The Journal of the Nova Woodturners' Guild

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March 2024

The Turning Point

In this issue:

The next meeting of the Nova Woodturners' Guild
will be held at Lee Valley Tools, 150 Susie Lake Crescent, Halifax
Sunday, March 17, 2024 at 2:00 PM

At the March meeting:
$\Longrightarrow$ Turning a Wave Bowl
$\Longrightarrow$ Bring in your recent work for show & tell

The President's Report

Gary Landry

Signs of Spring are in the air. Hopefully they are strong enough to hold off any late winter blasts.

The latest I can report about our battle with technology in our efforts to get the best at-home experience for members who cannot attend is that we are still working on getting the final (we hope!) bugs worked out of the system. Last month was our first use of wireless microphones and it was essentially a success. With practice we hope to make the system better every time.

Last month's seminar by Steve Zwerling went well. Steve presented food for thought on the process of wood selection and grading for the task at hand. There were several questions from the floor which garnered further information and discussion. This was time well spent on an oft-ignored aspect of wood turning.

This month we will meet on Sunday, March 17th. Doors open at 1:30 PM with the meeting going from 2 PM to 4 PM. We will have a demo by our Treasurer, Dave McLachlan. The title of his demo is "Turning a Wave Bowl". If past experience is a measure, I expect a well done demo with lots of tips and techniques with a scattering of jigs that facilitate the end result.

I would once again like to remind all members of this year's Annual Turning Competition. A final timetable for will be released soon by Bill Maes, our VP. In any event, now would not be too early for you to begin the process of turning your entries. Just keep in mind that the results, trophies and prizes will be announced at our meeting on June 9th.

> *Editor's note: the competition guidelines can be found on our website under the* Documents *tab; here is a direct link to the current version:* **Competition Guidelines (2020)**.

Finally, we have received two requests for Guild members to take on paid commissions to do some work. One is to turn a newel post for a renovation firm. Be aware that the post has a desired size of 6.5 inches by 42 inches so you would need a full size lathe. The other is to turn some blanks into bowls for a lady. Apparently she found some bowl blanks in her late husband's shop when clearing it out and would like to pay someone to make bowls out of them for her. I have not been given any info on how many blanks there are and what their size range is. Please contact me if you are interested and I will give you the contact info where you can get more information.

Please turn some wood, stay safe and have fun.

Notes from the February Meeting

Calum Ewing

Meeting called to order at 2:10 PM with 13 members present (in person) and 6 members connected on the Jitsi platform (online participation).

Announcements:

- We are starting to plan the 2024 Turning Competition and need to get a sense of who is planning to compete. It is a lot of work to organize and run the competition and we need a decent number of competitors to make it worthwhile. It is not too early to start working on competition pieces.
- We are testing new wireless microphones in today's meeting that will hopefully result in better sound quality for those online, especially hearing the presenter speaking. We will be looking for feedback (pun intended) on how well they work.
- Upcoming meeting topics:
  - March — **Dave McLachlan** — Turning a "Wave" Bowl
  - April — **Leo Westhaver** — Turning fine finials (pre-recorded demo)
- **Richard Ford** and **Jim Diamond** have been working on resolving the mail forwarding problems with our HostGator services. The problems seem to be resolved now and hopefully the fixes will endure.

Main Presentation:

The main presentation was a discussion with **Stephen Zwerling:** *Turn or Burn*, Wood Use Decision Making.

Introduction:

- this is a common conundrum with both beginners and experience turners: what is the best use of this wood? Is it suitable for turning? What's the best way to turn it?
- Often we have chunks of wood that we have been keeping for years and decide to try using them for a project. Or it may be a piece newly acquired through an auction or online sale.

Assessment:

- Need to take a very critical view of the piece
- Think about storage requirements, how long it will take to process it for turning (end sealing, drying, blank preparation, etc.). Processing needs to timely or it can rot before you get to it if it is acquired green
- Avoid being overly attached to a piece because it has pretty grain, colour, etc. and avoiding critiquing serious flaws or problems
- It is okay to say, 'No' and not acquire or use a piece that's not right for you

- Characteristics of the piece may conflict with your hopes for it (grain, flaws, bark inclusions, cracks, etc.)
- We often approach things from two directions:
- how can I use this piece to achieve my desired end result?, vs.
- what can I do with this interesting piece?
- Need to consider our current skill levels and abilities (frankly and honestly) when considering a particular piece
- Is the species of wood something that you want to turn? Have you used it before? Does it have typical problems that other species don't?
- How does it fit into your current practice? New growth areas in your turning?

