IWG News

The Newsletter of the Island Woodturners Guild November 2021

About the IWG:

The Island Woodturners Guild meets from 1:00 - 4:00 PM on the 4th Saturday of each month (except for July/Aug) at the Central Saanich Senior Citizens' Centre, 1229 Clarke Road, Brentwood Bay, BC.

Visitors are welcome.

Executive Committee

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Tim Karpiak

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Vik Peck

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The IWG gratefully acknowledges the support of the following companies:
Artisan Wood to Works
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Island Blue Print
KMS Tools
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Richelieu Hardware

THE PRESIDENT'S TURN

Here we are, a few days away from our first visiting demonstrator since 2019! For those who don't remember, Kai Meunzer was scheduled to demonstrate in the spring of 2020. And now, after a long delay, we have him here this Saturday for an all-day demo and workshops on Sunday and Monday. I first saw Kai demonstrate at the AAW symposium in Portland. I was intrigued with the projects he presented and I'm sure you will all be equally impressed.

As you know, our Guild has put in a lot of effort in developing ways to keep the membership engaged. This is a giant step to bring the old and the new ways together. It'll be interesting to see how it all works out.

Another thing I would like to point out is the effort some people have given, and will give, to make this weekend a success. It takes a lot of work, in all areas, to make this happen. All for the benefit of our members. And without minimizing anyone's contributions, I'd like to single out Vik Peck for all the hours she's put in for this demo. She's coordinated with Kai on his visit, arranged the workshop space, obtained all the wood required for the demo and workshops, and spent countless hours planning and discussing all the tiny details. It's a good thing she doesn't get paid by the hour! (She doesn't get paid at all)

For those that have signed up for the demo in advance, thank you. I'll be sending out Zoom invites on Thursday. So, if you want to attend via Zoom make sure you enroll before Thursday. For people attending in person, Peter will be accepting payments in the morning before the demo starts.

I hope everyone enjoys the weekend. I look forward to seeing you all.

Cheers!
Tim Karpiak

NEXT MEETING: KAI MUENZER DEMONSTRATION

Our meeting on Saturday November 27th will feature an all-day demonstration by Kai Muenzer **beginning at 9:00 a.m.** It will be held at our regular meeting place in Brentwood Bay and registered participants may view it in person or remotely via Zoom. He will demonstrate…

a Turned Drawer Cabinet …

…a Happy Box…

…and a Wacky Salt Shaker.

The cost is $20 for members and $40 for non-members. **You must register and pay by e-transfer no later than Friday November 26th to Tim Karpiak at president@islandwoodturners.ca.**

WORKSHOP

Two one-day workshops with Kai will be held on Sunday November 28th and Monday November 29th. These will feature hands-on instruction in one of two projects – a Wacky Salt Shaker or a Happy Box with Tilted Lid. Lathes and all consumable supplies (wood, glue, etc.) will be provided. This will take place at the McTavish Academy of Art.

Available to paid up members only, the cost (which includes the demonstration) is $155 for one-day or $250 for both days. **You must register and pay by e-transfer no later than Friday November 26th to Tim Karpiak at president@islandwoodturners.ca.**

Note: If you are attending workshop, please email Vik Peck (vikpeck@gmail.com with your preferred topic (wacky salt shaker or happy box) and any challenges to your availability on either Sunday or Monday.

