



Volume 36, Issue 6
June 2019

Sawdust & Shavings

PRESIDENT'S MESSAGE



We're coming into June, and our thoughts are turning to the Orange County Fair, and specifically the Fine Art Woodworking Show therein.

Hopefully all of you who were planning on having something in the show met the entry deadline on May 24th. The

delivery dates for your entries is July 5th.

We will be posting a sign-up sheet for volunteering to work the show, and our booth, on June 1st, and we would like to have the sign-ups finished by June 20th, so we can get everyone badges, and parking passes. The badges can be picked up at Bldg. 16 on July 5th. The Orange county fair runs from July 12th, through August 11th.

TOY PROGRAM

We're halfway through our Christmas toy production run, and I'm sure that Ol' "Doc" Crandall, and his curmudgeon elves could use a little help sanding, and finishing these heirloom toys to be given out at Christmas. No pressure, just a lot of fun, and making new friends.

SUPPORT OUR TROOPS

As a veteran I know how hard it is to be away from home, family, and in a strange, and hostile environment not knowing whether anyone at home appreciates your service.

We here at the OCWA try to show our appreciation to our service personnel, and veterans by giving them beautiful handcrafted wooden writing instruments that our members took time out of their busy schedules to make just for them. There is a lot of love in those pens, and judging by the response

we've had from the recipients of these tokens of appreciation, is, that they feel it too. To our Pen Turners; Keep up the good work.

THE SECRETS TO A GOOD LIFE

1. Show up and Participate. 2. Don't cry over spilt milk. 3. Don't believe that all good things come to those who wait. You have to make it happen. 4. Failure is a learning opportunity. 5. And most important of all. Being of service to others is the greatest form of spirituality in that when we put someone else's troubles, and woes ahead of our own, and through helping them get through the tough times we also get through ours with dignity and grace.

James Santhon, *President*

STOLEN TOOLS

FROM DOUG THOMPSON OF THOMPSON TOOLS

A guy I knew from the club (yes, a woodturner) 12-14 years called me about a job. He worked for his dad for 25 years then took his dad's customers to start his own business and that's all I knew when I hired him. Well, a few things started to disappear the after the Florida symposium a whole pallet of tools vanished... I let him go. When I called the police they showed me a mug shot then his whole story fell into place. ... The bottom line is he stole over \$80,000 worth of tools, and the only place to sell them is to you. He can't change steel or flute shape so that helps find the tools.... if you see anything contact me.

Thank you, Doug Thompson

WOODWORKERS' SAWDUST

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Sawdust & Shavings

is the monthly newsletter of The Orange County Woodworkers Association. It is published monthly before the Woodworkers Meeting.

Do you have an idea for an article, shop tip, or tool review? Please send articles to: newsletter@ocwoodworkers.org

Deadline for submissions is the Monday after the Woodturners meeting.

Visit us on the Web at:
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Renown furniture maker, Russ Filbeck, was our speaker at the May 2, 2019 meeting. He came to explain and demonstrate his wood finishing techniques and to tell about his recent trip to Japan to participate in the Kezuroukai Competition.

Russ's finishing technique is simple but effective. He first dry sands to 220 grit. Then he rubs in a coat of boiled linseed oil using 220 grit wet/dry sandpaper. The oil is applied liberally and rubbed into the wood until it won't take any more. Russ then lets the piece set for 24 hours before he wipes off excess oil with a clean cotton rag.



After the linseed oil has fully cured for at least 36 hours, Russ applies 3 or more coats of Liberon finishing oil until he achieves the finish and feel he desires. Each coat is rubbed into the wood, small sections at a time, using wet/dry sandpaper until the wood won't take any more oil. Excess oil is wiped off and the oil is allowed to air cure for at least 24 hours before the next coat is applied. Each successive

application of oil is applied with increasingly finer wet/dry sandpaper: 220, 300, 400 and finer if needed.

(Caution: to prevent fires, always store oily rags in a non-flammable, air tight container and let the rags dry completely before disposing of them. To avoid heat buildup, drape a single layer of rags over a table or shelf edge in open air to dry them)

Russ says that if you prepare and care for your sandpaper you can extend its life substantially and save a lot of money. He cuts his paper with a sharp edge rather than taring it. (He has a home-built jig). Next, he rubs the paper side of the sandpaper over a table edge to increase flexibility and then folds the paper into thirds. The sand side of the center layer provides extra support for the outer layer which makes the paper last longer and perform better. Finally, Russ stores his sandpaper,



especially wet-dry sandpaper, in zip lock bags between usages. You can't reuse oiled sandpaper if the oil dries.