Limitations:
Two types of limitations will affect your decisions:

Physical

- insect damage?
- Fungus / mold? What protective equipment will be needed to turn it safely?
- Metal inclusions? — nails, etc can be very dangerous when hit during turning or cutting up a blank. Be wary of any wood from urban or suburban areas.
- Toxicity? — beware of toxic woods (e.g., Oak, locally or many exotics).
- Size and Shape? — is it too big for your shop, lathe or abilities to handle and secure it? It may be large in appearance but have very little usable fibre inside. In Nova Scotia, Beech, spalted Birch and the ornamental Maples are bad for having a lot of unusable wood.
- Fibre Quality? — need to look carefully at end grain for micro-checks (use a magnifying glass) that will impact the end result.
- Moisture Content? — is is properly dry? Will it twist, crack, spalt or rot after turning if not correctly dry?
- Bark Thickness / Inclusions? — may go quite deep into the fibre; thick bark may also hide loose segments of wood that can come loose during turning. Also check bark carefully for signs of insects.

Aesthetic:

- Can you visualize the desired piece using this piece of wood? Are there areas (flaws, damage, grain changes, etc.) that will make the desired outcome difficult or impossible?
- Is the species appropriate for the desired finished piece — especially kitchen utensils exposed to a lot of moisture?
- How are the qualities of the finished piece (shape, form, use) enhanced by the characteristics of this piece of wood?
- Can you 'think outside the blank' and see potential outcomes or inspiration in the piece?

Practical Examples:

Stephen brought along a series of blanks of Apple, Oak, Plum, Birch and other woods and discussed potential uses of each:

- small crotch pieces — often turned very thin and allowed to distort as they dried (must be turned very thin to avoid cracking.
- limb wood (the pith is well off-centre) — has a lot of tension, so may distort or crack as you turn it.
- Apple — trunk and branches don't grow straight so will often have a lot of tension that may change over the length of a piece. This is why Apple often splits or distorts during or after turning.
- burls — may have deep bark inclusions so the end result may have not enough actual wood for your desired object once you start cutting into it. Need to think about where the burl and non-burl grain are in the piece and consider the orientation when mounting, to control where in the piece the burl figure is in the finished piece.

Show & Tell

Dave McLachlin showed off a small, one-handed gouge with a short carbon fibre handle — useful for turning small finials, pens, etc., and frees up the other hand to provide extra support to the piece.

Bob Earle provided an update on his DIY friction sander. He now has made 2 inch and 3 inch sanders. He also showed his sandpaper disk cutter to cut disks for the sanders.

Raffle Results:

Ted Monk	took home a mystery grab bag
Chris Palmer	added a book to his home library
Gary Landry	won a pen / pencil case
Joe Crouse	collected a new book and a mystery grab bag
Jim Kuzma	added a ball cap to his wardrobe
Martin Lachance	went home with a pen kit including a wood blank
Bob Earle	won a pen / pencil case and a new book

The meeting wrapped up at 4:10 PM.

Upgrading a General 16018

Doug Allen

Editor's note: I asked Doug if he would like to share his flickr "story" with the Guild, because after reading it I was quite impressed with all the updates he did, and because I think other Guild members would also be interested to see what he did.

Doug (modestly?) does not want anyone to think he is presenting himself as an expert at this sort of stuff, but rather that he is a tinkerer. I don't want to get into a big discussion about what those words really mean, but if you look at the flickr page below, I expect you will consider Doug to be, at the very least, a serious and capable tinkerer.

