



IWG News

The Newsletter of the Island Woodturners Guild

April 2022



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

President:
Tim Karpiak

Vice President:
Vik Peck

Secretary:
Michael McEwan

Treasurer:
Peter Pardee

Member at Large:
John Kilcoyne

Member at Large:
Virginia Lee

Member at Large:
Marlene Speckert

Past President:
Steve Werner

Newsletter Editor:
John Kilcoyne

The IWG gratefully acknowledges the support of the following companies:

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THE PRESIDENT'S TURN

If everything goes according to plan, when you read this, I'll either be on my way or in Ireland. As you know this month's demo will be from Glenn Lucas and I have the opportunity to be in his shop for the demo. I'm pretty sure that's a first for Glenn and it's definitely a first for me. Glenn's demo will be early in the day for you but because it's on Zoom you can attend in your pajamas. And then after the meeting I'll be staying there for a weeklong class in his training facility. I'm pretty excited for this adventure.

Last month's demo with Janine Wang was very different from what we're used to. But I for one was very intrigued with the process. I'm looking forward to receiving my weaving kit and trying to replicate what Janine did.

May will be our annual general meeting. We'll be electing the new executive for next year. I haven't received any nominations yet but there's lots of time to put your name forward. After the AGM, Tim Soutar will give a talk on finishes. And then we'll have the spring challenge. I'm looking forward to seeing the pieces from Phil Cottell's wood sale.

I know we haven't had a lot of sun lately but I'm confident that it's coming. Time to get out into the shop and blow off the dust. In my case that includes the dust on me!

See you all on Saturday!

NEXT (ZOOM) MEETING: SATURDAY APRIL 23: 10:00 A.M.

Our next meeting will feature a remote demonstration by noted Irish turner **Glenn Lucas** who will demonstrate turning a square edge bowl. He will discuss tool techniques, sharpening, sanding, and finishing.



A turner for over 23 years, he enjoys an international reputation as an outstanding turner and instructor. He has been a frequent demonstrator at AAW symposia and clubs throughout North America and Europe.



His one-off pieces are in collections around the world and in 2017 he was part of the team that worked on “Solar Orb” to remember those lost in the tragic Germanwings crash in 2015.



NOTE THE EARLY START TIME: 10:00 A.M.

EXECUTIVE VACANCIES

At the Annual General Meeting in May, we will be electing a new Executive. At the present time, we anticipate that we will have **two vacancies which must be filled**. The **annual** workload is approximately 15 hours. If you willing to help continue the operations of the Guild, please contact Tim Karpiak.

IMPORTANT NOTE FROM THE EXECUTIVE: 2022-23 AGENDA

Our third request for volunteers to assist with A/V work and photography once again produced no response.

Accordingly, the tentative plan is to adopt the following format for the year's activities beginning in September 2022.



1. Every year we have 9 meetings not including December.
 2. The Executive will organize 6 of these meetings which will consist of remote demonstrations by professional turners. We hope to offer these in a hybrid format which means members can view them at our regular meeting place in Brentwood Bay (assuming connectivity) or at home.
 3. The Annual General Meeting which takes place in May 2023 will also be organized by the Executive.
 4. The balance of the May meeting and the 2 remaining meetings will be organized by volunteers with the assistance of the Executive. A member may opt to deliver a presentation alone or in conjunction with other members. If no one volunteers, the meeting will only consist of a *"Show and Tell"*.
 5. **The foregoing plan is conditional on two members agreeing to fill the 2 anticipated vacancies on the Executive beginning May 2022.**
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MARCH RECAP

The March meeting saw an interesting demonstration by Janine Wang on a unique integration of turning and basketry. The following are the highlights.

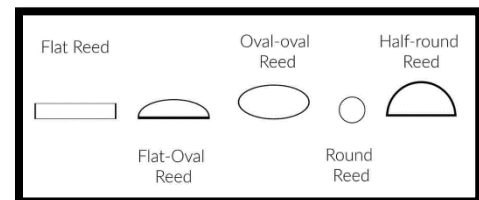


MATERIALS

Janine began by providing a brief overview of some common materials that are used in basketry.

Reed

Reed taken from the inner core of the Rattan palm is the most popular material. It is available in different forms (and sizes) depending upon the task. Round reed, for example is commonly used for the skeleton or frame while flat and flat-oval reed is generally used on the rim.



