Volume 2, No. 1 Spring-Summer 2011

LINDOW WHITE

Spring-Summer 2011

John Tarpley, Editor

LW Owner Wins National Wild Turkey Federation Grand Nationals Callmakers Contest

Danny Wells won this year's NWTF callmaker's contest in the Yelper Category. There are several types of turkey calls that vary in shape and ease of use. The Yelpers are trumpet style and take a lot of skill to make and to use. Danny used his Lindow White Rose Engine to build and decorate his winning entry. Recently we did an electronic interview with Danny. In a future issue of the News Danny will do an article on design.

The call has an elephant ivory mouthpiece with an African Blackwood lipstop. The metal ferrule is titanium.

The faux ivory bell has a barleycorn scrimshaw treatment. The cuts, only about 0.005 deep were made with the eccentric drill cutter frame.

Photos courtesy of Danny Wellls

The Aristocrat

Completed winning call with its African Blackwood stand. The call features barleycorns, basket weave, spiral beading, along with decorated beads and coves. It sold at auction for $1,100.

Danny, I want to congratulate you on your win in the Grand Nationals where your trumpet yelper titled, The Aristocrat, won first place. For those of us not familiar with the contest can you tell us about the organization and the contest?

The National Wild Turkey Federation (NWTF) which was founded to promote the conservation of the wild turkey holds the largest sport show in the nation annually in mid-February attended by over 25,000 people. Included in the show is the Grand National Callmakers Contest for both turkey call makers and duck and goose call makers. In both the turkey and waterfowl call making contests there are two divisions: 1) the hunting division in which the calls are judged primarily for sound and 2) the decorative division in which the calls are judged primarily for their artistic component. This year was the 18th Annual contest with over 800 calls entered in the turkey side of the competition. The purpose of the contest is to promote the art of

(Cont. on p2)

(Cont. from p1)

call making by bringing both call makers and artists together with call collectors. There are several different types of turkey calls and some variations of each of those. After the calls are judged, the winners in the decorative division and some of the winners in the hunting division are placed in a live auction. The rest of the calls are sold in a silent auction.

Where do you live and what is your non turning job?
I live in a small community called Ft. Jesup in West Cental Louisiana about 70 miles south of Shreveport and about 30 miles from Texas. For my day job, I am self employed as a consulting forester and petroleum landman. I assist private landowners with the management of their timber and its associated resources as well as their mineral resources. My degree is in forest management, and I spent 9 years as a full time landman working for clients in the oil and gas industry.

How long have you been woodturning and when did you start rose engine work?
I've been turning wood since about 1995 and purchased my LW rose engine in 2008.

Do you make other types of turkey calls or other animal calls? It looks like it takes more skill to make and use trumpet yelpers so how did you become interested in this type of call?
I also make duck and goose calls upon request, and I plan to develop RE designs for duck and goose calls. I had turned about 450 pens (writing instruments) and got bored, so I started making duck calls. Selling hand crafted duck calls in Louisiana is difficult….too many people are doing it and too many mass produced calls are available at relatively low prices.

I was working on a Friends of NRA fund raising banquet with a guy who is an avid turkey call collector. He invited me to see his turkey call collection. This was back in 2004. He collects all types of turkey calls, but when I saw his trumpet yelpers of very fine craftsmanship with beautiful woods and ivory mouthpieces, I was really amazed. Then when I learned that some of the really fancy yelpers were going for over $800.00 I was astonished and inspired at the same time. There was room for artistic expression in this type of call, and there were people willing to pay for the art and the craftsmanship. I said, "I can do this", and started making prototypes.

The great thing about trumpet yelpers is that they are all custom made, no mass production. It is more difficult to master the use of trumpet yelpers, because there is no reed like a duck or goose call. All of the sound is made by drawing air in between your lips to make them vibrate…..just the reverse of blowing a regular musical instrument trumpet. The pitch, range of tones and the amount of what is called "roll-over" potential of the call is determined by the internal dimensions of the yelper.

Can you give us a general idea of how you do develop designs? Do you make drawings, models, or other types of plans?
When I first got my LW, I just started making design models, learning what the different features of the lathe would do within the dimensional parameters of my trumpet yelpers as well as learning how to operate the lathe and its many different functions. By learning what features were pleasing within the dimensional parameters of the call, I was able to begin making drawings planning what portion of the call would include each of the chosen features. From that point, it's a matter of making the call according to the plan to see if it is pleasing to the eye in 3-D and what obstacles need to be overcome to implement the features.

Do you plan to continue the development of your yelper designs and what other areas of rose engine work interest you?
I have been astounded and extremely pleased with the overwhelming acceptance this rose-engine turned call has received by call collectors and even other call makers, so YES I do plan to continue developing new designs for my yelpers. The rose engine lends itself well to the decoration of the bottom of the general type of call known as a "pot call" or slate call with features such as barley corns, shell patterns and fish patterns. As I mentioned earlier, I also plan to develop designs for duck and goose calls. Decorative boxes have been a favorite turning project as well.

If you could design one accessory for the LW RE that is not currently available, what would it be and how would you use it?
A spiraling attachment would be the next accessory that I would design. There is currently no precision method of creating spiral flutes, either concave or convex, within the dimensional parameters of yelpers.

Where do you see your work in 5 years from now?
My ego would say that I would like to be the "first name" in rose engine turned turkey and waterfowl calls. However, I know that the gifts and talents, even the equipment that I have are gifts from my Lord Jesus Christ, and where ever he wants to take me with this is OK with me, because I believe what the Apostle James said: *Come now, you who say, Today or tomorrow we will travel to such and such a city and spend a year there and do business and make a profit." You don't even know*

(Cont. on p 3)

(Cont. from p2)

what tomorrow will bring--what your life will be! For you are a bit of smoke that appears for a little while, then vanishes. Instead, you should say, "If the Lord wills, we will live and do this or that." James 4:13-15 HCSB

What turners, ornamental or plain, have influenced you and how?
I have learned a tremendous amount about the artful proportions necessary for eye-pleasing designs from many of the turners on WoodCentral forum. Since I live in an area void of other wood turners and AAW chapters, I am so thankful for the access to woodturning forums and call making forums. As far as individual turners, I love Mike Stafford's boxes, David Nittman's basket weave illusions, Neil Scobie's erosion series, and Jacques Vesery's work. Mike's boxes are amazingly fluid. I have always loved Native American art especially bead work and basket weave. Nittman's basket weave illusion has inspired two trumpet yelpers, and Scobie's erosion series has inspired two trumpet yelpers. Eli Avisera's laminated stars have inspired two yelpers also.
In the ornamental turning, Bill Ooms' work inspired the bell of the Aristocrat yelper, and Bill was very helpful with his coaching on how to implement that design.