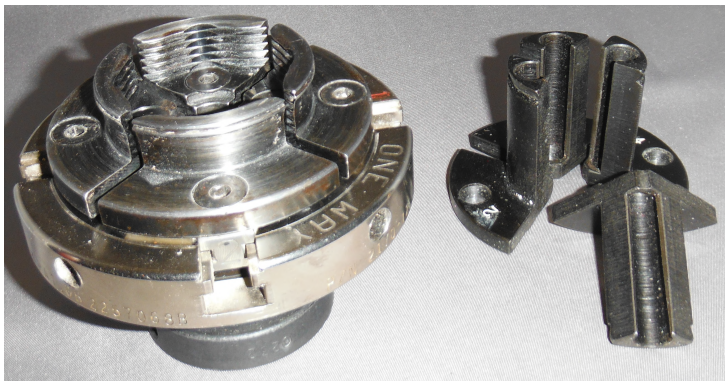
Caution: Doug notes that doing this sort of tinkering can get in the way of doing turning!

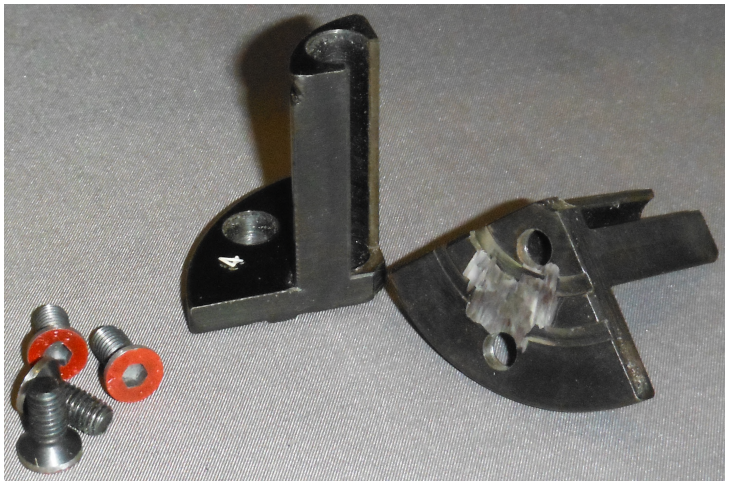
The most recent incarnation of Doug's General 160 is shown above. To see a short description of Doug's epic journey to get there, visit his flickr page https://www.flickr.com/photos/76762476@N05/albums/72177720312200324/. *If you aren't familiar with flickr, scroll down to the first picture below the "title" picture, click on the first picture, and note that Doug has a little blurb about each picture, which you might need to scroll down to see, depending on your browser. Click the arrow at the right of the photo to move on. (You may also want to check out some of Doug's other flickr albums while you're there.)*

Frankensteining a Chuck

Norm Jolivet

After assuring myself that the Vicmarc VM100 series jaws would fit my OneWay chuck body *(both of these seen in the photo to the right)*, I ordered a set of Pin Jaws (V00651) from Branches to Bowls. As it turns out, the only compatibility is in the mounting hole spacing.





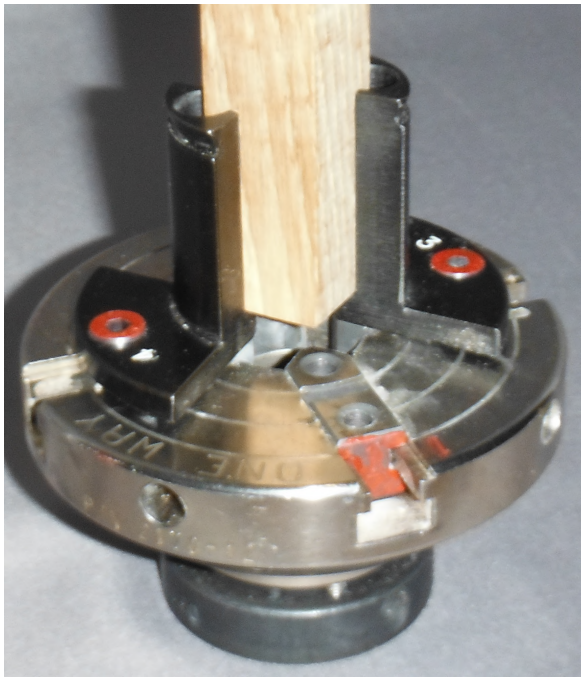
The jaws had to have the mounting holes enlarged to 6mm to match the Oneway bolts. On the other hand, the 6mm screws had to have the heads reduced to fit the jaws' front channel. Gripping the screw in a drill gun and running the head against a grinder solved that problem. I did all eight and to mark them I used a red paint pen.