Raffia

This material, which is made from palm tree leaves, is commonly used for weaving and is particularly strong in tension.

(In the case of reed and raffia, she emphasized the need to obtain fresh and thus flexible material. For this reason, she recommends purchasing from a dedicated basketry supply outfit. A Google search will provide Canadian sources.)



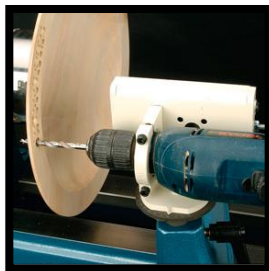
Wisteria

As a locally available material, Wisteria runners can be used for twining and the bark can be used for fine twining and cordage.

PROJECT 1: RIM BRAID

1. Starter Holes

The first project she demonstrated was the application of a simple braid on the rim of a shallow dish. With the dish sanded and finished, she marked a circle on the inside of the dish near the rim and used the lathe indexer to mark the locations of the starting points for the reeds. She aims for a gap of 3/4" to 1-1/4" between the points.



A hole matching the diameter of the reed is drilled at each point with the holes perpendicular to the inside surface. For this task she uses a *Oneway Drill Wizard* (\$175). A corded drill is secured in the jig which is mounted in the banjo and allows holes to be drilled accurately and consistently. The drill depth can be easily set using an adjustment screw and there is a scale for drilling angles.

Note

The Drill Wizard is built to hold a drill with a 42 mm (1-3/4") collar which means it will fit most, but not all, drills. In addition, while I was unable to verify this with *Oneway*, the *Craft Supplies* website states that it will not fit in a Nova banjo as the post is slightly oversized.

2. Starting the Braid



Measured lengths of reed are placed in warm water for at least 5 minutes. This swells the reed which ensures a tight fit in the holes as well as making the reed very flexible. Using glue is a "mark of shame" for experienced basket makers.

3. Braiding

For ease of explanation, she started with a simple 2 phase or 2 weave braid.

Starting anywhere, take one weaver and place it behind the one to the right and then gently pull it down to the outside of the dish. Take the next weaver and place it behind the one to the right and then gently pull it down to the outside of the dish. Continue this until you are back to the starting point.



Take the “starting” weaver and tuck it under the first curve.

At this point, she likes to take the next weaver (#1) and skip the next one (#2) before tucking it under the next one (#3). She continues this pattern until she is back to the starting point which concludes the braid.

She indicated that you may have to periodically wet the reed to keep it pliable.

She also noted that the weaver ends should end up inside which will make them relatively hidden, and the ends should be snipped off at an angle in line with the direction of the braid.



4. Finishing

To seal the braid, she recommends against using a polyurethane spray as it will leave a brittle finish which might cause the reeds to fracture.



The product she uses is clear *Weaver's Stain* which is an aerosol product. Called Danish oil, it is a blend of tung oil and urethane. It penetrates the reed and provides a protective coating without becoming brittle. However, it only appears to be available in the U.S. which is a problem since it must be shipped by ground which would make it very expensive.

One option to consider is the Danish Oil in an aerosol format from *Mohawk*. It is also a blend of tung oil and urethane, and assuming it is available in clear, could be ordered from *Mohawk Finishing Products* in Vancouver.



PROJECT 2: "HOLLOW FORM"

Janine then demonstrated how she would make the piece at right using round reed spokes.



1. Preliminary Issues

The rim of the turned bowl must be thick enough to accommodate drilling the spoke holes. Furthermore, the drill angle and thus the weaving should complement the curvature of the bowl. Finally, the location of the holes should be such that the weavers will be flush with the outside of the turning. For this latter task, she places a piece of reed flush with the outside of the turning and then marks the hole location with a piece of the spoke material.

2. Spokes



The process of drilling the holes for the spokes and inserting them is as described in Project 1.



3. Twining

For the demonstration she adopted a simple twining using only 2 weavers.



One weaver is wrapped behind a spoke (#1) and in front of the next one (#2) to the right. The second weaver is then wrapped behind #2, underneath the first weaver and then in front of the next spoke (#3). And so on.

When you need to add a new weaver, you simply lay the next one on top of the end of the old one (on the inside) and continue weaving.



