

Shavings No 43 August 2018

The Ulster Chapter Newsletter

By Peter Lyons and Brendan McAreavy

Send mail to shavings@iwgulsterchapter.com

This is an extra Shavings because of the meeting we are having on Saturday 25th August to discuss our future. We would ask that you attend this meeting. It is an important one.

Agenda for this meeting

14:00 Meeting to start in Wood Shed.

Welcome

Presentation to develop the document circulated earlier.

Questions

Open Discussion

Decisions

Conclusions

Finish with a recommendation to take into the future for the New Year.

Keep looking at

iwgulsterchapter.com for things useful for sale.

Calendar of Demos for 2018

The 2018 programme is as follows:-

Sept 8th Joe Laird. 1400 start.

Competition will be :-

Category 1 a turning made on two different centres.

Category 2 a turning made on more than two different centres.

Oct Eugene Grimley

Jason Breach will be here in November, an all day demo.

December AGM and TBA.

Shavings - August 2018

by Brendan McAreavy

Our annual barbeque, the weather on Saturday 11th August 2018 was kind to the Ulster Chapter of the IWG and rain held off until everyone was stuffed full of burgers, hot dogs and barbequed bananas...all beautifully cooked by Peter and Ricky. The turn-out for this year's barbeque was much higher than in recent years which shows the vibrancy of, and interest in, the Ulster Chapter. Visitors got a taste of what the chapter does, members had

an opportunity to catch up with each other, and we all were able to enjoy each others company and then learn from our demonstrators for the afternoon, Michael Dickson, Ricky McDonald and Peter Lyons.

Turning Miniatures - Michael Dickson

Michael's interest in turning miniatures was sparked after visiting America and then hosting Del Stubbs for a week. Whenever Del visited anyone's workshop he would turn a miniature and leave it as his calling card. There are different degrees of miniaturisation from Willard Wigan's carvings of the Mad Hatter's Tea Party inside of the eye of a needle(TV - <https://www.channel4.com/programmes/worlds-tiniest-masterpieces> Website - <https://willardwiganmbe.com/>) and Michael Modes miniature chess set (<https://www.custommade.com/miniature-chess-game-vessel-2/by/MichaelMode/>) to Kurt Hertzog's seemingly more achievable pieces (<http://www.kurthertzog.com/>) and the precision of David Pye ([https://en.wikipedia.org/wiki/David_Pye_\(furniture\)](https://en.wikipedia.org/wiki/David_Pye_(furniture))).

Michael talked about 'the turning of risk' and the making of miniatures being all or nothing. The one consolation is that we waste very little material when things go wrong but that is more than compensated for when things go well because the satisfaction of successfully completing a miniature is immense.



There are many factors affecting the successful completion of miniatures and Michael outlined the main ones.

Light - the right light is very helpful because poor lighting will cause problems. The best light is daylight and that can be complimented by bright white artificial light of the type emitted by LEDs.

Eyesight - prescription glasses can be tailored to assist with turning miniatures by having an optician set the focal length to make optimum vision at a comfortable distance from the work. This applies to regular turning as well and it is a simple calculation for your optician to set your reading glasses to perform to their best at the lathe. Headset magnifiers can also be used and are not expensive. A popular make is Optivisor (https://www.amazon.co.uk/s/?ie=UTF8&keywords=optivisor&index=aps&tag=googhydr-21&ref=pd_sl_1kr83a7f4s_b&adgrpid=52624995025&hvppone=&hvptwo=&hvadid=259044401494&hvpos=1t1&hvnetw=g&hvrand=11752781678943458037&hvqmt=b&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9045193&hvtargid=kwd-11404811) which can be purchased from £28 - £58 and offers many variations depending on the need of the user. A quick Amazon search produced many alternative headsets from £11 (https://www.amazon.co.uk/s/ref=nb_sb_noss_1?url=search-alias%3Daps&field-keywords=headset+magnifier&rh=i%3Aaps%2Ck%3Aheadset+magnifier)

Michael uses a pair of ophthalmic surgeons' glasses which allow him dual images because of how they are used below eye level.

Materials - there are many alternatives to wood and Michael outlines the ones he uses.

Bone - the cow shin bone is best and is prepared by boiling to remove meat and marrow and then bleached to whiten it.

Plastics - Corian, HDPE, Teflon, Nylon and imitation Ivory are all suitable materials and are very stable allowing more detail.

Wood - African Blackwood can be used but can be troublesome because of the grain. It also has a redness which spoils an attempt to achieve an Ebony look. Ebony is much better and instrument quality is the very best. Bog Oak can be used but, once again, coarse grain and defects can cause problems. The advent of wood stabilisation has made it possible for woods that were previously unsuitable for miniatures to be used

successfully. These resin-impregnated woods turn beautifully and take detail well. Stabilisation brings us into a new world of vacuum chambers, pressure pots, and mini ovens but, for anyone making miniatures and pens it could be a good investment.

Antler - is a very interesting material and can be combined with woods like Ebony to make beautiful jewellery. Anyone who has turned antler will know about the smell of burning hair but it is claimed that stabilised antler isn't as pungent. Michael uses CA glue mixed with bicarbonate of soda (baking soda) to fill 'grain' and has had good success with the results (the same technique can be used on bone too). One item passed around was a small goblet made using the 'crown' of the antler (where it attached to the head). The goblet was turned so that the crown became the rim of the goblet which was very attractive.

Tagua Nut - or 'vegetable Ivory' can be used for miniatures but care has to be taken because there can be a defect running through the nut. If so, resin can be injected to stabilise it. Glue the nut to a wooden chuck to preserve material.