Then came the discovery that the protrusion on the bottom of the jaw did not match the groove in the Oneway base jaw.

Great!

With the newly modified screws, I attached a base jaw to the Pin Jaw and traced the outline with a scribe. Using a Dremel tool I ground away just enough of the offending ridge to allow it to mount without obstruction. This was repeated three more times.

If you are silly enough to do this, remember that with the removal of the ridge the jaw strength has been reduced.



DaveM's Fireside Chat

David McLachlan

First off I have to apologize for missing the deadline for submission for last month's newsletter; I put it down to having to deal with snow over the weekend, which took up a lot of my time and energy. But here we are with spring just around the corner. Over the past few months I have used this chat time to reflect on decades of my past turning experiences, but I thought to day I would reflect on the last 10 years that I have been with the Guild.

I believe that I started with the Guild back in 2012. Although I had a lot of years of turning experience I hadn't really gotten a lot better than I was in the 70's and 80's. I certainly enjoyed turning, but I hadn't seen or done a lot of experimental turning like segmented turning, adding colour and texture, off-set turning, deep end-grain turning, fine finials, nor improved much the artistic consideration process into my pieces... Through the Guild my world opened up to all of these things through our members instructional demos and guest lecturers. I learned so much from members like Don Moore, Steven Kennard, Richard Ford, Gordon Marshall, Glen McCarron, Ted Monk, Stuart Taylor, Robert Atkinson & Dianne Looker (to mention a few of the demonstrators) and from all of the members who participated in the monthly Show and Tell sessions. So many new techniques and ways of doing things were introduced, which I found encouraged all of the Guild members to stretch out our creative juices and turn more interesting pieces. It also encouraged me to share my experiences with the Guild whether it was photographing our work or talking about work holding methods or just showing off what I had made in Show & Tell.

One thing that also really encouraged me to up my turning game was a juried public exhibition at the Mary E. Black Gallery July 16–Aug 31, 2015, which was spearheaded by the then Guild President, Dianne Looker. It was a year long project to get everything in place like the funding, a Curator, getting accepted by the Mary E. Black Gallery for an exhibition and producing a limited run of a professionally produced Catalogue of the exhibition. A lot of time at meetings was spent discussing how we members could improve our artistic visions to produce some exquisite pieces for the show. I believe it was a turning point for the Guild in that we all pulled together to make this happen and a lot of self improvement happened. To get a good picture of what was produced one only has to go to the "Events pages" and click the *Mary E. Black exhibition 2015* link to see the whole catalogue for "*Against The Grain: Beyond Traditional Woodturning*". I would encourage all of our membership to go to our website and review this exhibition catalogue to get a good dose of inspiration.

It has been almost a decade since we have done a public exhibition and maybe it is time for us to think about doing one again in the next couple of years. I can't think of a better way to elevate the overall quality of the collective work of our members than planning to have something to show in a juried public exhibition, if there is interest from our membership to do so, let's bring it to the Executive… the deadline for a proposal submission to the Mary E. Black for 2026 is this coming May 27th.

So now onto some technical talk. I recently upgraded my floor model drill press by replacing my Jacobs chuck with an ER20 collet holder (see Photo 1). I had always had a problem with concentricity with my 30 year old drill press, and had changed the Jacobs chuck once before with little improvement, (maybe I just didn't purchase a high enough quality replacement chuck). The ER20 collet holder with

a collection of AA precision collets seems to have really helped and since I also use ER collet holders on the lathe for drilling (see Photo 2) it made perfect sense to me to also use it on the drill press. It was an easy enough procedure, simply use a tapered drift key to release the old Jacobs chuck from the drill quill (Photo 3) and insert a MT2A Type ER20 collet holder (this is a different holder from a drawbar holder in that it has a flat end piece that prevents it from turning in the drill press quill[1]). With the ER20 holder I can hold drills up to 1/2" or 13mm with standard collets and with oversize collets I can go up to 16mm in 1 mm increments. For really small drills I insert a very small Jacobs chuck, (which has a 3/8" shaft) into the ER holder which will handle 1mm to 5mm drills with ease.