Janine did indicate that using 3 weavers provides a much better finish. Called a 3 wale, the process consists of weaving each one over two spokes and then under the third.

More Information

Since a picture is worth a thousand words, there are two sources you can consult for more detailed instruction on Project #2.

If you are an AAW member, you can see her article (with pictures) detailing a 3- wale process in American Woodturner Vol. 35(5) (October 2020)

Moreover, any person can access the video she made to accompany this article at:

<https://www.woodturner.org/Woodturner/Resources/AmericanWoodturner/FeaturedVideos/AWVideo2020Oct3505.aspx>

(While she used a small saucer in the video with the spokes secured in a turned groove on the outside, the weaving procedure is the same as she showed in her demonstration.)

INLAY: “BOULDERS”, BUTTERFLIES AND BISCUITS

Inlay material may be used to provide structural support as in the case of cracks, inclusions, or voids or simply as an embellishment technique. In either case, there are literally thousands of materials that can be used. This note considers materials and methods that can be used for 3 types of inlays: stone, butterflies, and biscuits.

I. STONE

While the following is restricted to stone inlay in a turned recess, the information may also be useful when filling inclusions or voids as well as when using other inlay materials.



Dennis Liggett

A. MATERIALS

1. Natural Minerals

Selection of natural stone for inlay involves balancing durability with ease of working (crushing/sanding). The hardness of a mineral is designated using the 10-point Moh scale ranging from chalk (1) to diamond (10). Most turners recommend using a pearlescence or reflective crystal in the 3 - 4 range.

Mohs Hardness Scale			
	Mineral Name	Scale Number	Common Object
↑ Increasing Hardness	Diamond	10	
	Corundum	9	Masonry Drill Bit (8.5)
	Topaz	8	
	Quartz	7	Steel Nail (6.5)
	Orthoclase	6	
	Apatite	5	Knife/Glass Plate (5.5)
	Fluorite	4	
	Calcite	3	Copper Penny (3.5)
	Gypsum	2	
	Talc	1	Fingernail (2.5)

The following are some popular choices. (*Note: The photos are ideal versions of the minerals.*)



Chrysocolla



Calcite



Fluorite



Azurite



Biotite



Malachite

The following are local sources although they both indicated that their selection of soft crystals in rough form is limited.

Rockhound Shop
Divine Gem

<https://www.rockhoundshop.com/>
<https://divinegems.ca/>

While there are many on-line sources, it can be difficult to assess the quality of the material and it is not unusual to read reports that the actual products are simply plastic or dyed.

Accordingly, while some turners continue to use natural minerals, most have shifted to using synthetic.

2. Synthetic Minerals

Diminished supply, human rights and environmental concerns over mining practices and the rising cost of many natural minerals have prompted the development of synthetic stones also known as “man-made” or “cultured”. While initially designed for use in communication and laser technology as well as microelectronics, they quickly made their way into the jewellery market. They are often referred to as *Kyocera* stones which is the name of the leading manufacturer.

A variety of techniques are used to create these minerals. One of the most popular is flame fusion which involves dropping powdered chemicals through a high-temperature flame, where it melts and falls onto a rotating pedestal to produce a synthetic crystal. More advanced techniques involving extreme heat and pressure are used to create synthetic emeralds, rubies, and sapphires to name but a few. It is also possible to create these *gems* in a variety of natural and “unnatural” colours.

These are not “fake” gems. They have the same atomic structure, chemical composition, crystal structure and physical properties of the natural material. To the layperson (and even many gemologists), they are indistinguishable from the real thing and as they are produced in a laboratory, the colour quality is often superior to that of natural stones (right).



As they typically cost 10 – 15% of natural stones, they are a very popular option. Moreover, there are many sources that offer crushed synthetics in large grain, small grain, and powder form (left)

While I was unable to find a Canadian source, there are many retailers in the U.S. The following are a few of the more popular ones. (As most are aware, the cost of shipping will likely exceed the cost of the stone.)

Easy Inlay (<https://www.easyinlay.com/>)

In addition to some natural stones (Crystal Calcite) and shells (Paua Abalone), they offer synthetic opals in a variety of colours.

STOP THE PRESSES: SIMPLE INLAY

On Monday, I learned that our own Mike McEwan will be starting a web-based business titled *Simple Inlay*. (The URL will be **simpleinlay.ca** and he expects that the site will be up and running within a matter of days.)