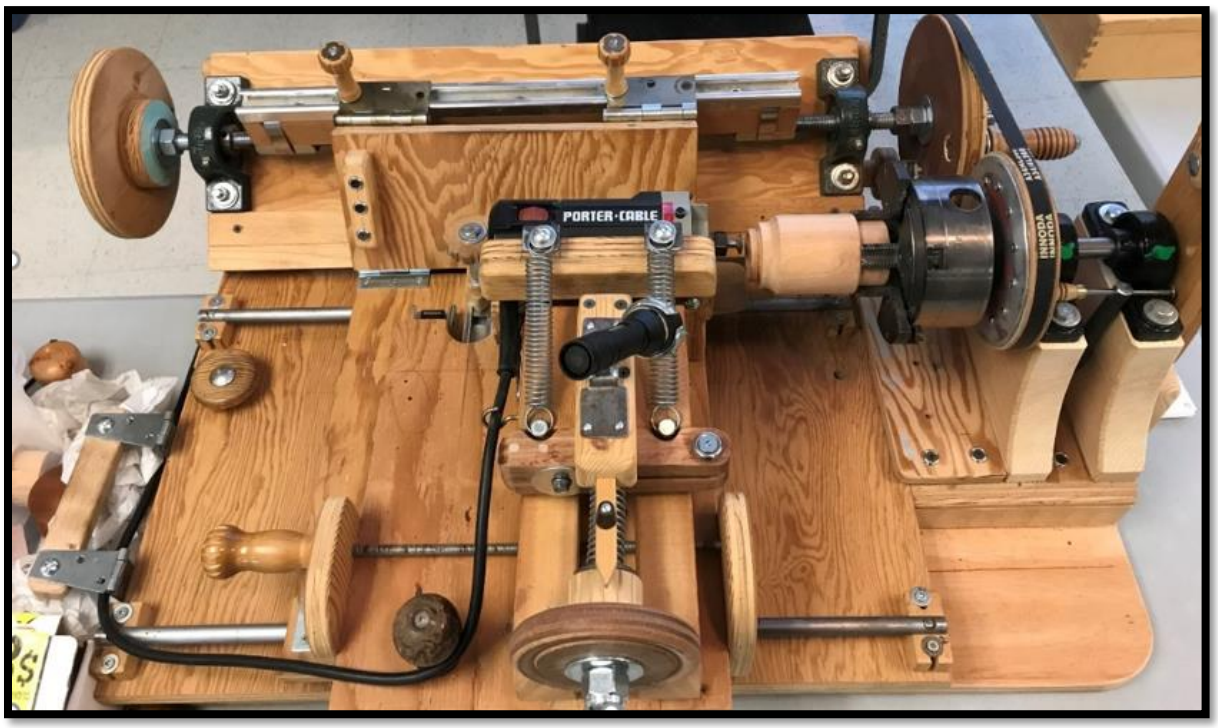
OCTOBER RECAP

Once again, Gil Heise confirmed his status as our undisputed Jig Master. While he presented a variety of jigs and tools, his presentation focused on three in particular: Threading Jig, Slot Machine and Spoon Bowl Carver.

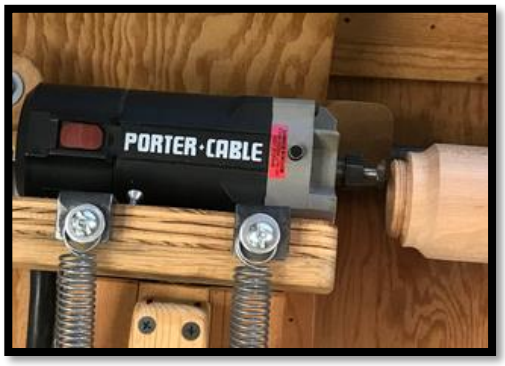
[*As a result of technical problems, I was not able to access the recording of his presentation. Since, "a picture is worth a thousand words" thanks to Dave Blair for some of these photos.]*

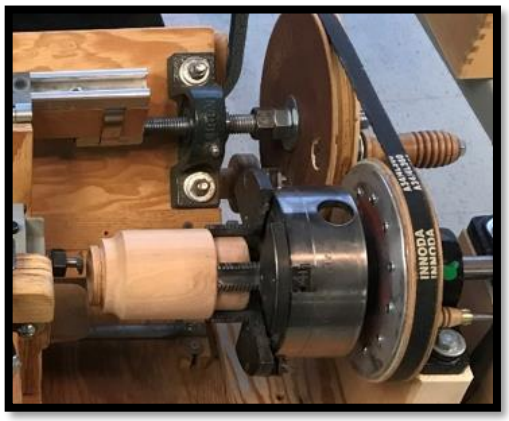
A. THREADING JIG

While threads can be made by "hand chasing" using tools called "chasers" for the internal and external threads (right), the process can take years to master. Accordingly, most turners rely upon one of the many commercial jigs that are available. Not surprisingly, Gil decided to make his own. He opted to make one which is dedicated to making external threads and relies on a tap to create the corresponding internal threads.



Most commercial jigs have the cutter mounted in the headstock of the lathe and use the tailstock to hold and advance the workpiece. Gil chose to install the cutter in a trim router and relies upon a series of threaded rods and stops to adjust the length and depth of the threads.