Do you have hobbies other than turning?
Not any that I spend much time on any more. I still like precision shooting. I tried out for the USA Olympic Shooting Team twice a few years ago in the 10-meter pistol event and still like to do a little sporting clays competition once in a while. Two years ago I took up fly-fishing, which I thoroughly enjoy.

If a new ornamental turner comes to you for advice, what do you say to help him develop?
First of all, the design elements that make for a balanced, eye-pleasing plain turned piece are the same for ornamentally turned pieces, that is… primarily the components of proportions and curves. With that in mind, make a lot of firewood. Buy some maple 2 x 2 blanks and learn what the machine can do and how to do it, because there are far more obstacles to overcome related to holding, presenting the cutter and different types of cutters to the wood at different angles than there are in plain turning. Be willing to invest more in precision tooling. The degree of precision of your cuts and patterns is actually determined by your ability to hold the object firmly and precisely, to hold your cutters firmly and precisely and then to make your depth of cuts and series of cuts precisely.

Anything else you would like to say?
First I want to thank David and Steve for making these machines, the subsequent add-ons and this piece of art history available to us. Then to the other practitioners, think outside the box. There is so much beyond our current imagination that can be done with the rose engine that we need to explore. Then share what you have learned, what you've done and what you still want to know. There is not nearly enough activity on the OTI forum for a group this large…..post anything and everything. Thanks for the opportunity to participate in the newsletter.

If you would like to see photos of Danny's prototypes and other photos of the winning call search, "yelper" on the OTI site.

This is a pendent that Danny made to experiment with scrimshaw techniques. It is cut on artificial ivory with the eccentric cutting frame.

Aligning the Hardinge Slide Rest On A L-W Rose Engine

By Brian Clarry

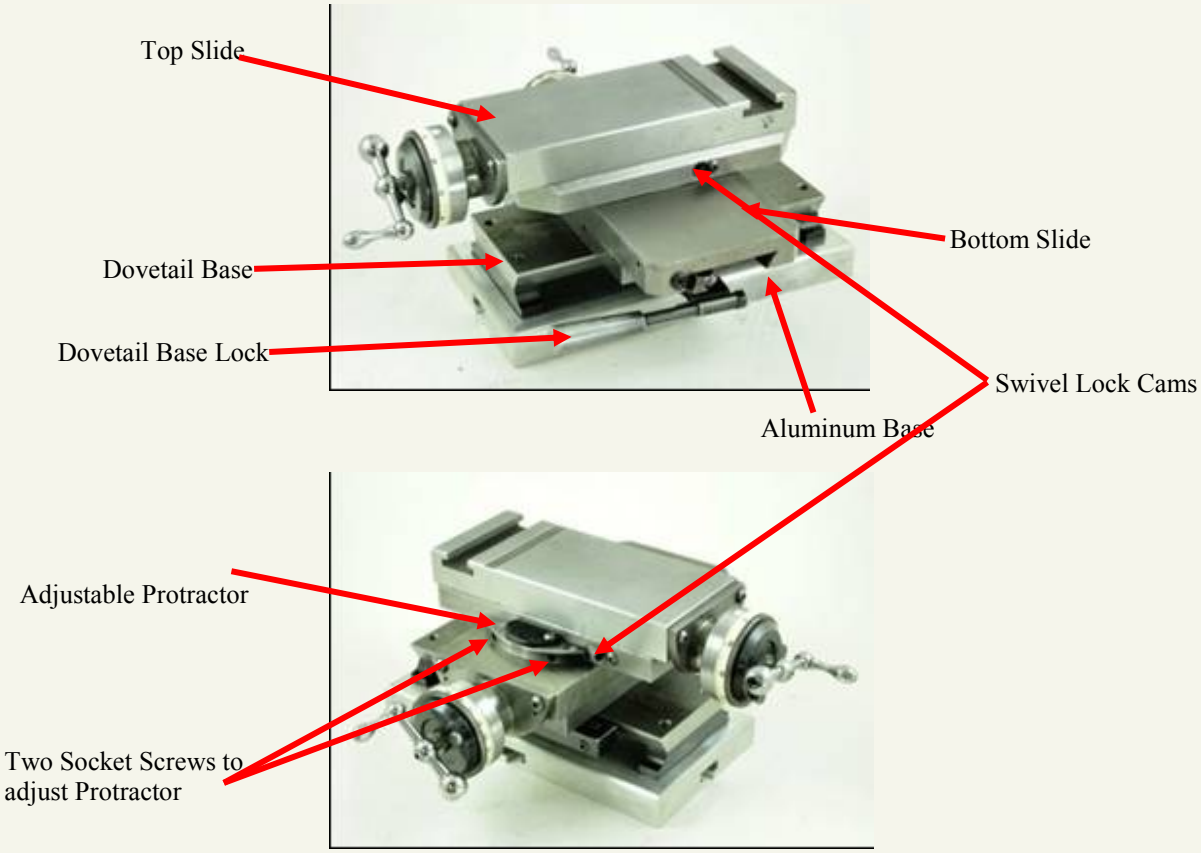
It is important to check the alignment of the Hardinge slide rest as soon as you receive the slide rest and several times a year. There are four steps in the alignment process.

These are:

Step 1. Align the aluminum base with the bottom slide.
Step 2. Check that the dovetail base is 90 degrees to the headstock or spindle.
Step 3. Align the bottom slide with the face of the headstock or a faceplate.
Step 4. Align the top slide to the bottom slide and dovetail base, and zero the protractor.

Parts of the Hardinge Slide Rest

Review the following descriptions as they are used throughout the alignment document.