The Kezuroukai is a competition between teams and individuals to determine who can make the longest, thinnest and most uniform wood shaving from a large log using traditional Japanese pull-planes.

Russ demonstrated setting up his plane iron for competition. First, he adjusted the iron exposure so the shavings were nearly transparent. He then adjusted the camber so both sides of the shaving were equally thin.



During the competition, each competitor makes many consecutive shavings and displays them. (Over portable white boards in the picture.) The winner is the one with the best and most uniform shavings.

The key to producing great plane shavings is to have a

really well sharpened plane iron. Traditionally, Japanese woodworker used a mined silicon-rich siltstone to sharpen their blades. Russ said these Japanese Stones don't come with a coarseness grading. You need to find your own coarse and fine stone by trial and error. The

Japanese Stones are soaked in water before use and kept wet during usage.

Russ now prefers diamond embedded ceramic stones. These stones come in standard grades and are used wet. Russ recommends

1000, 5000 and 8000 grits or a 1000/6000 combination stone for beginners.



Start sharpening the plane iron by rubbing the flat back on the stone until you get a uniform color. Hollow ground tools should have a uniform perimeter. Then sharpen the bevel.

Russ sharpens both the front bevel and flattens the back by feel, using a figure 8 motion across all of the stone. The edge is passed over the stone sideways, never edge first, to avoid rounding the front edge. The front cutting edge and the heel of the bevel are kept in contact with the stone while the tool is rubbed sideways, in the figure 8 pattern, until a uniform, bright line is achieved along the entire front.

It is necessary to keep your sharpening stones dead flat and free of sharpening debris. Russ regularly uses a ceramic flattening stone to dress, flatten and unclog his stones.

Russ also makes and sales hand-made spokeshaves. He brought along a selection to show us and donated one to our 50-50 drawing. (I hear the cash prize winner grumbling that he would have preferred the spokeshave!) These are the tools that he uses to shape and carve the legs and backs of his famous chairs. They are beautifully made, and are works of art in themselves.

June Meeting: Our next meeting is 7 PM, Thursday, June 6, 2019. Our Speaker will be Lou Barcelo who will speaking finishing wood using the new water-based products.

Jerry Knight, *Vice President*

WOODTURNERS' SHAVINGS

This month we learned Hal Metlitski's method of making a bowl from a board. If you've never heard of this process before, it involves cutting a series of tapered rings from a board and stacking them to produce a bowl blank. If you cut all the rings at the same angle, your blank becomes a cone. While this can be a nice shape, things look better if you put a curve on them. Hal has figured out that if you vary the angle of each cut, with a larger angle on the bigger rings, you can create a nicely curved bowl.

The stunning results Hal gets from his bowls begins with meticulous layout. Beginning with a pair of boards that will combine to make a square, make the mating edges flat enough to meet with no gaps. These will eventually become a glue joint, so any mismatch will be both visible and weak. It's also important that they both are the same thickness, something easily accomplished with a thickness sander. (Other methods are left as an exercise for the student.) Place the boards side by side and temporarily join them with masking tape on one side. Flip the assembly over and locate the center. If you did everything right, this will lie on the joint between the two boards. Mark a line through the center, perpendicular to the joint, and extend it around to the back. From the center point, mark each ring to be cut. In the interest of keeping track of everything, also make a mark on each ring of one side.

With everything laid out, you can remove the tape, tilt your saw, and cut out the half rings. Once again, attention to detail is important. Working with $\frac{3}{4}$ "

stock, Hal gets good results using a sharp 6 TPI $\frac{1}{4}$ " bandsaw blade. Fight your usual practice of cutting to the line and run the cut right up the middle

of your layout lines. Once everything is cut out, glue each ring half to its mate, taking care to keep the ring flat and squeezeout minimal. After the glue sets, do a dry fit to ensure that each ring matches its neighbor as closely as possible. The layout lines from earlier are a great help here.