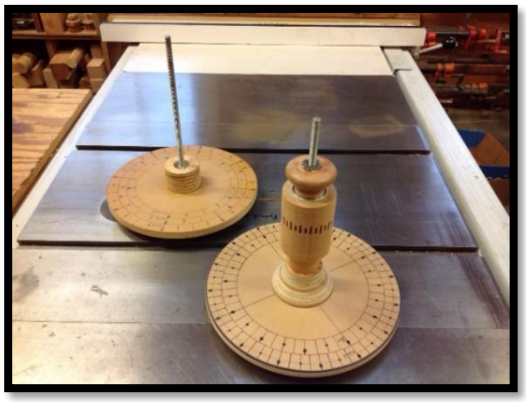
The workpiece is held in a 4-jaw chuck, and he incorporated a hand-operated “lathe” to turn and advance the piece. Different size pulleys are used to produce different thread sizes.

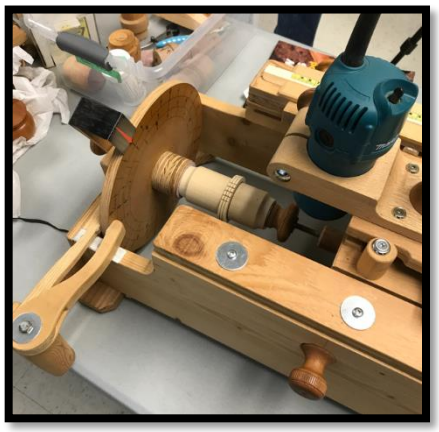
An impressive piece of machinery.

SLOT MACHINE

Gil built this machine to create decorative slots in turned ornaments.

He begins with 2 equal sized, cylinders which have a centre hole drilled through them. They are bolted on an index wheel and secured in the front of the jig.

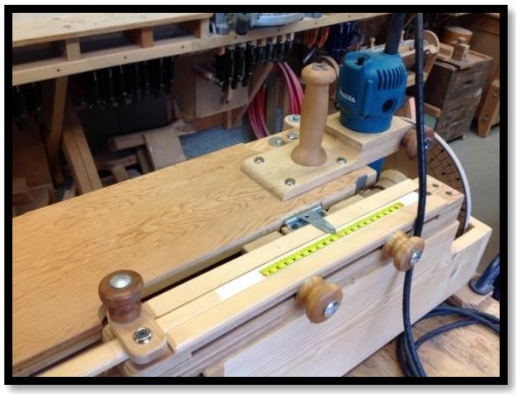




The number and location of the slots are determined using a pointer and the index wheel.

The wheel is secured with a clamp to prevent movement while routing.

The slots are cut using a trim router which is mounted in a “top plate”.



The top plate slides “fore and aft” with the amount of movement regulated by two locking knobs using the on-board measuring tape.

SPOON BOWL CARVER

Gil built this jig to speed up the carving of the bowl portion of spoons. The spoons are turned with a round bowl and the top “half” is removed at the bandsaw.

The spoon is secured in the forward station and a trim router is mounted in the rear “arm” which can be moved from side to side as well as up and down.

He first uses a carbide bit and then cleans up the surface using a bent gouge and repurposed spade bits.

2021-2022 CHALLENGES

FALL CHALLENGE

The fall challenge is to turn a piece – bowl, platter, whatever - from green wood. The results will be presented at the January 2022 meeting.

SPRING CHALLENGE

The spring challenge is to create a turning using wood that was obtained from Phil Cottell. Ideally this will be using one of Phil's rough-turned bowls.

The results will be presented at the May 2022 meeting.

SHOP TOUR?

If you would be willing to have a tour of your shop video-taped for viewing by members, please contact Tim Karpiak.

COLOURING: BLACK AND WHITE

BLACK

While it may be heresy to some, there is a long history of turners colouring their works black. Indeed, the application of black in *urishi* (Japanese lacquer) dates back over 6,000 years (right). And there are many professional turners today who rely heavily on "ebonizing" especially with the lack of access to ebony and African blackwood.

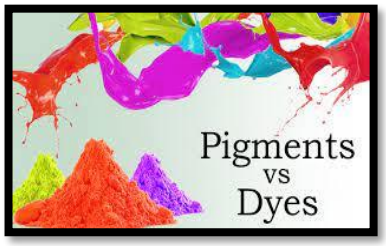
Black colouring can be used on a portion of a turning or can be applied to the entire piece. In the latter case, the absence of any colour means that there is rarely anything to distract the viewer from the form of the piece. As Gorst Duplessis observed: *Black is the absolute colour where form rules.*

There are literally dozens of products and methods that can be used to blacken a turning. The following are some of the more popular ones.

