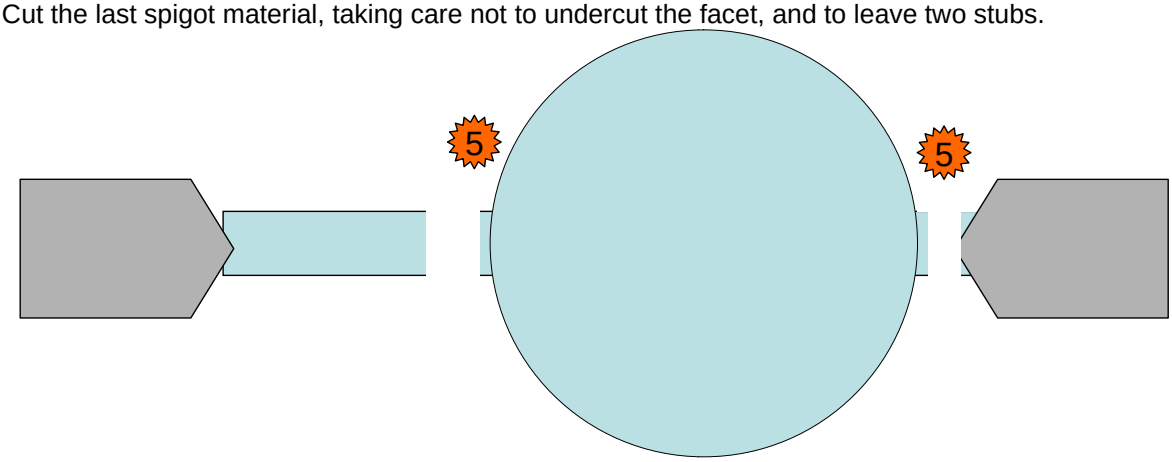
Mark off the two lines either side of the three centrelines, where X2 = 0.0995 x sphere diameter.



Step 4: Remove the material between the pairs of new lines, and new lines and the sp[illegible]care not to undercut the facet, and to leave the line visible. The shape is now almost spherical. Remove the final remaining facets to create a smooth circular surface.



Step 5: Cut the last spigot material, taking care not to undercut the facet, and to leave two stubs.



Step 6: Mount the sphere between centres in cupped or coned supports to remove the final stubs. Sand through the grits to 400 grit, rotating the sphere within the cups to ensure it remains spherical. Finish with your choice of sealer.