Photo 1: My drill press with a new MT2A collet holder in place, ready to drill.

Photo 2: Left to right: old Jacobs chuck; new MT2A ER20 collet holder (note the flat tang on the end to keep it from spinning in the drill press quill); MT2 tapered drift key for removing the MT2 shafts from the quill; a MT2B ER20 collet holder with a drawbar to lock it into the lathe headstock.

[1] *Editor's note: In case you are as unschooled about Morse Tapers as I was before putting this issue of the newsletter together, an MTA taper has a tang and an MTB taper is tapped for a drawbar.*

Photo 3: Using the tapered drift key to remove the MT2A shaft from the drill press quill with a light tap of a hammer.

At the last meeting I showed off two new tools I have been working on for working fine finials. Here (Photos 4 through 8) are some photos showing off the handles and their respective blades and how the blades were produced from hardened high speed steel blanks. One item that really helps in the milling process is an ER square block in Photo 9 which keeps the round blank in a specific plane for the grinding process in the milling attachment for the Taig lathe.

Photo 4: HSS 6mm gouge in an 8” handle.

Photo 5: Double-ended 12mm skew in an 8” handle.

Photos 6 and 7: The two ends of the 12mm skew, one with a radius profile and the other end a straight profile skew.

Photo 8: A close up of the flute architecture and polishing. The radius of the flute is $^{7}/_{64}$", done with a $^{7}/_{32}$" chainsaw diamond sharpening burr.

Photo 9: Setting up the Taig lathe with a 25mm diamond hone, with a 8mm HSS blank held in a ER25 square block collet holder which is held in the jaws of the milling attachment on the lathe. The milling attachment allows incremental control of the X, Y, & Z-axes. Basically the Y-axis is centered over the diamond hone while the X-axis is moved back and forth longitudinally over the hone and the Z-axis is lowered down onto the hone a few thousandths of an inch after each pass. The diamond hone is lubricated with WD-40.

The Electrical Corner

Jim Diamond

I'm guessing that most (if not all) Guild members know that electricity and magnetism are best friends: an electrical current in a wire generates a magnetic field, and a changing magnetic field will induce an electrical potential in any wire in that field. (I'm using this sorry excuse to justify talking about magnets in this "electrical" column.)

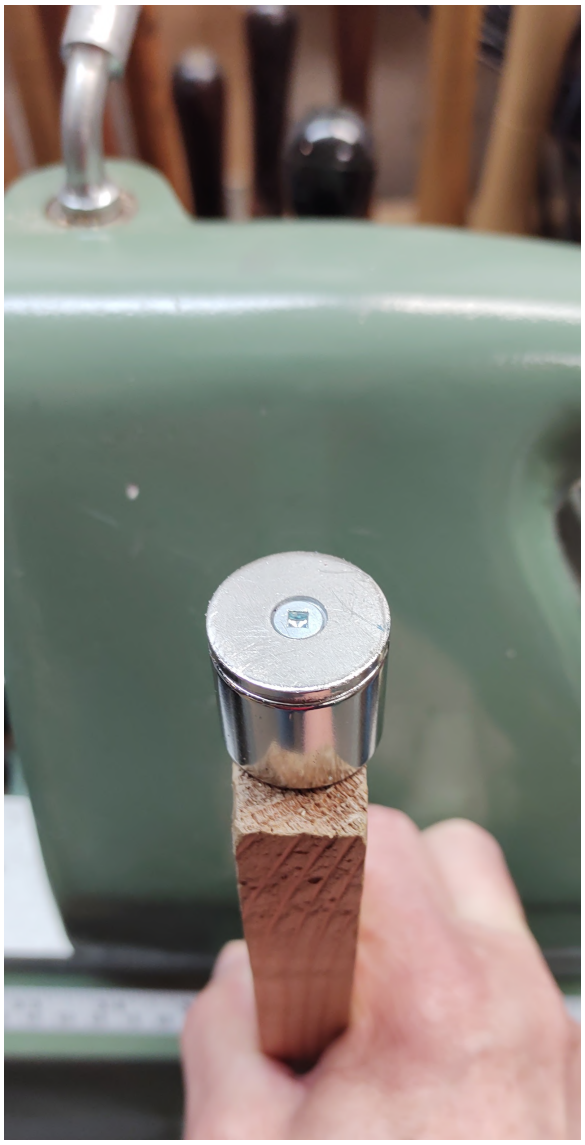
As those of you on the **members** email list already know, a neighbour of mine has some cylindrical rare-earth magnets he is hoping to sell. They come in two sizes ($^7/_8$'' diameter by $^5/_8$'' long, and $^7/_8$'' diameter by $^3/_8$'' long). Both have a $^7/_{32}$'' hole length-wise down the middle (all these measurements approximate).