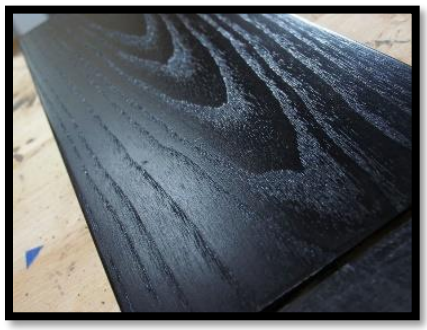
Caution: Commercial products that are labelled black will frequently have hints of grey, brown, violet, or even red in them when dry. Moreover, the degree of black will vary depending upon the species of wood to which it is applied. You should test the product on a spare piece of project wood before applying to the turning.

Introduction: Pigments vs Dyes

Most wood colourants are either pigments or dyes. Pigment-based products such as stains and paints contain small colour particles that are held in suspension while dyes are dissolved. A commonly used analogy is that pigments are akin to sand mixed with water while dyes are akin to sugar dissolved in water. Both will colour wood but will do so in different ways.



1. DYES



If you want to blacken a piece without obscuring the grain, dyes are a popular choice. Unlike pigment products which rest on the wood's surface, dyes consist of molecules which will penetrate deep into the wood. However, as they tend to bleed, they are not a particularly good option if you only want to ebonize a portion of a turning.

a. Aniline

For over a century, the most popular dyes have been so-called aniline dyes. Typically available in powder form, the most common types are mixed with water which makes them safe to use and able to be top coated with a range of finishes. They are relatively inexpensive (LV: 1 oz (1 qt)/$15), easy to apply (brush, wipe, spray, dip) and generally do not produce brush marks or laps.

However, they do have some disadvantages. With a water binder, they will raise the grain, they sometimes produce a different shade on end grain as opposed to side grain and, most importantly, are not lightfast which means they are prone to relatively rapid fading.

b. Metal-Complex

First developed in the 1950's, these are liquid concentrates typically suspended in an alcohol solution which can be mixed with alcohol or water. While they are slightly more expensive than aniline dyes, they dry quickly and with little raising of the grain (assuming you use alcohol) and most importantly, are much more lightfast. (Wood Essence: 60 ml (2 gallons)/$20)

c. Fiebings Leather Dye

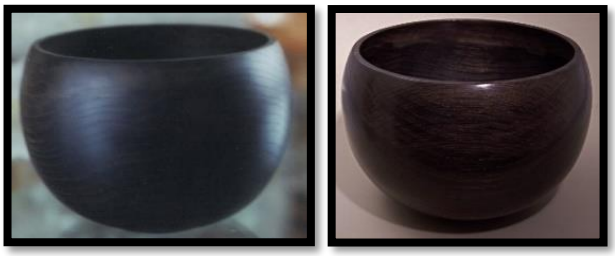
One of the more popular dyes for ebonizing is Feibings USMC Black Leather Dye. While it is an alcohol-based dye developed for leather, users claim that it provides a very pure black. (Amazon: 4.8 oz/$8.50 + $12.00 shipping)

d. Iron Acetate

For those who like to play, a popular homemade "black" dye can be made by mixing white vinegar with iron. This will produce iron acetate which will chemically react with tannins in the wood to darken it.

The most common recipe calls for placing steel wool in a glass container of white vinegar. The steel wool must be oil free (LV: $16). The acidic vinegar will dissolve the iron (3 - 7 days) producing iron acetate (and hydrogen gas) which is then strained. (**The hydrogen gas can explode the container if it is sealed tight. You should make a small hole in the lid)**

However, there are a few limitations. The ebonizing will only react with woods that have a high tannin content such as oak, cherry and arbutus. Otherwise, it may produce only a grey colour. To boost the darkening, some users recommend first applying multiple coats of black tea (which contains tannin) to the turning. Secondly, even with a high tannin content, on some woods the black will have a brown, red, or green tint to it. And finally, many users report that the black will fade very quickly. The photographs below show the initial application and the colour one year later.



2. INKS

Ink is inexpensive, easy to apply and as it is water-based, easy to clean up. As is the case with dyes, it will also highlight the grain. However, most conventional inks are dye-based which means they will react to natural acids in the air or wood and fade over time. Moreover, many such inks have a distinct blue colour to them. The following are two versions which avoid these concerns.

Archival Ink: This is ink which has been chemically modified to be relatively Ph neutral or slightly alkaline to minimize interaction with an acidic environment. As a result, it resists fading (light fast) and provides superior adhesion. (Island Blue: 3 oz/$15)

India Ink: This opaque ink is composed of a variety of fine soot molecules (lampblack) combined with water. While it has not been chemically modified, it is in fact lightfast and waterproof once dry. Most brands of this ink provide a very strong "pure" black. (Island Blue: 2 oz/$6) This product is highly recommended if you are going to ebonize an entire piece.