He will be offering the following **Easy Inlay** products.

Opals (CA\$26/2 grams) Available in 12 colours including the following:



Crystal Calcite (CA\$26/3oz.)



Paua Abalone Shell

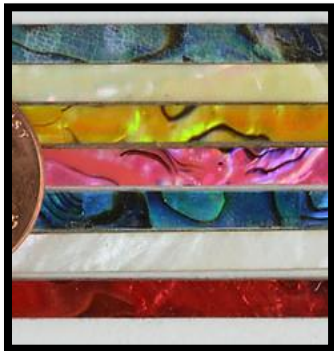
Various Shapes (CA\$33/2 oz.)

100 large pieces/200 medium pieces



Strips (CA\$20/3 pack)

9.2" x 0.15" x 0.03" (L x W x D)



Sheets (CA\$52 each)

9.25" x 2.75" x .03" (L x W x D)



Gold flake: \$26/20oz.



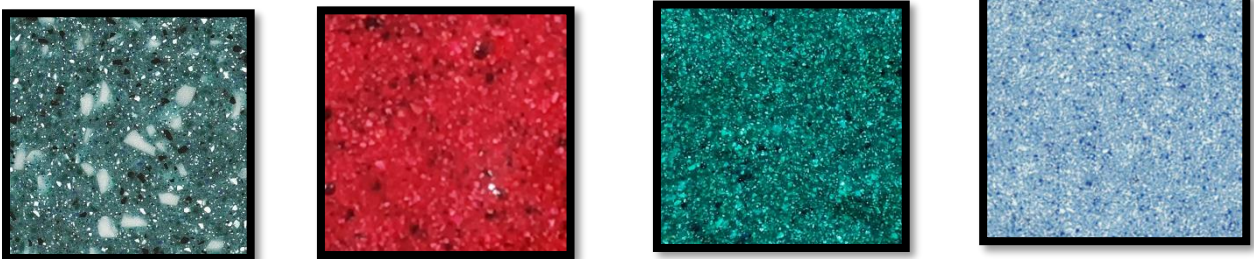
Turners Warehouse (<https://www.turnerswarehouse.com/collections/inlay-materials>)

They offer a wide range of synthetic stones in 3 grades (large, small, powder) in 13 different colours (US\$9/3 grams).



Craft Supplies USA (<https://www.woodturnerscatalog.com/t/162/Inlay-Materials>)

In addition to a range of *Turner's Select Stone* (crushed and powder) (US\$11-15/1 oz), they also offer *InLace Decorative Inlay* (US\$32/8 oz) which is a resin-based product that comes in a variety of "stone-like" colours (samples below).



Caution: Dyed Stones

Do not use dyed stones which are often found in bead shops or some on-line mineral sources, usually in a tumbled (smooth) format. While there are many dyeing techniques, one of the most common is to take a relatively porous mineral such as agate and colour it by placing it in a heated dye solution. The problem is that the dye will rarely penetrate very deeply into the stone which will be apparent when crushed.

B. INLAY TECHNIQUES

1. Crushing

If you are using stone nuggets, you can crush the material using a metal can and a cold (concrete) chisel. A cloth covering will prevent stone chips from escaping.



Alternatively, you can use a 6 or 8" long galvanized nipple (3/4" or 1") with screw caps on each end.

2. Binders

The two most common binders are CA glue and epoxy, and each has its supporters.

a. CA Glue

CA glue is relatively inexpensive, easy to apply and cures very quickly. The latter point is particularly important if you are inlaying material in a recess on the circumference of a bowl or box. Epoxy will require extensive dams and the need to inlay in multiple stages with lengthy waits between them. Having said that, some users have found that as CA glue is brittle when dry, it may be affected by seasonal movement of the turning.



Craig Timmerman

Note: You should use thin (or super thin) glue and, if possible, avoid using an accelerator as it may cause "blush" in some CA products.