Avocado seed - can be dried and turned with good success.

Walrus tooth - a very good material but hard to get.

Ivory - the restrictions on Ivory trade prevent the use of Ivory unless the item is at least **100 years** old and the item was either imported prior to 1982 or after 1982, through one of **13** ports specifically designated for antiques; or the item was manufactured in the United States from legally imported ivory. (taken from an internet search) As Bill Jones said "If you've got it use it".

Tools - there are few specialised tools for turning miniatures so people make their own or adapt other tools. Michael uses Obo nails (old ones are best) and shapes them to suit the job in hand. These are scraper tools because it is very difficult to cut tiny miniatures.

Collet chuck - 6 to 12 mm is the most useful. Axminster do a chuck for about £45 that comes with three collets and others can be bought to suit the chuck (<https://www.axminster.co.uk/axminster-junior-chuck-ax22446>)

Silver steel blanks - can be used to make tools

Dental tools - these can be shaped, cut to size, and sharpened to cut rings. The next time you are at your dentist ask if they could give you the tools they don't use because mine gave me a huge handful that supplied a lot of turners with picks and tools for miniatures. When dentists buy sets of tools there are always some that are impractical for everyday use because they are designed to access a particular situation that a dentist might see once in their career but, like for woodturners, tool designers are always trying to tempt them with the latest derivation.

This was a very interesting talk by Michael and his own miniatures that he passed around were sure to spark interest from people who might not have considered going small before.

Casting Resin - Ricky McDonald

Ricky McDonald did a short, but very interesting, talk on casting resin. This is a huge area but, within the time he had, Ricky was able to mix and cast some pieces to show how easily resins can be used to create blanks for turning or decorating turnings like walking sticks.

There are many types of casting resin and, for this demo, Ricky used a fast-setting polyester resin which went of in three minutes.

He advised us to consult MBFG (<http://www.mbfg.co.uk/>) in Belfast and talk to the staff there because they are very knowledgeable about the resins they sell, especially since they deal with Jim Overton <https://youtu.be/-zbGSWCh6tY> who makes all sorts of resin constructed pieces and is very particular. If you wish to learn more about resin turning it is worth looking at Heath Knuckles' channel on YouTube, he has led the research into resin casting (<https://www.youtube.com/channel/UC7ymj9d5HO-sLh2AnyILAiQ/videos>)

When buying resin be sure to check the shelf life because it is usually less than a year. Resin starts to cure as soon as it is made, even without a hardener, so it's important not to buy more than you will use.

Ricky prepared a 50/50 resin to hardener mix and added some Baby Powder talc to strengthen the resin. He had only three minutes to pour it into moulds so it is important to be set up and properly prepared so that you don't end up in a rush and with a failed pour.

The resin was poured into two moulds Ricky had made of dogs' heads and a rectangular box that was used to mix resin and coffee beans. The beans will float off the bottom so a sheet of wax paper and a board will help prevent them floating above the lip of the mould. Ricky tapped the moulds to remove air before the resin could set.

After a few minutes the casts were set and removed from the mould. Ricky pointed out that if you don't mix enough resin you can make more and top the mould up because the new mix will adhere to the old.

If you want to make large casts Ricky recommended using half as much hardener as recommended because that will slow the reaction between resin and hardener down and make cracks and splits less likely. It is also worth setting the mould outside your workshop to slow the reaction further.

This demo opened up another world of materials and turning that, once again, is only limited by your imagination.

Turning and Carving - Peter Lyons

Peter used a faceplate to mount a leaf-shaped blank, cut out on a bandsaw, about 25mm thick on the lathe and proceeded to draw a leaf shape on the edge. He then followed that line to leave a thin (5mm) wavy line around the blank that would become the edge of the leaf. After marking a 40mm spigot to allow him to hold the blank in a chuck and the boundaries of a raised ring which would be carved away to leave three feet later Peter cut the spigot and a groove on each side of the ring for the feet. At this stage the feet can be marked using either approximation or the lathe's indexing system... if you have one. The wood between the spigot and the ring for the feet was removed and the blank removed from the lathe. Peter removed the faceplate and grabbed the spigot of the blank in shark jaws to give maximum holding power.

When the blank was reversed Peter determined the extent of the bowl in the leaf and then removed enough wood to form the bowl and remove the screw holes left from the faceplate. At this stage the woodturning element is finished and Peter started the carving element.

The carving can be done on the lathe but it may not be advisable to have fast-spinning, aggressive, cutting discs being used at chest height. Peter recommended clamping the

blank to the bed of the lathe and moving it as required to access areas to be carved. The three main tools used were from Arbortec and included:

Arbortec Tuff Cut - <https://www.axminster.co.uk/arbortech-industrial-woodcarver-blade-510222>

Arbortec Turboplane - <https://www.axminster.co.uk/arbortech-turboplane-blade-502570>

Arbortec Mini - <https://www.axminster.co.uk/arbortech-industrial-50mm-2-tct-mini-cutter-600495>

Arbortec Mini-Grinder Blades - <https://www.axminster.co.uk/arbortech-mini-carver-blades-600491>

These tools are expensive but, like Michael's miniatures and Ricky's resin, open up another world of design opportunity. Maybe we could put them on our Santa Lists?

Peter described finishing the bowl by removing the tenon with either a chisel or sandpaper on a disk and then sanding through the grades. you may wish to draw in and carve veins in the leaf which will add to it realism.

We thank Michael, Ricky and Peter for their interesting and informative talks and look forward to resuming our chapter activities in September.