3. GESSO

While black acrylic paint can obviously be used, one special type of acrylic paint worth noting is gesso ("*jesso*"). It consists of an acrylic resin typically mixed with chalk and pigment. While primarily used to prepare a substrate (canvas, wood, sculpture) for painting, it can be used as a colourant on turnings.

One of the primary attractions for turners is its relatively high viscosity and quick drying time which means that it will not bleed or creep. This allows you to colour one area of a turning such as the rim of a platter and then turn the edge of the rim which will produce a very clean and crisp demarcation between the two areas (left).

As it dries to a matte finish, it is also a popular choice for colouring the inside of a hollow form or box to obscure any roughness in the turned surface.

The turning at right was coloured using gesso on the lower portion and India ink for the “grasses”.

4. MILK PAINT

Milk paint consists of casein, clay, lime, and earth pigments which is sold as a powder and mixed with water. (LV: 6 oz (17 oz): $25) The alkaline lime reacts with the acidic milk casein to provide strong adhesion and durability. It is non-toxic, biodegradable, and has no noxious fumes.

It creates a subtle matte finish with intense colour and a very light texture. When burnished, it becomes smooth with a subtle sheen. It can be left unfinished, but it will show water spots. Virtually any finish can be used as a topcoat, but penetrating oils are advisable in the case of black since they will significantly darken the finish.

5. CHARRING

Burning virtually any wood will produce a strong black colour. It will also often produce a unique texture on wide grain woods due to the differential burning of heartwood and softwood.

While pyrography can be used for small areas, charring an entire turning is normally done using a propane torch. Needless to say, it should be done outside, and you should wear heavy duty gloves.

You should proceed slowly as it is easy to overheat the wood and cause it to ignite or crack – especially on thin pieces and end grain. The ash should be cleaned off with a soft bristle brush before applying a finish.

WHITE

Unlike ebonizing, there are effectively only two options for whitening a turning: pigment-based finishes or bleaching.

1. PIGMENT-BASED FINISHES

Acrylic paint including gesso as well as milk paint (right) can all be used to whiten a piece. They will all produce an opaque finish which will obscure the grain.

2. BLEACHING

Bleaching will remove the natural colour of the wood. This might be done where you want to colour the piece and thus want to start with a neutral palette.

A good example of this is the flowers turned by Gord Kifiak which he bleaches before dying to produce more vivid colours.

Alternatively, you may want a natural white appearance for aesthetic reasons.

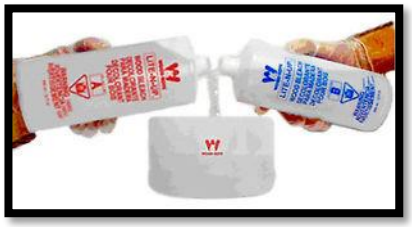
In either case, you need to use a two-part bleach. Household bleach is too weak and oxalic acid is only effective in removing rust or water stains from wood.

Two-part bleach consists of sodium hydroxide (caustic soda) and hydrogen peroxide. They are mixed together (50/50) and applied to fully sanded, raw wood. Multiple coats (3 or more) will be required in most cases to achieve the desired "whiteness". The combination will quickly lose potency so only mix what you can use immediately.

Safety: This bleach is extremely caustic. Gloves and eye protection are essential and always read the instructions.

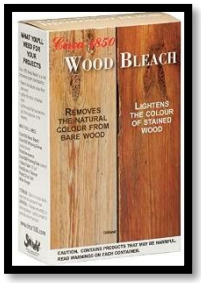
Lite-N-Up Wood Bleach

Manufactured by Woodkote, this is a popular bleach with Guild members. It is easy to use and while the manufacturer states that it has a shelf life of 2 years, many members report that the product is still effective more than 5 years after purchase. However, this can no longer be purchased in Victoria. The closest vendor is Mohawk Western Finishing Supply in Vancouver.