Hal starts his glueup by attaching the center disk, which will form the base of the finished piece, to a waste block. As it is important to minimize the wood lost in getting everything round, take great care to ensure the glue block is dead flat and square to the center axis. Hal showed us a neat trick to make sure the disk is centered as well. Once the waste block is squared up, drill a hole in the center that is just big enough for a small sharp pointed nail. He ensures the accuracy of the hole by starting it with a center drill, followed by a standard twist drill. (A center drill is a short bit

with a large body that is very stiff. They are typically used by machinists to precisely spot holes.) Once the hole is drilled, put the nail in, head first. (Clip the head off, or feed from the back. Seriously, just clip the head off.) On the disk, make a small divot as close to the center as you can. Put a good coat of glue on both surfaces, and use the point of the nail in the divot to align everything. After that, add each ring just like a normal segmented piece.

Once the glue dries you can start turning the vessel, beginning with the outside. Make sure the



tailstock end is well supported, otherwise you may find yourself dodging high-velocity wood shards. For this part, Hal provides support with the same plywood disk and a rotating center that he uses to press the rings together during glueup. Take small bites as you go, and be patient. Hal claims to have never had much success with gouges, but don't hold that against him. He uses a pair of negative rake scrapers, one quite small, and gets good results. This approach really shines with the crazy hard exotics Hal works with. Use whatever works best for you. In any case, get the outside fully shaped and sanded smooth before moving on to the interior.

Hal hit us with one more trick turning the inside. Remembering that the base where everything

attaches is pretty small, and you can generate a lot of torque way out at the rim, anything that can support the piece is a Good Thing. Hal's solution? A rubber ball, held in place with a rotating cup center. (Use a pointed one at your own risk.) Use the biggest one you can that will still allow access to the part you're turning, and switch to progressively smaller ones as you work your way down.

Go have fun with this, and remember that if you should experience an unfortunate diameter mismatch you can always call it a funnel.

Chuck Phillips



FENDER GUITAR FACTORY TOUR

On May 23, Fender Guitars of Corona, California kindly hosted a tour of their guitar manufacturing factory to the Orange County Woodworkers. Altogether, a record 39 members and guests attended the tour.

The wood body of each guitar begins as sticks of 8/4 face-planed wood of random widths between 3 and 8 inches. The most commonly used woods are ash, alder, maple and mahogany, but special builds can be made with any desired wood. Company policy requires all wood used in the guitars be harvested from a sustainable source.

Each stick is edge jointed and color matched by machine at the factory and stacked into bundles of matching color. The matching sticks are then grain matched by workers and placed into a clamping jig/machine that can begin clamping and curing a group of 4 blanks every 5 minutes.

After body blanks are cured, they are milled by a series of CNC machines that shape the body and then route all of the required holes and grooves.

A stick of color matched wood is used for the guitar neck. Like the bodies, necks are milled by a 3D CNC machine.

The milled body and neck are fully sanded by hand so that the look and feel meet the Fender standard.

Our guide said that machines just don't produce the Fender feel! All parts are sanded to 320 or 400 grit. Finishes don't adhere well if finer grits are used.

There were quite a number of sanding stations. Sanding of the front and back surfaces is done with a big belt sander (perhaps 15 feet end-to-end) where the operator traps the moving sanding belt onto the surface of the guitar body with a cloth block – I have never seen the technique before. The front and back were completed with random orbit sanders. Edge sanding and details were all done by hand.

Sanded bodies and necks are painted before assembly. Every guitar made at this factory has a custom paint job specified by the end user or the Fender dealer who has ordered the guitar. A wide variety of stained wood and paint finishes are





available for standard models. And, a team of 9 artists and their apprentices are available for custom paint jobs (additional charge, of course). One of the artists specializes in making exact replicas of celebrity guitars including the ware and sweat marks!

Painted bodies and necks are stored in racks to cure and wait assembly. Each guitar has at least 7 coats of undercoat, paint and clear sealer and the paint is buffed to mirror finish.

All of the non-wood parts of the guitar are manufactured at the factory. Electronic boxes, face



boards and other metal parts are stamped using giant die presses. Fender keeps the dies for every part of every guitar they have ever made. You can always get a replacement part. There must have been several thousand die in storage.

Chroming is not done on site. After parts that require a chrome finish are stamped, they are shipped to a outside vendor for chrome.