(cont. p 5)

(Cont. from p 4)

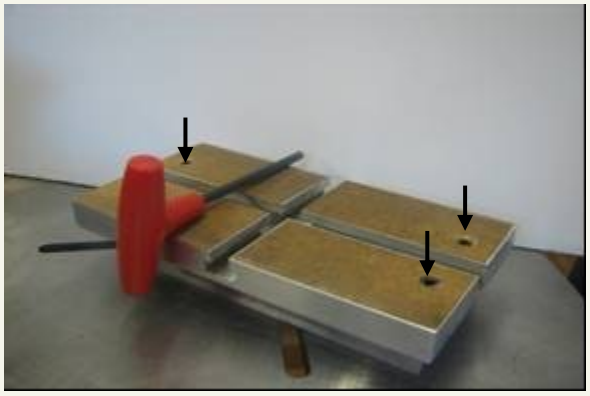
Step 1 Align the aluminum base with the bottom slide.

First, fasten a dial indicator base on the bottom slide with the dial indicator against the side of the aluminum base. Set the dial to zero. Release the dovetail base lock and move the bottom slide from one end of the dovetail base to the other. Make sure to maintain pressure against the dovetail base to keep the two angular pieces against the dovetail. This will move the dial indicator along the side of the aluminum base. Note the difference on the dial from one end to the other.

Setup of Dial Indicator

Angular pieces (red arrows) which ride along the dovetail. Pressure on the dovetail base during movement keeps these points in contact with the dovetail.

Note which end of the slide rest dovetail base needs to be adjusted. Turn the aluminum base upside down and locate the four screws. Slightly loosen the four screws and gently tap the end where the adjustment is to be made. Tighten the four screws and check the alignment again. This may take several tries.



Adjustment screws are visible on each end of the base. The left front screw is hidden behind the Allen wrench.

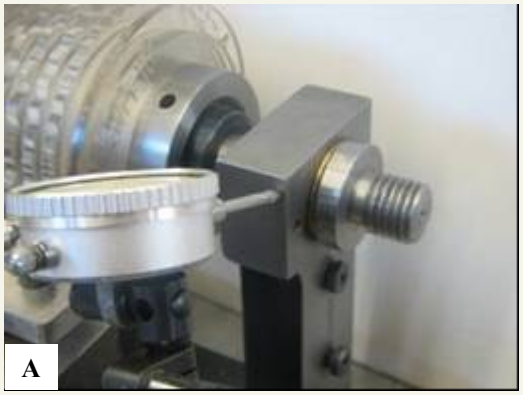
(Cont. on p 6)

(Cont. from p 5)

Step 2. Checks the dovetail base is 90 degrees with the headstock or spindle.

First, fasten a dial indicator base on the top slide with the dial indicator against the side of the headstock. Set the dial to zero. Release the dovetail slide lock and move the entire compound slide so that the dial indicator moves from the front (Photo A) to the back (Photo B) of the headstock. Note the difference on the dial from one end to the other. Lock the dovetail slide lock.

Overview for Step 2 setup.



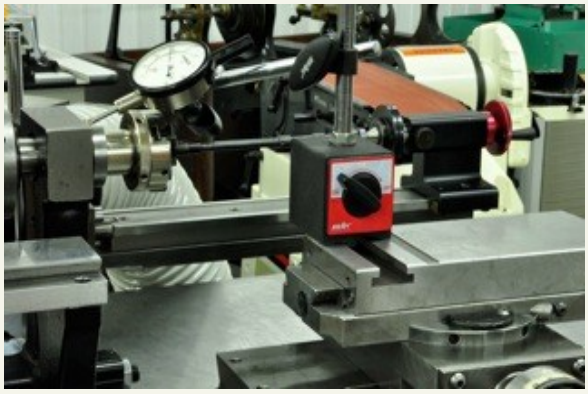
A

B

To correct the difference release the clamping knob underneath the RE table that clamps the slide rest to the RE table. Move the slide rest accordingly and tighten the clamping knob. Recheck until alignment is correct.

Step 3. Aligns the bottom slide with the face of the headstock or a faceplate.

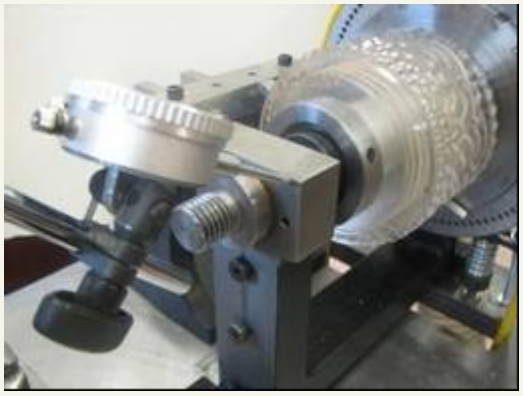
First, fasten a dial indicator base on the top slide with the dial indicator against the face of the headstock. Set the dial to zero. Rotate the bottom slide dial to move the slide so that the dial indicator moves from one side of the headstock to the other. Note the difference on the dial from one side to the other.

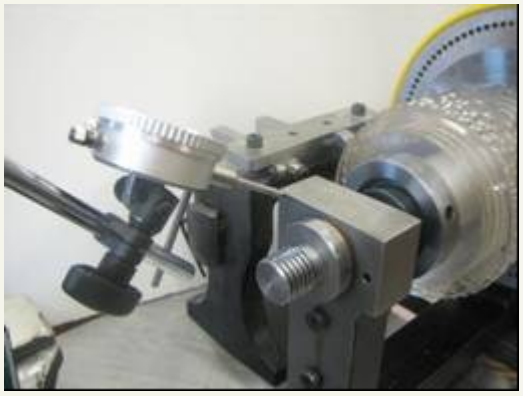


Overall setup for step 3.

(Cont. on p 7)

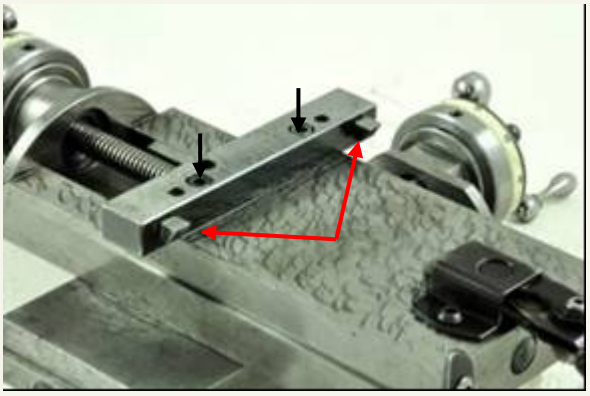
(Cont from p 6)





Move Dial Indicator Probe from one side of the head-stock to the other.