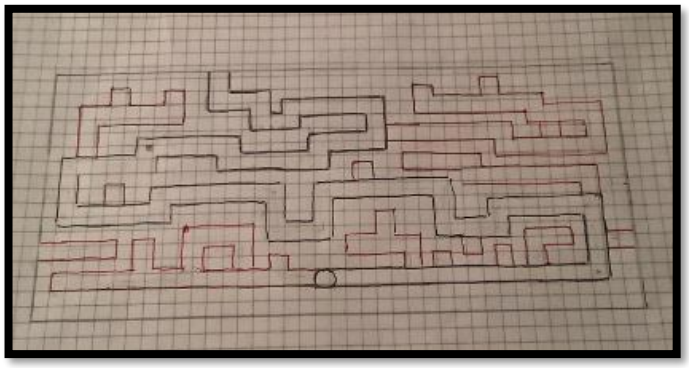
Circa 1850 Wood Bleach

This is the only product that I am aware of that is available in Victoria (Lumberworld: 1 litre/$22).



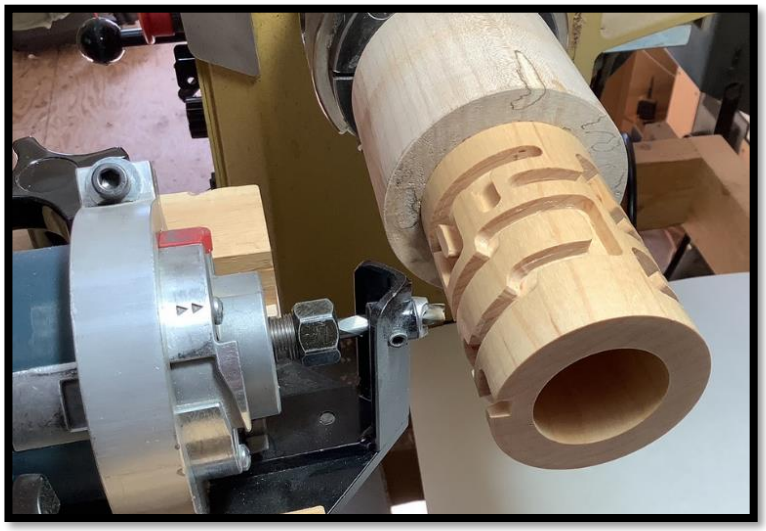
A-MAZING PUZZLE BOX

While I was not interested in turning a Cryptex Box, Carl Jacobson's demonstration last June did prompt me to consider other forms of puzzle boxes. Distant memories of Pac-Man ultimately prompted me to turn this box for my brother (who is a puzzle freak).



The first step was to design a challenging route with lots of blind alleys. This was laid out on graph paper matching the dimensions of the outside surface of the box.

The box portion was turned to size and hollowed.



The channels were then cut using a 1/4" upcut spiral bit (for a clean cut) with a palm router and custom sled.

A 1/8” or even a 3/16” channel would have produced a much more challenging puzzle.

The outside cover was then turned and hollowed following which a “registration pin” was inserted (right arrow).

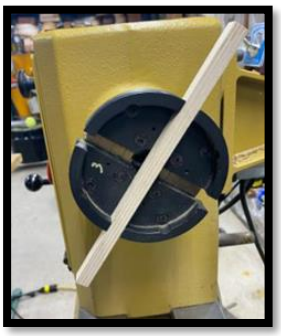
Sibling rivalry prompted me to add 3 additional “fake” black dots to make it more challenging.

I have not decided what “prize” awaits him in the box.

I am thinking that a piece of smelly cheese when coupled with two weeks mail delivery might provide him with an incentive to solve the puzzle quickly!

REMOVING STUFF

"STUCK" CHUCK



If you have difficulty removing a chuck from the spindle using the chuck key, you might want to consider this tip from Doug Crocket.

He keeps a small scrap of wood (1/2" square by 10") stored on top of his headstock. When needed, he simply places the scrap in the jaws and gives it a gentle tug. The extra leverage makes it easy to remove the chuck.

HOT MELT GLUE

While hot glue is a convenient way to temporarily secure a turning to a waste block, removing the glue without damaging the turning can be a trial. One option is to wrap an extra long piece of string around the join before applying the glue. When you want to remove the glue, simply pull on the tail end of the string and the glue should peel off easily.

If any glue remains, apply denatured alcohol using a Q-tip and let it sit for a minute.

If any glue **still** remains, you can soften it using a hair dryer.

And if any glue **still** remains…..

DECEMBER: NO MEETING AND NO NEWSLETTER

FYI: There will be no meeting in December and accordingly no newsletter. The next meeting will be in January.

PARTING OFF

Thanks to the members of the Executive for continuing to keep the Guild running. And a special thanks to Gil Heise for his presentation (which we all know involves an immense amount of prep time)

CONCLUDING THOT