

HORNSBY DISTRICT WOODTURNERS INC.

Established 1983.

eNEWSLETTER MARCH 2022.

March and early April have revealed that Bert Gude and John Edwards are afflicted and a close contact with Covid respectively. We trust that both will be back to normal ASAP. Ian McKay is laid low with pneumonia and we look forward to his recovery and return soon also. Please remember RUOK? and advise were necessary.

John Dear attended a chisel sharpening course at Trend Timbers during the last week of March. As a result it is planned to actively run Shed training so that supervisors and turning members initially will soon be fully aware of at least the ProEdge procedures for all turning chisel sharpening. Plans are to copy the Sorby text and their Youtubes on the web for reading, and frequent viewing via the Shed TV screen particularly on Thursdays. If requested USB sticks with all the details and videos could be made available on loan.

Most members will be aware of the latest and probably the final up-date of the Shed's constitution and By laws emailed from the President which include some additional text in both documents. Voting on the constitution is planned at a special meeting in April.

The 600 honey dippers were sold and will be on the market for Easter; thanks to Phil and John. Thanks also to Phil, Bert, Colin and Elwyn for already turning significant numbers of dippers towards out sales later in the year. Collect dipper blanks from the Shed as required.

No determination yet regarding our proposed visit to Dural Mens Shed. The date will be discussed at our April meeting.

Remember to perform a mini-clean-up around the lathes when possible, and after using, advising formally any mechanical problems please.

Information Exchange was organised By Brian.

John Edwards showed his Sorby Deep Hollowing 'banjo' allowing consistent and safe turning right to the bottom of the blank being turned. A very substantial and quality unit retailing around \$300+ without the carbide scraper component.



Greg showed a recently purchased Tormek jig for turning-chisel's wet grinding on Tormek and similar units. Labelled SVD186R this jig will allow a variety of precise and repeatable sharpening profiles Price was \$179 post paid ex Melbourne.

Ian has purchased a small LED lighting unit suitable for our lathes which is magnetically held in place allowing adjustment to suit virtually all turning requirements.

Show & Tell was run by Lindsay.

Rusty showed a medium sized bowl turned from beautiful Claret Ash wood and looking altogether nice.

Elwyn had turned a large hoop pine bowl showing



extensive grain for the wood with thin walls and looking impressive.

Lastly Mark* showed three items, a model train double boogie for large wood transportation, a laminated goblet with a captive ring and a number of beads embellishing the stem finished well to give a very appealing turning. His third offering was a double twist candle stick, with turned top and base, also well carved, turned and finished. Mark's goblet and an item previously shown will be entered in the RAS woodcraft competition.

The remainder of the day was filled with the demonstration and a short description and showing of lattice work turned using the Leady Off-Set Chuck.

For the demonstration Greg commenced with a discussion of the topic *Off-Set Lattice Lids* abstracted from a recent edition of the English Woodturner magazine and David Springlett's revised edition book *Woodturning Wizardry* (which has recently been reissued for sale via the GMC publishing group).



Initially the demo started with a showing of a couple of recently turned lattice lids to make clearer what the presentation was about, ie turning a smaller circular 50 mm by 6 mm thick insert, on centre, with 3 mm deep grooves and ridges each approximately 2 mm wide. Once turned this insert is reversed and temporarily set, off centre, into the larger 90mm by 6 mm thick main plate which is turned on centre with similar grooves and ridges such that the reversed initial turning and the this 'main' turning cuts a lattice like opening through the combined plates.



To enhance the effect the smaller circular plate is separated from the main plate and rotated through 180 degrees and permanently glued forming an interesting turned lattice lid for a bowl etc. Choosing woods of contrasting colours (or staining/colouring one plate darker than the other) will also add to the enhancement.

For this turning the wood needs to be capable of holding, without tear out, grooves cut 3 mm deep on both sides of the 6 mm plate and with the ridges only 2 mm wide for both plates. The references state using (English) walnut for the smaller plate, and maple or applewood for the larger plate which is not so critical as the grooving is only on one side of the plate. However the better the woods' capability resisting tear out the better and the easier the turning will be.

The turning was advised to be done using a ground down 'old scraper' turning chisel ground to 2 mm wide and 6 mm long which is then used in a standard way to cut down to the 3 mm depth, and to organise a rebate in the plates.

While the above was called for, I opted to use a 2 mm wide Hamlet mini parting tool to do this 'grooving' work making certain that the parting tool was always as sharp as possible and held horizontal and with the point always on centre height. Judging the depth of 3 mm was not as difficult as imagined and for the smaller disc it is possibly better to cut down to 3.25 mm? on one side of the plate thus ensuring certain break through without weakening too much the resulting lattice.

Even so, and following the above procedures the first trial attempt was made with a wood that was soft and unsuitable for 'grooving', and it is suggested that the woods chosen be tested prior to turning.

Other major requirements are, a microwave oven (this will only be needed for 4 x 30 seconds full power zapping so hopefully the kitchen unit can be made available) and a hot melt glue gun. The glue gun can be substituted by an electric heating gun and a stick of hot melt glue with extra precautions.

Begin by bandsawing the two 6 mm thick plates, 60 and 100 mm in diameter. Turn also a 150 mm disc of 19 mm scrap softwood to act as faceplate (ensuring it has flat sanded parallel surfaces), and a smaller scrap wood 30 and 80 mm diameter to act as a compression pads while the glue sets for the plates while held in the lathe.