Microtips

For greater accuracy and to minimize contact with the surrounding wood, when using thin CA glue, you might want to consider using microtips which fit over the container spout. While some manufacturers include these with their glue (Starbond glue includes 8 tips (LV: \$16.50)), you can purchase a container of 50 tips from various sources. (LV: \$18.50 or CEC in Port Coquitlam: \$8.00!). These are also very useful when using CA glue to fill a fine crack.



b. Epoxy

If the recess is located on the rim of a turning such as a platter which can be held horizontally, many prefer to use epoxy even though it is more expensive and takes longer to cure. It offers superior adhesion to wood, minimal shrinkage, can be coloured and is more flexible when cured.

If you are using a conventional epoxy, see if the manufacturer has a special clear hardener such as that offered by West System.



Having said that, a better choice is to use *casting or coating epoxy*. It has a lower viscosity which provides better penetration and dispersal of bubbles. You should avoid quick set epoxies (5 – 30 minutes) as these do not allow enough time for the bubbles to disperse.

c. Polyester Resin

While polyester resin is less expensive than epoxy and has a shorter cure time (8 hours), some users report that it tends to shrink more than epoxy and is more brittle when cured. One exception to this is *Inlace* which is a liquid dyed, orthophthalic polyester resin that is activated by a special hardener (methyl ethyl ketone peroxide). Originally designed for eye glass frames, it comes in clear which can be used as a binder for grains/powder as well as the “stone-like” colours noted above.

On the downside, the quantity of hardener needs to be quite precise, the working time is limited to 10 -15 minutes, and the fumes are reported to be very noxious.

3. The Recess

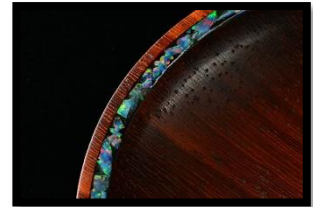
a. Before turning the recess, apply a coat of shellac to the recess location and surrounding area especially if you are using CA glue. This will help to prevent the binder from staining the wood and will also serve to stiffen the wood fibres for a sharper cut.





b. A ragged or chipped edge of the recess will be very noticeable once the inlay is in place. Accordingly, most commentators recommend using a skew tip to mark the outer edges before using a parting tool to cut the recess.

c. The recess should be $\frac{1}{8}$ " – $\frac{3}{16}$ " deep and some recommend angling the sides of the recess in a dovetail configuration to "lock in" the inlay – particularly if you are using CA glue.



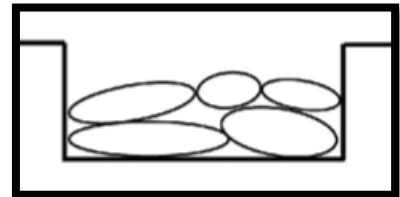
d. Some turners colour the recess black or dark blue which they claim highlights the stone colour.

4. Inserting the Stone

There are two common methods of filling the recess.

a. Layering

Some choose to follow Stephen Hatcher's process of layering the stone in stages. He begins by inserting larger nuggets and applying enough binder to cover them. He uses a bamboo skewer or toothpick to ensure that the binder flows to the bottom of the recess. If using epoxy, he also uses a heat gun (or hair dryer) to disperse bubbles. In the same fashion, he then glues in smaller nuggets and finally stone powder.



If using CA glue, this method guards against the possibility that uncured glue will be trapped in the bottom of the recess since the glue will cure from the surface downward.

b. Single Pour

Many of those who use CA glue in a shallow recess prefer to insert the nuggets and powder flush to the surface and then apply thin CA glue while avoiding the use of an accelerator. In this case, it is essential that you use thin or super thin glue.



For epoxy, some users prefer to add the stone to the resin, add the hardener and then insert it in the recess. Needless to say, you should use powdered stone or very small nuggets.

Hard Gems

While turquoise is one of the most popular gemstones, it has a Moh of 6 – 6.5 and users report that it is extremely difficult to sand without damaging the surrounding wood. Accordingly, for hard gems (and perhaps for all gems) you may wish to keep the infill material slightly below the top of the recess and use the binder to fill it flush. Once cured, you will only have to sand the binder which will be relatively soft. By the same token, if you are using CA glue and end up with a depression in the filler, you can fill this using medium CA glue.

5. Finishing

You should not attempt to turn stone even with a carbide tool. The stone will chip, and you run the risk of a serious catch. While you can use HSS or carbide tools to turn epoxy, there is the risk that you will hit an embedded stone. Accordingly, virtually all stoned inlayers, use sandpaper as a finishing tool.