To correct alignment, first remove top slide by loosening Allen screw as shown.



Differences are corrected by moving the two angular pieces (shown with red arrows) on the mounting block of the bottom slide as shown in the left hand photo. Use a hex key to first loosen the vertical set screws (shown with black arrows), and second make adjustments to either of the angular pieces. Recheck the alignment until the difference is gone.

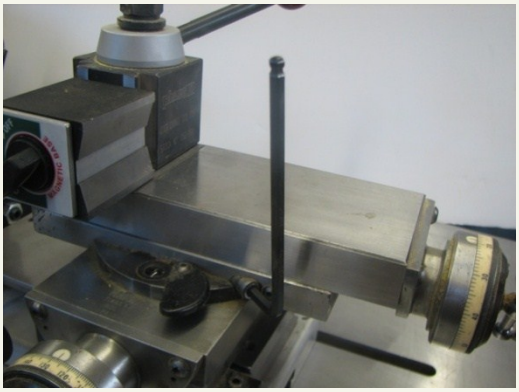
(Cont on p 8)

(Cont from p 7)

Step 4. Align the top slide to the bottom slide and dovetail base and zero the protractor.

First, fasten a dial indicator base on the top slide with the dial indicator against the side of the dovetail base (the side of the headstock may also be used). Set the dial to zero. Release the dovetail slide lock and move the second slide to the back of the dovetail base. Rotate the top slide dial and move the top slide from the front to the rear of the dovetail base. Note the difference on the dial from one end to the other.

Dial indicator setup for Step 4.



Allen wrench inserted into one of the two socket head cams that allow rotation of the top slide. The other cam is not visible on the opposite side of the slide.

On each side of the top slide there is a socket head cam. Both should be loosened and the top slide moved to correct the measured difference. Tighten both cams and check the alignment again. The cams can be tightened in either direction (these cams do not function like screws and may have to be loosened in the right or left hand direction).

Note: For ornamental turning the top slide can be set at an angle or straight. Use the two cams to loosen and tighten the top slide at the required angle.

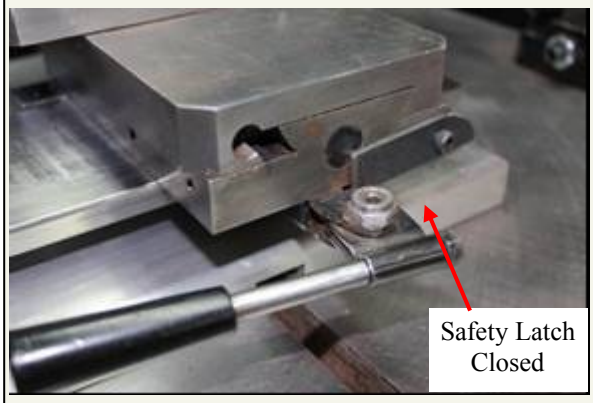
When the top slide alignment is correct the next step is to zero the protractor. Loosen the two socket head cap screws on the protractor. Open the protractor cap, move the protractor body until the hairline is at zero, and tighten the two socket head cap screws.

Note, if the top cross slide is moved and reset back to zero using the protractor scale, the indicator process of this step should be repeated if the dovetail must be absolutely parallel to the top cross slide.

(Cont on p 9)

(Cont from p 8)

Second slide safety latch.



At one end of the second slide there is a safety latch that can be opened or closed. It is important to know the use of this safety latch.

Closed position - This photograph shows the safety latch in the closed position. In this position it will allow the second slide to be moved along the dovetail base, but will not fall off from the dovetail base. Leaving the safety in the position shown ensures that it will not fall off while making small adjustment.

Open position - This photograph shows the safety latch in the open position. In this position the second slide can easily be removed from the dovetail base. Be careful as this top assembly is heavy and may topple from the dovetail base.

A Letter From David

Dear Owners,

I want to thank everyone who came to the meeting in Tennessee. I thoroughly enjoyed it. I'd like to thank Andy Woodard and his wife Susan for opening his shop and their home to us and being such good hosts, Brian Clarry for hosting me and getting me where I needed to be as well as bringing his machine, and Steve White for bringing his machine. These things are appreciated more than I can say, and the meeting would not have been possible without them. It is a pleasure to see the interactions with ideas being shared and relationships established and reinforced.

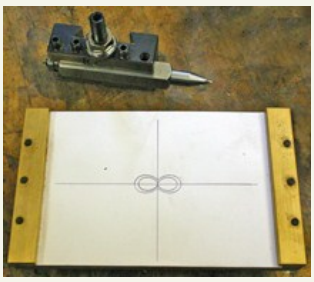
The year has started off well, and we're currently working on rose engine #65 which will be our first sale outside North America. It's hard to believe that four years ago in April we delivered our first machine and hoped to sell the 12 we made in the first batch. I want to thank you all for your participation in making that happen. It's a wonderful feeling to be part of a renaissance of ornamental turning, and I hope it continues to expand.

There should be some new tools coming out very shortly. Likely the first will be the large eccentric cutter head that will expand out to 2 ¼" diameter. It has much more mass to absorb vibration and reduce chatter on those wider and heavier cuts. It will accommodate cutters of 1/8", 3/16", and 1/4". The next tool will probably be the Auxiliary Rosette Holder which has been prototyped and should be started

(Cont. on p. 12)

(Left) Prototype Auxiliary Rosette Holder. Note worm gear for phasing and adjusting rosette.
(TOP) Holder mounted on LW Rose Engine.

Prototype Large eccentric Cutter Head. Supplied with balance blocks.



Pen Chuck
Holds 4x6 cards for rosette mapping. Pen is spring loaded and will work with pumping rosette.

AAW 25th Anniversary Symposium, St. Paul, Minnesota
June 24-26, 2011 St. Paul RiverCenter

This year's AAW Symposium will be held at the RiverCenter in downtown St. Paul. Since this is the society's 25th anniversary a large attendance is expected so you may want to make your reservations for accommodations early. Detailed information is available on the AAW Website. While the program is not finalized it is clear that ornamental turning will be represented by several presenters.