In order to test their strength, I tried picking something up with one of each size. The problem is, the smooth surface finish is a bit slippery, so picking something heavy up was a bit while holding the magnet with my fingers was a bit of a trick. A major benefit (in my opinion) of these magnets over some commonly-available magnets is the center hole, which provides an easy way to hold on to the magnet. Specifically, I attached each of them (one at a time) to a piece of wood by screwing them to a board (the screw first goes through a steel washer so I could countersink the hole large enough for a #6 wood screw to sit just below the surface of the washer).

The smaller magnet was able to lift an electric motor that weighs about 13 pounds, and this was lifting the motor by the top of the (cylindrical) housing. I had to find the balance point so the motor didn't tip, and the magnet was on a curved surface, so it might lift a heavier object if the magnet was against a flat surface.

The larger magnet picked up a smallish machine vise which weighs a bit over 33 lbs (again, I had to find a point near the vise's center of gravity, so it wouldn't tip over).

Both of these magnets are strong enough that I thought they might be handy for jigs. In fact, when trying to get them apart, or when trying to put them back together, some care is required to avoid getting parts of your fingers pinched between two magnets. DAMHIKT.

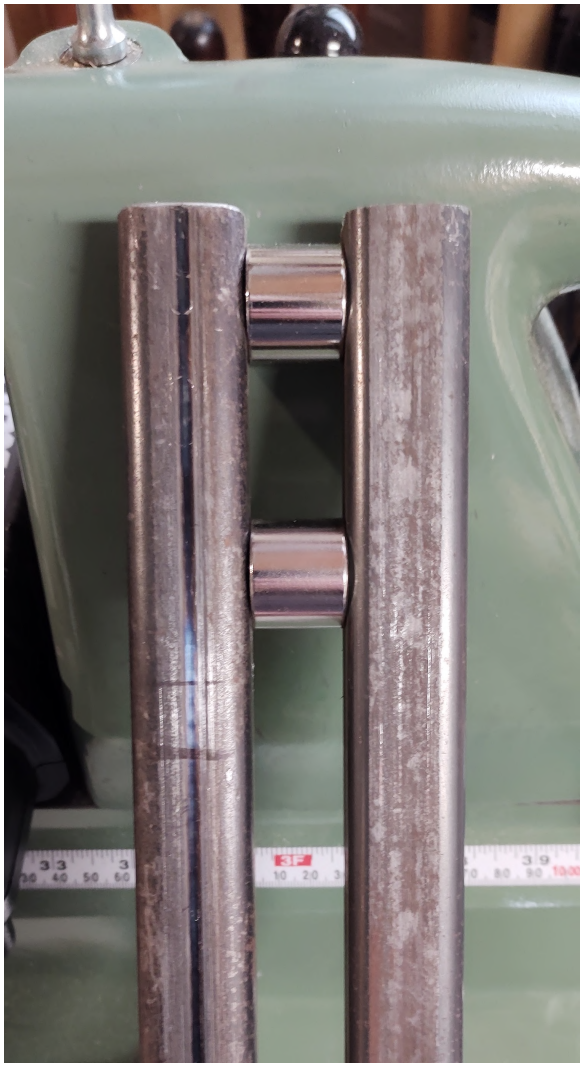


Magnet on a stick, with a lathe tailstock in the background so that this counts as a woodturning article.

My neighbour will sell the larger magnets for $2.50 each, and I am guessing he will let the smaller ones go for a bit less money. If you would like to get some, email or phone me and we can set something up.