Safety: Mineral dust is typically finer than wood dust and in the case of some minerals such as those that contain copper may be particularly dangerous. Dust collection and a respirator are essential.

a. Binder Cured?

Before sanding, you must wait until the binder is fully cured. In the case of CA glue, most sources recommend at least 24 hours while in the case of epoxy it may be up to 7 days.

b. Grits

Most turners report that they start power sanding with 60 - 80 grit. This will almost always reveal pitting which can be easily filled with medium CA glue. Conventional sandpaper is used to 400 grit and thereafter polishing is done using wet/dry sandpaper with grits from 1500 to 12,000.

c. Wood finish

You can then apply your desired wood finish.



6. More Information



You can find more information including stone inlay in figurative designs on Stephen Hatcher's website: <https://stephenhatcher.com/>

and Scott Grove's site: <https://imaginewoodworking.com/>



II. BUTTERFLIES



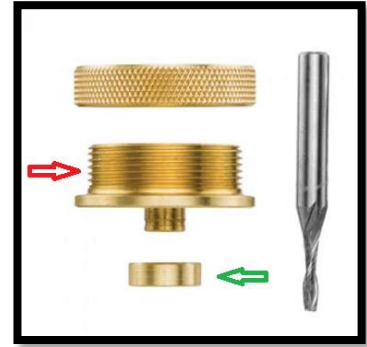
Tim Soutar

Butterfly joinery is a relatively common technique in flat work, especially in plank and live-edge tabletops. Also known as bowties, pewas and dutchmen, butterfly keys can also be used to provide a unique and attractive means of stabilising a crack or void in a turning.

Problem

However, there is a problem using the conventional method when inlaying butterflies in a turning.

In flat work, the process of making the recess and then the key or insert is typically done using a plunge router, template, and inlay set. The template is secured to the workpiece and the template guide (red arrow) is mounted in the router baseplate using a ring nut. To cut the recess, a bushing (green arrow) is added to the guide and then the bushing is removed to cut the butterfly key in separate flat stock. The diameter of the bushing is matched to that of the router bit to ensure the insert precisely fits the recess.



While any router (fixed or plunge) can be used to plough the recess in a turning, it is extremely difficult to use a full-size router on a round surface. Accordingly, virtually all turners use a smaller trim router/laminate trimmer for this task.

The problem arises when it comes to producing the matching insert. While in theory you can use a fixed base trim router and carefully lower it on the template, it is extremely difficult in practice. Any deviation from vertical or gap between the bushing and template will produce an ill-fitting insert which is why flat workers use a plunge router. While you can purchase after-market plunge bases for most popular trim routers, this is unlikely to be an attractive option at a cost of \$125 or more.

If you do own a full-size plunge router, you could use this to make the key since you will be working on flat stock. However, you will have to ensure that the inlay set used in the trim router fits the opening in your plunge router **and** that the router bit is accurately centered in each router to get a perfect fit. It can be done but will undoubtedly be a challenge.

Accordingly, unless you have a trim router with plunging capacity, it is recommended that you purchase butterfly keys that are sized to fit a specific template. The only source of quality inserts that I am aware of, and one used by a number of members, is *Big Island Engraving* (BIE) in Hawaii <https://bigislandengraving.com/butterfly-inlay-repair-system/> which means that you must purchase their template(s) as well.

1. Materials/Equipment

a. Template(s)

Many retailers offer templates with multiple patterns. While they work well on flat stock, they are far too large to safely secure to a turning. For that reason, *BIE* sells only single sized templates.



They have 5 sizes of traditional butterfly shapes ranging in length from 0.5" to 1.4" (US\$19).



b. Inserts/Keys

BIE offers butterfly inserts in 12 different wood species, and these can be purchased in small or large packages. For example, a small package of 0.9" long inserts will contain 13 (US\$12) while the large package will contain 40 (US\$30).

c. Inlay Set

You need an inlay set with a **1/8" diameter bit** for your trim router. Various turners recommend the MLCS set (US\$22) (https://www.mlcswoodworking.com/shopsite_sc/store/html/9177.html). The router bit is a solid carbide, down-cut spiral bit which provides the smoothest cut with the least tear out.