Jon Magill, the father of the MDF Rose Engine will give a presentation entitled, *Demystifying the Rose Engine Lathe.* Tried your hand with the rose engine? View a variety of techniques used in ornamental turning . Everyone can move up the complex ladder of skills required to master rose engine turning and incorporate OT into their turning repertoire. Learn about cover settings and setups that will exemplify the range of possibilities and patterns using the lathe, as well as insights into using assorted OT chucks and cutting frames.

Joshua Salesin will present, *Tips, Tricks, and Traps from a Decade of Turning Boxes.* This slideshow will illustrate my approach to the ornamental turned box. It includes strategies for the languid woodturner as well as insights for the ardent collector. The presentation demonstrates how tools, technique, and artistry have an impact on results.

Bill Ooms' presentation is *Patterns and Recipes for Rose Engine*. How are all those pretty patterns made by a rose engine lathe? Learn how simple rosettes can be used to make stunning patterns on turned wood objects. In addition to having a recipe book of patterns, the attendees will gain an understanding of how to make their own creative patterns.

John Calver is presenting, *Eccentric Chuck for Rose Engine*. See how a shop made, indexable eccentric chuck on a rose engine can be used. The effect of off-center turning on a rose engine can be as appealing as off-center and eccentric turning on a wood lathe. Applications for this process will be discussed.

On Special Interest Night OTI will meet for an open discussion of ornamental turning.

Lindow-White Machine Works will have a booth in the trade show.

OTI 2012 Meeting

Planning is well underway for the next biannual OTI meeting which will be held September 27-30, 2012, in Scranton, PA. Ornamental Turning International is a worldwide chapter of the American Association for Woodturners. OTI is an excellent source of information about Ornamental Turning. If you are not a member you can join from the Web site which is www.ornamentalturners.org. OTI has regular newsletters and a directory of the membership which can be very helpful in finding other OT enthusiasts in your area. One of its most valuable resources is its Web site where members can post photos of their work and equipment and forums for discussion. Steve White is our current OTI President.
David Lindow and Eric Spatt will host the 2012 meeting and they have spent many hours finding the best hotel for the meeting. They have chosen the Hilton Hotel and Conference Center. We will have a large meeting room with stadium seating. There are comfortable leather seats with desks and available Wi Fi for each member. The hotel is located at 100 Adams Avenue, Scranton, PA 18503-1826. There are many activities available for non meeting times and for family members who accompany you to the meeting. The hotel is within walking distance of the Steamtown National Historic Site, Electric City Trolley Station and Museum, Mall at Steamtown containing over 100 stores, Eight Screen Marquee Cinema, Scranton Cultural Center, and Day Spas. A short drive away is the Lackawanna Coal Mine Tour and PA Antracite Heritage Museum, Houdini Tour & Show, Snow Cove Summer Water Park, and Everhart Museum. Golf, tennis, and white water rafting are also nearby. Further information regarding the program and meeting activities will be announced after the New Year.

Editor's Chips

If you've ever sat and stared at a blank page with a publication deadline looming, then you know what it is to be an editor. You want to print information that is useful and relevant to your readers, but you can't do it all by yourself. Especially if you're new to the subject you're editing. Fortunately, I haven't had to face that with LWREN. In fact for this issue I have the Editor's blessing of having a full issue and having non time sensitive material that can be used in the next issue. I want to thank Roy Lindley for providing the article and photographs of the Chicago meeting. I want to thank Danny Wells for doing the interview about his prize winning turkey calls. And last, but certainly not least, I want to thank Bob Barbieri for providing photos that helped better show the article on the May meeting in Tennessee. Speaking of the May owners meeting, I want to thank Andy and Susan Woodard for hosting the meeting in their shop and home. If you'd like to push the learning curve for RE work you can do so by attending one of these owners meetings. I always return home feeling that I've jumped several months of trial and error experience. Now I only need to get more time to stand in front of the lathe. I hope you all have a great summer with time to enjoy good weather, family time, relaxation, and time for your hobbies. Keep sending in those articles and photos for future issues.
We'll have another edition in the fall, but until then don't hesitate to contact me if I can be of help.—John Tarpley , Editor

Real Winter in Chicago - January Lindow-White Seminar

By Roy Lindley

Thanks to the Chicago Woodturners Club (CWT) and many months of planning and coordination, the first CWT sponsored OT seminar occurred on January 21-22 despite frigid outdoor temperatures and lots of ice and snow. About twenty-five interested people with varying OT experiences were afforded the opportunity to be part of an event with David Lindow and five Lin-

dow-White (LW) Rose Engine lathes. This meeting evolved from response to OT items being part of the CWT monthly gallery over the last year as well as the availability of a loaned MDF thanks to Steve White. MDF capabilities have been demonstrated as part of a regular CWT meeting and the lathe circulated among interested turners for in-shop trials. As a result a few OT pieces were part of the recent CWT sponsored symposium auction.

According to David, this Chicago area event had the largest number of LW lathes being setup and used in one place at the same time to date. Several LW owners attended from as far away as the west coast. Clearly, this became a gathering of diverse backgrounds and experiences where questions were welcomed and where concepts could be openly discussed and physically illustrated with actual hardware. Newcomers departed with a much broadened appreciation of OT pieces while owners and the more experienced gained numerous tips and techniques to improve their skills.

The majority of the Chicago audience were either totally new to OT or relatively recent LW owners. Thus the first day focused on setup basics including verifying cutter center positions, cutter platform orientations, headstock top dead center, and setting headstock motions for equal amounts from top dead center. With a good deal of personal tutoring by David, this was followed by the making of a square box using the dome chuck. This included pointers on how to orient the work correctly, setup the lathe accurately, and phase rosettes to get the desired results. The second day focused on threading topics and creating an attractive fluted and threaded acorn shape piece using the dome

chuck . Something new to most were double start threads possible with the LW Threading Attachment wherein an 8 thread per inch advance appears to be 16 threads per inch until one observes there are two starting positions for the lid instead of one. Since the main body of the acorn box is fluted during rotation in the dome chuck, there was additional beneficial explanation on how to determine and set the radial offset distance and box axial position to get the correct contour yet preserve a small flat base.

As shown in the photos , several owner-attendees brought samples of their work. This illustrated capabilities that had not been showcased in CWT meeting galleries and provided the more experienced or ambitious with ideas for future projects.