Speaking of jigs, some of you might own tools with “switchable” magnets. One example is the magnetic base used for dial indicators, and another place to find switchable magnets in the workshop is in some table saw featherboards. I have a magnetic featherboard I bought some time ago on sale, but I'm having a hard time not describing the current price as astonishing, and not in a good way.

I began to wonder whether or not I could make a switchable magnet using these magnets. Essentially, you can make a switchable magnet by having a mechanical design which either “shorts out” the magnetic field (by connecting the north pole and the south pole with a piece of steel) or aligns the magnet(s) so that the only “easy” way for the magnetic field to get from a north pole to a south pole is through the item you want the magnet jig to stick to (such as your cast iron saw table). In **this video** you can see (at the beginning) a home-made magswitch which (apparently) requires a 3D-printer to make up a plastic body. However, beginning at about 2:12 in, the same video shows a simpler magswitch construction, and gives a basic “theory of explanation” (picture only, no words) of how a magswitch works.



Two magnets between two pieces of square tubing. (That lathe tailstock again!)

Tragically, I have almost no scrap steel in my shop, but I did find two pieces of square tubing. I put two of the magnets between the two pieces of tubing as seen in the photo on the right. Orienting the two magnets so that their north poles touched **different** pieces of tubing created a magnetic “short circuit”, which has the effect of containing most of the magnetic field (and therefore the apparent magnetic strength) inside the small rectangle formed by the two magnets and the portion of the steel tubes between the magnets. In this orientation, there was only a very weak magnetic effect at the end of the tubes shown in the photo.

However, when the magnets were oriented so that both north poles were touching the same piece of square tubing, the “easy” way for the magnetic field to make a circuit is when the ends of the steel tubes are touching a piece of magnetic material (such as steel). In this case, the magnetic field at the end of the tubing was fairly strong, allowing me to pick up my 33 pound vise. (I didn't have any convenient steel weight to see how much more I could lift.)

To make a usable magnetic switch, there has to be a convenient way to switch the polarity of one of the magnets. The video linked to above shows two approaches to doing this. I found a number of other videos on line, but some are bizarrely complex: I watched one guy do an extensive amount of machining to create a magnetic welding ground clamp. This struck me as a fun afternoon's amusement, but really not a practical use of time. But I think the second technique in the above video does provide something that makes a bit more sense, which I will try when I get some suitable pieces of steel. If any of you try this out I'd really like to hear about it.

Cover Photo

Did someone scribble over a photo with a silver marker? No, this is a close-up of the result of some modifications that Norm made to his pin jaws. If you want a closer look, you should be able to zoom in to about 250% before your start seeing “big pixels”.

Photo Credits

Thanks to Chris Palmer for the photos from last month's meeting. The photos in the contributed articles were (as far as the newsletter editor knows!) all taken by the respective authors.

Nova Woodturners' Guild — 2023/24 Executive

All members of the executive, as well as committee chairs, can be reached by using the email address associated with that position. That is, a note sent to (for example) the president will go to whomever is president at that time. The following `<address>`*es should be followed by* `@novawoodturnersguild.com` *to send mail to the person holding that position.*

A 'C' after a committee member's name indicates they are chair of that committee.

Position	<address>	Incumbent(s)	
Executive	**executive** (sends the message to all executive positions on the list)		
President	**president** (or) **pres**	Gary Landry	
Vice President	**vice-president** (or) **vp**	Bill Maes	
Secretary	**secretary**	Calum Ewing	
Treasurer	**treasurer**	Dave McLachlan	
Director at Large	director-at-large	vacant	
Committees			
Library	**library**	Jim Diamond Richard Ford	C
Web Site	**webmaster**	Richard Ford	C
Membership & Promotion	membership	vacant	
Newsletter	**newsletter** (or) **news**	Jim Diamond	C
Competition	competition	vacant	
Guild Photographer	**photographer** (or) **photos**	Chris Palmer	C
Fund Raising	raffles	vacant	C
Members Group	**members**	members	

The **members** address forwards the email to all members **who have signed up to be on the members list**. To add or remove yourself from the **members** list, email **webmaster@novawoodturnersguild.com**.

If you wish to send an email to **all** current members of the NWG, send your message to **secretary@novawoodturnersguild.com** with a request to forward your email to all members.