Note: This set is designed to fit the opening in Porter-Cable baseplates. If you have a trim router from a different manufacturer, you can purchase a replacement baseplate which is sized to the Porter-Cable. Lee Valley offers these for the Bosch Colt, Rigid and Makita trim routers (\$16.50)

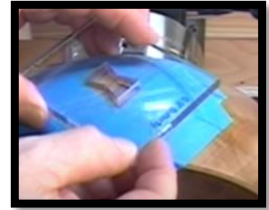


2. Routing the Recess

Most turners recommend installing the keys after the bowl has been turned to final shape but before finishing cuts and sanding.

a. The template is secured to the turning using tabs of hot melt glue at the 4 corners of the template. The amount of glue required will obviously depend upon the gap between the template and turning. The smaller the turning, the larger the tabs.

Most users recommend applying masking tape around the location of the inlay to protect the turning when the template is removed.



b. With the guide and ring nut installed in the router, the recess is routed. The BIE inserts are sized for a recess routed without using the bushing. As a rule, the movement of the router around the perimeter of the template should be done in a clockwise direction. Once the perimeter is routed, a “back and forth” movement can be used to remove the remaining wood.

c. The router bit will leave rounded inside corners which can be squared up using a sharp knife.



Noted calabash turner Emiliano Achaval recommends using the X-Acto #5 HD knife.

3. Installing the Inserts

As was recommended with stone inlay, you should apply a coat of shellac to the surrounding area to prevent the adhesive from staining the wood.

While wood glue will provide the strongest bond, there is a danger that the hydraulics will force the insert out and it will be impossible to use a clamp. For that reason, most turners use CA glue. Once the glue is dry, the inserts are sanded, and final turning and sanding takes place.



Barrie Baptie



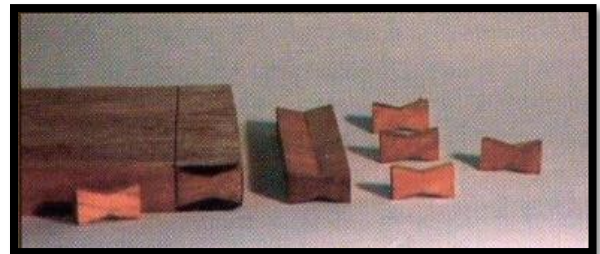
Caution: Removing the Template: Barrie Baptie advises that you should use a twisting motion to remove the template. He indicates that if you try to pry the template off, it may break.... or so he has heard!!! He made this slick little jig to use in the twisting.

4. More Information

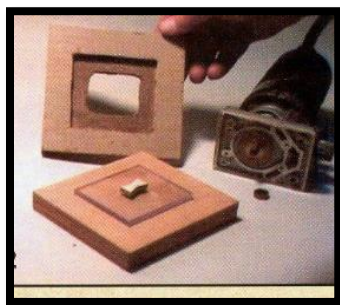
For a video by BIE of the installation process go to: <https://youtu.be/EEEEK-T5Iz3I>

5. An Option for Do-it-Yourselfers

Kelly Dunn is a noted Hawaiian turner who is an experienced inlayer of butterflies or pewas in calabash bowls. He recommends the following process for those who want to make their own inserts and templates.



To make the inserts he begins with a board that is 6" wide and approximately 3/4" thick which he cuts into blanks 7/8" wide. He tilts his table saw to 15 degrees and adjusts the height so that after two cuts, the 15-degree cuts will meet in the middle of the blank. After making the two cuts on one side, he moves the fence approximately 1/2" and makes two cuts on the other side. He then cuts 1/4" thick inserts from the blank.



To make a template, he uses 1/4" clear cast acrylic. He puts dabs of hot melt glue in the 4 corners as well as the centre and secures it to a scrap board. He then glues an insert in the centre of the acrylic which will serve as a pattern. With the bushing of the inlay set removed, he uses an upcut spiral bit to trace around the insert and create the template. Multiple passes are recommended to avoid melting the acrylic. To stabilise the router, he makes a frame which is the same thickness as the insert (left).

You can find a detailed description of his method on the World of Woodturners (WOW) site at: <https://portalvhds2x044vyygy1.blob.core.windows.net/wowstorage/filecabinet/637408707038632019.pdf>

III. BISCUITS

A biscuit (or plate) joiner is a tool commonly used by flat workers to join two pieces of wood together.