To complement the gallery David (Cont. on p12)

(Cont. from p 11)

brought along a substantial selection of tooling accessories that he uses or is evaluating for introduction in his product lineup.

Both projects were useful learning exercises. While both demonstration projects entailed making chips rather than just studying a project, the acorn box proved to be the most presentable project when completed. In both cases David assisted individual lathe stations with setups for a particular process but the threaded box was done on more of an assembly line basis. This afforded attendees the option to focus on the stage and setup of most interest.

The event was a clear success with a reasonable mixture of "down in the weeds" details but also the big

Finished African Blackwood Acorn Box made at the Chicago Meeting. (Photo courtesy of David Lindow.)

E-mail to the Editor

Subject: LW Rose Engine News V1N2

Dear Editor,

Great quality Magazine. Keep up the good work. I haven't had time to read it all through but I did spot a few errors:

1) On page 10 you left the 's' off the end of my name.

2) You reported that I recommended cutting the male screw-thread first. I actually recommended cutting the female thread first because it is more difficult (because it is inside and you can't see it so easily) so all you need to do is cut a clean thread to a reasonable degree of accuracy. When it comes to fitting the two pieces together it is easier to test to see if the finished female thread screws smoothly onto the unfinished male thread because it is easier to move the tool away from a male thread for testing and moving it back in again if you need to cut another whisker off to ease the fit. Also, the male thread is easier to cut as it is on the outside and you can see clearly how the cut is going.

Kind regards

John Edwards

Editor's Response

I apologize to John for misspelling his last name. It was a simple typo that wasn't caught in the proofreading process. I want to thank him for correcting the error on which half of a thread pair to cut first. I wrote this article from my meeting notes and obviously made an error as I listened to his presentation. Perhaps in the future OTI will be able to publish a booklet of speakers notes which will help all attendees from making these types of errors and help us learn more form the presentations as we later review the speakers' notes.

John Tarpley, Editor

(Cont. from p 9)

very shortly. The continued delay on the MT 2 spindles has generated a couple of changes not only in the spindle itself but also in our approach to production. The delay turns out to be serendipitous as the changes will be a marked improvement. The other tool we're hoping to see very soon is the pen chuck for mapping out rosettes on paper.

Thanks to those who've contributed to the newsletter. John Tarpley has done a fine job putting it together as have Brian Clarry and Danny Wells who've written articles. We're very proud that Danny has chosen to throw his talents toward using the LW Rose Engine ultimately winning national recognition as a first place winner with his trumpet call. It's such contributions that have caused OT to grow exponentially in the past few years.

The next trade show we'll be attending will be the AAW Symposium in St. Paul. If you're coming we'll see you there.

David

Spring LW Owners Weekend

John Tarpley

This spring's Owners Weekend was held at Andy Woodard's shop in Columbia, Tennessee on May 11 and 12. Sixteen of us were able to attend the two day event. As usual it was a time of great fellowship and we all came home with a lot of new ideas. We had access to three LW RE provided by Andy Woodard, Brian Clarry, and Steve White. Also available was Andy's well equipped shop which also includes a Lawler OT lathe.

Most of us have been making projects by trial and error and have not always been able to execute the ideas in our head in wood. The focus for this weekend was to show us techniques and methods to accomplish just that. As David said, "We've made some nice work by trial and error, but it's time to move beyond that and be able to accomplish any design and shape that we want to make." The projects that illustrated these methods were an acorn box and a fish box with two alternative lid treatments.

I'll share the methods we learned in a separate article, but to summarize the methods are based on sketches which become shop drawings which we can measure and use for setting the RE.

There are three things we need to do to advance our skills. The first is spend time at the RE. The second is read the existing literature, especially TD Walshaw's *Ornamental Turning*. Third, but not last, is attend these owners weekends where you can be exposed to a lot of information in a compact event.

All photos on this page courtesy of **Bob Barbieri**.

Thank you Bob.

Photos of the Instant Gallery from the May Meeting

Most of the items for the Gallery

Brian Clarry

Brian Clarry

David Lindow

Brian Clarry

Andy Woodard

Geoffrey Saver

Brian Clarry

Andy Woodard

Andy Woodard

Andy Woodward

David Lindow

(Cont. p 14)

(Cont. from p 13)

Sam Seaton

Mike Foydel discussing a piece.

David Lindow (L) and Geoff Saver with a piece Geoff made.

Brian Clarry discusses a point of turning while David looks on.

Andy Woodard(L), our host, David Lindow(M), and Sam Seaton(R) do some work on Andy's Lawler OT Lathe.

While others worked, Eric Spatt decided to enjoy the warm TN sun.

Our Projects made during the Weekend

The acorn box has a barleycorn, threaded lid with a fluted bottom. Box made from mopane.

We made two variations of lids for the fish box. A shorter scalloped lid for the fish insert and a taller barleycorned lid with an African Blackwood finial. Both lids are threaded. Boxes are mopane and the fish insert is osage orange.

From Idea to Completed Turning

By John Tarpley

While some LWRE owners come to the machine with a background in OT having used other types of lathes, many of us come from a background of plain turning where we simply mount a block of wood and proceed to make a shape we like and which is close to the shape we envisioned before starting. We quickly learned that the rose engine does not work best like this and sometimes we couldn't even determine the methods needed to produce certain shapes or decorations.

Fig. 1

In this spring's owners' workshop weekend, David Lindow introduced us to some simple methods to solve these problems and help us take our work to the next level of skill. In this article I will share with you the information I learned from David and try to pass on his knowledge to you.

It all starts with a sketch of the design we have in mind as shown in Fig. 1. In this sketch David has shown two variations of a vase shape that will contain both convex and concave shapes along with some possible decoration. Once you have explored your creative ideas and have made a sketch or sketches which you like, you are ready to move to the next step which is to create a measured shop drawing.

Fig. 2

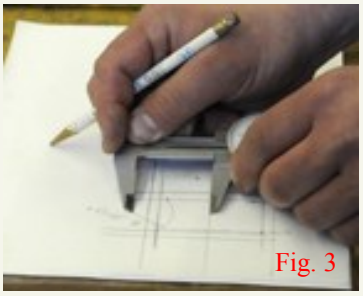


Fig. 3

You may want to make this drawing on tracing paper. You could use graph paper, but this is not usually necessary. This shop drawing should be full-sized so knowing the size of stock you have available and the finished size of your turning are important. Start your drawing by laying out two parallel lines the width of your turning stock. Next add a centerline. Now using various drawing tools as needed you can layout the shape on one side of the centerline. Fig. 2 shows David using a compass to layout the upper cove that will form the top of the vase. You can now make measurements to add to the drawing for use in setting up the RE.