Final assembly and testing of each guitar is done by hand in the factory. And, at the end of the line, a master tester plays every guitar to ensure that it deserves to be called a Fender!

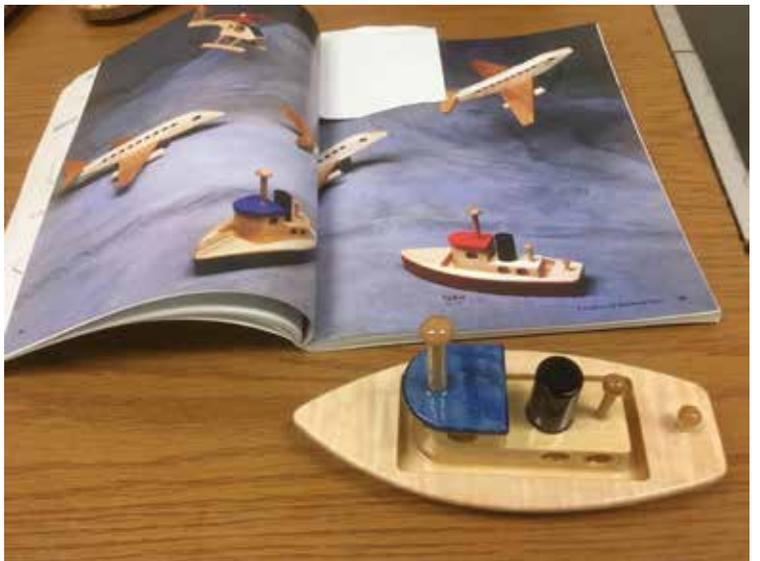
The factory employs over 600 people and produces over 500 guitars per day. Our guide said Fender is the number one guitar maker in the world and that they currently have a one-year-long waiting list!

Jerry Knight



SHOW AND TELL

As we are on the cusp of the Fair we would love to see a preview, or sneak peak if you prefer, of your projects for the Woodworking Show. Of course this is optional, and we would love to see anything that you're working on in your shop, and remember that there is a show and tell drawing at the end of the segment, and you could be taking home some dough re me.



TOY STORY



Having measured twice and cut once, we gathered together to sand, sand, sand, sand, sand. May gave us a lovely Spring day to sit across from a friend and work on our much needed toys. Our tally to date of completed toys is 2200 which includes several hundred left over from last year. Many more are in various stages of completion. Several of our regulars were

absent (which meant more doughnuts for the rest of us). We hope that they are well in will return in June. With his new pacemaker, Gary Phipps should be raring to go. A newcomer, Tony Palmisano, a friend of Richard Kalman, had a good time and says he will be back next month. Bill Rogers reports that Thrivent Financial Services of the Lutheran Church has donated \$125 to our program. This will buy many much needed wooden parts for our projects. Our next work party is Saturday, June 8th, 9:00-12:00. See you then.

Ken "Doc" Crandall, *Toy Chairman*



MONTHLY CHALLENGE

The Challenge for the next turner's meeting on June 20 will be to construct and turn a "bowl from a board". Hal Metlizky's demo made it look very doable. If you did not get a handout at the meeting Hal's detailed notes and diagrams are posted on the website under Handouts.



PEN PROGRAM – SUPPORT OUR TROOPS



Happy Spring to everyone:

The pens are starting to be distributed now that Memorial Day is upon us therefore it is time to pick up the pace.

Veterans celebrations of respect and thanks have begun and in the last two weeks I have

given out over 500 pens and expect more requests.

This and July are our two busiest times with the Holidays, at the end of the year, a close third, so get your lathes going and pitch in. Thanks.

Keep turning and remember

“NEVER WRITE WITH AN UGLY PEN!”

Gary Phipps, *Chairman, Support Our Troops Pen Program*



NEW MEMBERS

A big welcome to our new members:

Dave Hackett, Tustin

Miguel Prietto, Santa Ana

Stephen Masek, Mission Viejo

Steve Neuburger, Laguna Woods

MEETING LOCATION AND DATES:

Tustin Senior Center

200 S. "C" Street
Tustin, CA 92680

Woodworkers' Meeting

Thursday, June 6, 7:00 p.m.

Woodturners' Meeting

Thursday, June 20, 6:30 p.m.

Board Meeting

Thursday, June 6, 6:00 p.m.



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