It uses a small circular saw blade to cut a crescent-shaped slot in the opposite edges of two pieces of wood. Biscuits made of compressed wood are then glued in the hole.



The following is the process that Tim Soutar has developed for inserting custom biscuits in a turning.



1. Cutting the Slot

The slots are cut after the outside of the form has been turned to near finish and piece is still mounted on the lathe. While one can use a platform in the banjo and the joiner on its side, there are limitations with this method.

It will only work well for cracks/voids that are relatively straight and aligned longitudinally with the lathe. Moreover, it will only produce a symmetrical layout (right) which may not always be desired.



While Tim considered a number of options, a fortuitous visit by "*He Who Must Not Be Named*" provided the best solution (left).

The jig consists of a platform to which the joiner is bolted and a post for mounting in the banjo. A flange on the bottom of the platform bolted to a U-form mounted on the post allows one to adjust the vertical angle of the slot.

When coupled with rotating the post in the banjo, it provides a wide range of slot locations and angles which allow him to deal with a variety of cracks and voids (right).



Tim indicated that while it is very versatile when working on a hollow form, the fence on the joiner does impose some limitations if trying to make a slot near the bottom of the turning (especially on a bowl), and the chuck.

On a bowl or box, care must be taken with the depth of the slot to avoid its appearance on the inside.



The joiner blade tends to leave a small gap in the crescent. To remove these, he uses a piece of thin, biscuit-shaped aluminum with a strip of coarse sandpaper glued to the edge.

2. Making the Biscuits

You can produce thin stock which is close to the desired thickness using a variety of tools including a thickness planer, bandsaw, belt sander or hand plane. To refine this stock to the exact thickness, Tim uses a lathe-based “thickness sander”.



He made the drum by turning a cylinder and wrapping fabric-backed abrasive tightly around it. The ends are secured with screws and washers.

He then built a hinged table which is mounted to the lathe using adjustable knobs. To ensure a biscuit with equal thickness, it is important to ensure that the top table is parallel to the drum.

A “jack screw” is mounted in the lower plate shelf and in a hole on the underside of the top plate. A wing nut allows very fine adjustments to be made when thicknessing.



Note: Ensure that the lathe is turning in the correct rotation to avoid shooting the blank across the shop.

The biscuits can then be cut from the stock using a bandsaw or jig saw.

3. Gluing

While Tim initially used CA glue to secure the biscuits, he found that the glue would often begin to set before they were fully inserted. Accordingly, he now uses conventional wood glue.

4. Finishing

Once the glue has set, he finishes the turning in conventional fashion.

IN MEMORIAM: WAYNE HOLMES

A long- time member of the Guild, Wayne passed away earlier this month. A prolific furniture maker for many years, Wayne finally saw the light and embraced turning. His wife Grace stated how much joy he got from turning and how much he looked forward to our meetings. He was a friendly and supportive individual who always had a kind word for others. Our sympathies to Grace and the family.



FOR SALE

André Robin is offering the following tools for sale. You can contact him at twolapins@shaw.ca.

Lathe (ShopCraft) 5-speed, moveable headstock, spindle stop. Great to take along on a camping trip. \$50.

Oneway Wolverine dressing attachment. Like new. \$35

Oneway Balancing system for grinder wheels \$30.

Sorby Revolving Steb centre \$25.

Cabinet scrapers.

DeWalt 3/8" drill.

Lee Valley (Crown) Captive ring tool \$25.

Japanese slipstone 1000 and 4000 grit (new)

10" sanding disk attachment for a 1" spindle.

3 Dremels. 2 with flex shaft. One almost brand new in original case with almost all unopened accessory bags.

Foot pedal for Foredom or other tools.

3/4" Sorby Hollowing tool (Gooseneck with handle)

2 Electric engravers. (1 new).

Profile mask to help visualise shapes.

Miscellaneous (2 drills, measuring tapes (1 digital), slip joint pliers, 4" mason chisel, hammer and more.

1 – 8 ½ ft edge guide plus more.

1 large bag of giveaways.

PARTING OFF

Thanks to Barrie Baptie, Tim Soutar and Andre Robin for their help with this edition of the newsletter.

And thanks once again to the members of the Executive for stepping up to provide support and encouragement for all members.

CONCLUDING THOT