To define a shape based on a circle for the double eccentric dome chuck, we need to define two measurements. One is the radi us of the circle which is the offset and the other is the distance of the center of the circle from the top of the piece which is the object radius. In Fig. 3 David is measuring the distance from the centerline of the drawing to the center point of the arc drawn for the vase's top cove. This number, converted to thousands will be the offset for the double eccentric dome chuck when it is used to cut this shape. The measurement from the top of the vase to the centerline of the cove will be the object radius for setting the double eccentric chuck. If the shape is to be fluted then the number of flutes must be determined and the index head used during cutting.

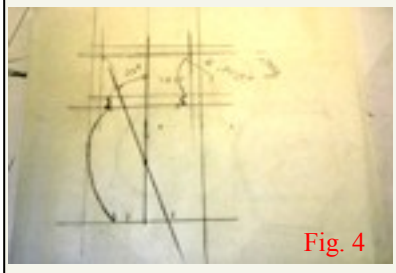


Fig. 4

Fig. 4 shows the drawing with measurements for the top of the vase completed along with an angle line added for cutting the angled flats that separate the two curves. Also, from the drawing we can see that the lower curve of the vase is an oval rather than a circle. We could use some math to determine the distance from the oval's focus to the edge to determine the offset for cutting this shape and to accurately draw the oval, but there is an easier way.

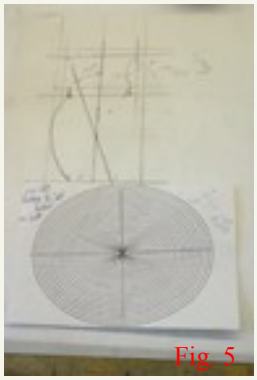


Fig. 5

This method will require you to spend some time mapping your rosettes. You will find that in the long run you will be repaid for this time since you will use these maps in many projects. To map a rosette place a pen chuck on the LWRE and set the lathe up to accurately and uniformly follow the shape of the rosette. You are going to make concentric tracings of the rosette's shape so start with the cross slide set close the center point of paper on your chuck. Move outward in even increments tracing as you go until you have filled the drawing paper with concentric shapes. One such map is shown at the bottom of Fig. 5. Be sure to label your map so that you know which rosette produced each map. Also draw the major axes of the ellipse on the map and another pair of 90º lines oriented 45° from the major axes as shown on the drawing. These lines will be used in a later step. Now by laying your drawing over oval rosette maps you can choose the oval rosette which best makes the curve in your drawing.

To better illustrate this I am going to use some photos provided by Brian Clarry where Brian is using a template on the map rather than a drawing, but the principle is the same.

Still using the double eccentric dome chuck you will need to define three points to cut an ellipse. Each of these points can be measured from your map using your drawing or template. First, we need to determine the number of degrees from vertical which is where on the ellipse map the shape lies. Fig. 6 shows a template overlaid on the map with

(Cont. on p 16)

(Cont. from p 15)

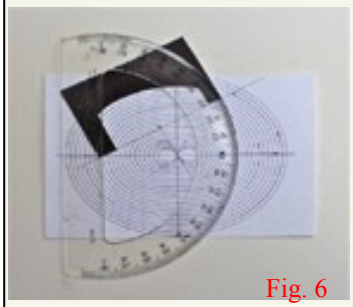


Fig. 6

the top of the template at the left side of the map. By placing the 0-90° line of a protractor along the horizontal axis of the oval rosette map with the zero mark at the intersection of the horizontal axis on the map and the center line of the shape represented here by the edge of the template we can measure the vertical offset in degrees under the scale. This offset is done using the worm on the crossing wheel which will move the project from vertical away from the cutting head by the number of degrees of vertical offset.

Second, we need to determine the offset distance from the map center. Fig. 7 shows this measurement being made from the map center to a centerline drawn from the template centerline. This adjustment is done be moving slide A (the slide closest to the headstock) on the dome chuck toward the cutting head by rotating the red knob counterclockwise.

Fig. 7

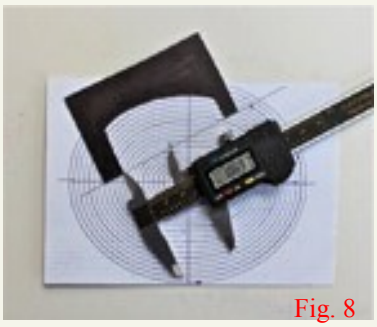


Fig. 8

Third, we need to determine the object radius as shown in Fig. 8. Here the caliper is measuring from the top of the project to its midpoint along the line drawn in the previous step. This adjustment is made by first setting slide B (the slide farthest from the headstock) so that the top of the project is level with the cutter head and then adjust the slide until it has been moved by the radius.

As you can see these measurements require you to draw some lines on your map. If you use a template for these steps of your project rather than a shop drawing, you may wish to make copies of your maps or you may prefer to place tracing paper between the map and the template and draw on the tracing paper so that your original map is preserved. If you are making a shop drawing rather than using a template this is not an issue since you will be adding to the drawing rather than drawing on the map.

Once you have completed your shop drawing you are ready to setup your RE to cut the project. At this point some people will prefer to proceed directly to the RE and do all the rough and finish work on the RE. Others, who may be more comfortable with the plain turning lathe may prefer to rough the shapes on their wood lathe and then transfer the rough blank to the RE to finish turn. Here again your shop drawing will help. Take a copy of your shop drawing and cut out the various shapes and attach them to some type of template material. Using these templates you can turn your blank to the rough shapes you need. Remember that since you are using hardwoods you may find that scrapers work better for shaping than cutting tools. If you use the wood lathe to do the roughing, then you should use a leveling chuck on the RE to account for any differences in rotation between the lathes such as spindle run out and other machining differences.

Now that you can transfer a mental shape to a measured shop drawing you need to be able to setup the RE accurately so that it performs as you expect. This setup will vary depending upon the chucks, cutting frames, and other attachments being used, but there are some general points that you will always use.

