

HORNSBY DISTRICT WOODTURNERS INC.

Established 1983.

eNEWSLETTER SEPTEMBER 2020.

Yet another monthly Saturday Zoom 'broadcast' made possible thanks to member Elwyn Muller and his workshop. Colin's multi camera system and our greater understanding of the Zoom software has allowed wider scope which we will continue to exploit.

RUOK? Please let us know if you need or would like some assistance during these 'lockdown times', email or phone one of the members.

Shed attendance on turning Thursdays continues with close to a full-house each week and nice work produced by experienced turners and those learning alike. The benefit to learners working alongside experienced turners certainly pays off. Please continue to book-in for each anticipated attendance.

Most of us will be aware of the sad passing of ex member John Knight last week; a good friend who



produced wonderful work from his lathe. Long term member and current treasurer John Edwards celebrated his 90th birthday during September....congratulations John. Thanks to Colin and Bert for a



large number honey dippers for stock. Members, please keep making the dippers but at a more leisurely pace. The Shed needs a couple more persons to train as supervisors ASAP so if you can help please advise.

Show & Tell was again sparse. However Elwyn was proud of his restored turning jacket and would like to advise that "if your jacket's long zipper fails it can happily be replaced with a couple of strips of Velcro to regain its serviceability," see the photo.

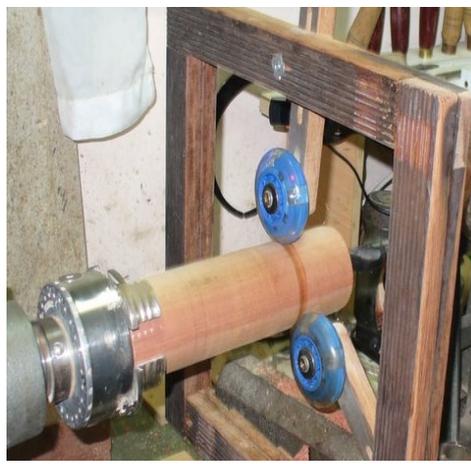
This month our demonstrator is Colin Hunter: Colin will *Discuss and Demonstrate the Design and Usage of his Lathe Steady*.

To introduce the topic Colin spoke about his need to utilise a Steady for the range of 250 mm tall salt and pepper crushers he is turning. Drilling and turning the larger internal diameters at this length



even with Vicmarc Shark Jaws posed problems of centricity so the solution was to utilise a lathe steady. By definition the steady has to remain stable and rigid and commercially made from heavy metal for this size of turning. While waxed string steadies are suitable for thinner work these were not considered.

To obtain the necessary strength hardwood planking was chosen for the rim frame which for ease of construction is square. The frame is glued and screwed at the corners. The 3 wheel arms need to be at 120 degrees and are held at that configuration in radial slots in the frame. The wheels are from a contemporary Skateboard with quality roller blades and 2 ball races each.



Fixing the Steady to the lathe rails will be a matter of design for the specific lathe but the same principles apply. Extra

frame width where it is fixed to the rails will increase the stability and is considered necessary for success.

For more details view the included photos of the important construction areas but for more detail please advise and Colin's construction outline will be emailed.

The Steady is to be used with for turning of about 20 plus 250mm (10 inch) grinders with the demonstration grinder turned from Australian Red Cedar. This wood is relatively soft compared to eucalyptus woods but still requires a steady particularly with the larger Forstner type drills used.

The blank cut to the required length and squared, is turned between centres (or in this case with Shark Jaws) using the tail stock to centre the blank prior to turning the cylinder to the required diameter, in this case a couple of millimetres greater than the OD of the base skirt.

Once this is done the blank is marked out and the Steady installed between the chuck and the tool rest. Set the position of the wheels tightly against the blank while it is held with the tailstock attached. These



wheels generally mark or indent softer woods so protect the blank with thick tape and/or set the wheels where wood will later be turned away. Commence drilling the base with the large Forstner drill to suit skirt under the crusher mechanism. The steady prevents the blank moving (ie following the grain etc) and allows a perfect 38 mm drill hole. Without removing the steady, drill the hole along the blank's length using a one inch #2 MT twist drill. Reverse the blank, expand the jaws of the chuck into the 38 mm hole, set the steady wheels tightly with the tailstock in place, remove the tailstock, and Forstner drill a hole to suit the crusher mechanism in depth and diameter. Complete drilling the one inch hole to run the entire length of the blank.

Insert a plug into the one inch hole, bring up the tail stock and turn the base to include a gentle cove on th skirt with a 3 mm bead above. For this grinder design an ogee is turned from this bead to the flared top requiring a faster speed than drilling and the Steady's noise increases somewhat.



Turning the top of the grinder does not require a steady and is not described.

Colin advises that we should be aware of a problem with this crusher/grinder mechanism. The thin metal disk after some usage bites into the square aluminium shaft greatly reducing the effectiveness of the grinder to almost zero. To prevent/overcome this issue the turning of a thicker plastic substitute as per the photo is ideal. This plastic unit, doesn't have to be round (or can be turned) and filed easily to suit the square shaft; see photos.



As mentioned above Colin has produced a document file showing the general details of the making of his Steady which he has circulated, and is also available on request.

Thanks Colin: a plan, fabricating details and the usage of a handy steady, plus advice how to prevent shaft wear of crusher/grinders as well as the turning of a very attractive Australian Red Cedar grinder body.....great.

To finish the day Elwyn showed a steady? made by an unidentified donor designed to be set on the lathe bench rather than secured on the lathe rails.



Made from layers of ply and without wheels but relying on clamping to prevent blank movement. A short test of the unit showed it to be very noisy and dangerous for other than low speeds.

For the October meeting another ZOOM is planned for Saturday 10th October from 10 am.

For further interest or to join-in woodturning go to www.hornsbymensshed.org.au