Screw a faceplate or faceplate ring centred to the 150 mm diameter softwood and mark clearly on the wood surface a pencil outline of the outside of the faceplate as it will be removed and assembled a couple of times. Use well fitting short screws.

Place the smaller disc centred and compressed against the faceplate using the scrap wood block and a tailstock to compress. Ensure a tight hold and turn the disc to 55 mm diameter using a skew. Remove the tailstock, the disc and the scrap wood then remove the metal faceplate from the head stock and unscrew the faceplate or faceplate ring.



Heat the wooden faceplate and the 55 mm disc in the microwave for 30 seconds and without delay reassemble the parts carefully, both faceplate centring and centring the disc, with the scrap wood using the tailstock.

Using the heat gun run a thin layer of glue around the edge of the disc (enough to hold the disc in place while turning the grooves). Allow the glue to cool; minimum 30 minutes.

Remove the scrap wood and the tail stock and set the toolrest, using a Shelf toolrest if available, otherwise set the toolrest so that the point of the chisel cut/scrape is level with the centre diameter of the disc.



On the outside edge of the disc turn a 3 mm wide by 3 mm deep rebate.

Drill a 3 mm diameter hole 1 mm into the centre of the disc and then plan your layout for the grooves to be cut into the wood. Organise for the grooves to evenly fit between the centre and the rebated circumference and carefully turn the concentric grooves, 2 mm wide by 3.25 mm deep.

Drill the centre hole to 3 mm deep, sand the turning to 400 grit, and unscrew the metal faceplate. Microwave the wooden faceplate and the disc to heat and soften the glue then carefully pare off the disc. Remove the glue from both plates using turps or a turps alcohol mixture. Hold the turned disc aside for later.

Screw the faceplate back onto the 150 mm wooden faceplate and secure the 100 mm by 6 mm disc at its centre by a tailstock ensuring a good hold. With a sharp skew chisel turn down the diameter of the plate to 96 mm ensuring square edges. Remove the plate and draw a diameter pencil line. Measure in from the circumference 30 mm towards the centre and mark this point as the new centre for off set turning.

Bring up the tailstock to this new off set centre point and hold the 96 mm plate tightly against the wooden faceplate and fix this plate in position with 4 pan-headed screws.

Withdraw the tailstock and turn a 49 mm circle about this off set centre to 3 mm deep to accommodate the smaller plate and its rebate. Continue turning away (all) the centre 49 mm of wood to 6 mm depth. Check that the smaller plate fits snugly into this recess before removing the 4 holding screws and both plates from the faceplate.

Reverse the smaller plate and fit with the grooved side into the large plate recess. The ridges' surface should be level with the unturned wood on the back side, being held in place by the rebates in the smaller and larger plates. Temporarily hot melt glue these plates together with a few drops placed at intervals around the rebated surfaces.

While the glue is cooling turn a 6 mm deep recess in the wooden face at 96 mm diameter to



accommodate the 'compound' larger plate. Also drill a 19 mm hole through the centre of the wooden faceplate.

Hot melt glue the compound larger plate into the faceplate's 96 mm recess with the turned grooves and ridges of the smaller plate side facing the faceplate. Place a heavy weight on the plate or if done on the lathe bring up the tailstock quill to the 80 mm scrap wood to ensure good compression of the plate to the wooden faceplate. Use only sufficient glue to hold the plate in place securely.

Once the glue has cooled and set commence turning 2 mm grooves into the flat surface in an identical manner as for the smaller plate. Continue turning until the concentric grooves reach the circumference while leaving a ridge at the circumference. This action will turn the concentric grooves through the large and small plates. Check that the grooves are deep enough to break through in the area of the smaller plate, where the off set concentric grooves were made on the opposite side. If needed carefully



turn the grooves slightly deeper than 3 mm to achieve break through. Drill a 3 mm hole through the centre 6 mm deep.

Clean up the break through areas using a small file and a stiff brush before sanding from 120 to 400 grit. Polish and finish as required before removing the metal faceplate and microwaving for 20 to 30 seconds on full power to soften the glue.

Using the 19 mm hole in the wooden faceplate carefully push the plates from behind to eject the plates remembering that the smaller plate will now be detachable from the larger plate. Before the glue completely hardens remove the surplus hot melt glue from the rebated area particularly, as well as, the back of the larger plate.

Replace the smaller plate into the open area of the larger with the concentric grooves and ridges uppermost and rotate the plate 180 degrees (or other desirable amount) and PVA glue in place.

Once the glue has dried sand and finish the back of the plate as for the front and the exercise is completed except for the possibility of fitting a turned handle.

Sadly the turning did not proceed as described above, namely the final concentric turning of the outside groove broke and the plate then broke from the wooden faceplate almost at the finish of the turning. This was possibly caused by a combination of factors.

1 The hot melt glue was not sufficient or applied wrongly thus breaking away when the scraping was fastest and the hold weakest,

2 the use of a parting tool may not have been as suitable as the recommended 'square ended cutting tool' made from a ground down old woodworking chisel and,

3 the use of a shelf toolrest would likely have held the scraper in place while turning the 2 mm grooves.



While the project is challenging it is not difficult so giving more time, care and attention (including sharpening the chisel near to completion of the turning) may have also 'saved the day.' As well more practice prior to the demonstration would have been advisable. I recommend this interesting project for all turners to try.

The photo below is taken from the earlier mentioned article in the Woodturner magazine and shows some of the scope available for these lattice turnings.



Our next Saturday meeting will be on 9 th April from 10 am.