You will always want to setup the chuck you use and different chucks require different types of setup and they can not all be explained in this short article. You also need to setup the RE headstock and cutting frame and a machinist's level and a dial indicator are needed for these steps. The first step is to use a machinist's level to set the headstock to top dead center while using an even counted rosette. Lock down the headstock and engage the rubber in the valley of the rosette. You will find the worm gear on the crossing wheel useful for final adjustments. Now release the lock and recheck the level to make sure the headstock is a top dead center.

Second, set the cutting frame to true horizontal or vertical. In this example we will assume that we want the cutting frame to be horizontal. Adjust the cross slide so that you can make a small incision on the left side of the face of your blank. Then move the cross slide to the side of the first mark and make a second incision. In Fig. 9A we can see that the ends of the incisions do not point to each other so the cutting frame is not set horizontal with respect to the face of the blank. In this particular situation the cutting frame is tipped to the left and the top must move to the right to be truly horizontal Fig. 9B shows a retest after the frame has been adjusted. Now that the two incisions align and the ends point to each other we know that the cutting frame is adjusted for horizontal alignment.

Fig. 9A

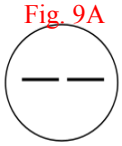


Fig. 9B

Third, set the cutting frame to the center of the spindle. Fig. 10 shows a similar technique being used to check if the cutter is set to cut on center. Two incisions are made in the same manner except this time the spindle is turned 180° instead of moving the cross slide. Either an even count rosette can be used or the indexer on the pulley can be used. The results of 10A show that the cutter is not set on center and needs to be adjusted using the quick change tool holder and tool post. If the mark on the side of the cutter is lower the cutting frame must be raised. If the mark is higher conversely the cutting frame must be lowered. Fig. 10B shows a cutter adjusted to cut on center.

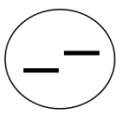


Fig. 10A

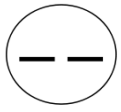


Fig. 10B

It should be noted that any spindle can be centered in this manner. For instance, once your cutting frame is centered to the spindle you can easily center the dome chuck or double eccentric chuck. Just remember that whatever spindle is being turned in the process is the spindle that is being centered.

Fourth, you will check to make sure the cutter is centered radially. This is done by making three incisions on the blank face. One is on the left side of the blank (1), one is in the center of the blank (2), and one is on the right side of the blank (3) as shown in Fig. 11. Cut number 1 is made to a specific depth which should be noted on the dial of the cross slide. Cut number 3 is then made by turning the spindle 180º just as was done when centering the cutting frame to the spindle. The cross slide is then moved toward the center for cut number 2. It is important that the edges of cut 2 not touch either of the others. Using calipers measure the difference in distance from the right side of incision 1 to the left side of incision 2 and the right side of incision 2 to the left side of incision 3. If the blank is centered then the distance will be the same on both sides. If the distance is not the same then the cutter must be moved toward the center by one half the difference in measurements.

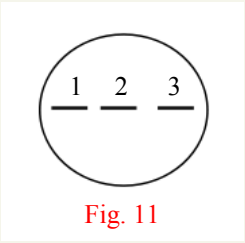


Fig. 11

Fifth, setup the RE headstock to control the amplitude of rocking and to make sure the rocking is equal on each side. With the headstock at top dead center, place a dial indicator on the side of the headstock and zero the dial. Rotate the rosette to maximum amplitude and note the reading on the dial. You can now adjust the rose engine so that you have equal rocking to each side of top dead center and you can limit the rocking by using the stop screw on the back of the headstock.

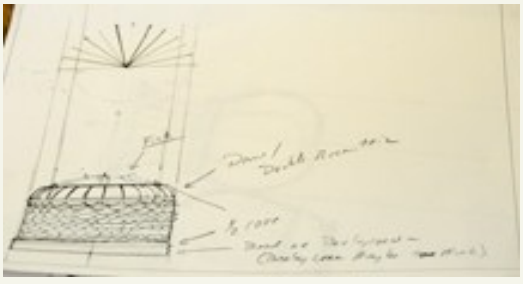
Note to Cutting the Fish Pattern

In his book *Ornamental Turning*, TD Walshaw describes cutting the fish pattern on an OT lathe using a mandrel index to divide the work piece into the four quadrants needed to produce the pattern. We can do the same thing using the index plate on our LWRE, but this requires marking a starting point and accurately counting divisions for each set of cuts. David has shown us a simpler method which used a rosette to index the cuts along with a dial indicator to double check accuracy. Some OT turners will disagree with this method on the grounds that it is not sufficiently accurate. However, for this project where only 4 divisions of the blank face are needed it seems to be very accurate and easier to do. It might not be as easy for a larger number of divisions due to the fact that it is more difficult to feel the rubber seat in the valley of the rosette.

To do this method for the Fish Pattern select a 12 bump rosette. The choice of rubber is important. It must be large enough to span the valley between the bumps so that it registers on the sides of both adjacent bumps. However, it should not be so large as to seat high on the sides which would result in a poorer register. For the 12 bump rosette a 1.5 inch radius rubber seems to work best. Once the rubber is adjusted to the rosette the spring tension should be increased so that there is some difficulty in rotating the rosette which helps to ensure the rubber remains in good contact with the rosette. Now the first set of cuts can be made. As an additional check you can use the dial indicator on the side of the headstock set to zero when the rubber is in the valley of the rosette. After each set of rotations you can easily and quickly check that the dial indicator still reads zero. For added security you can hold your left hand on the rosette stack to ensure it does not move during cuts. When the first cut is finished the rosette can be rotated three bumps so that the blank is rotated the required 90º. The next cut can be made. You can then continue in this manner until all the cuts have be completed.

I hope this information that we learned at the May meeting will help you develop new and exciting projects.

{ED Note: Thanks to David Lindow for reviewing and correcting the technical points of this article to ensure the information is correct.}



This is one of the drawings David did for the fish box which includes the layout for a fluted lid.

DAVID LINDOW
527 GRAVITY ROAD
LAKE ARIEL, PA 18436

570-937-3301
dlindow@socantel.net

WWW.ROSEENGINE1.COM

Submit Articles for future Issues of the Rose Engine News to
John Tarpley
2169 Highland Acres Way
Gatlinburg, TN 37738
jjtarpley@comcast.net