All the News that fits

Lake Charles Woodworkers Club, Inc.

February 2017

John Griffith, President
Patrick LaPoint Treasurer

Officers and Directors

Barry Humphus, Editor, George Kuffel
Gary Rock, Steve Thomas, Joe Comeaux

Mentoring Program - If you have a project, a problem in any woodworking area, these members have volenteered to help. Give them a call. Jeff Cormier: 582-3278; George Kuffel: 478-2707; John Marcon: 478-0646; Gary Rock: 433-1679; Eltee Thibodeaux: 436-1997; Dick Trouth: 583-2683. Each have years of experience and knowledge.

January Meeting Highlights

Once again we have had the opportunity of meeting at the Stines on Nelson in Lake Charles. Make sure as you leave and in particularly should you make a purchase, thank the folks when you check out.

Former member Scott Pias has rejoined the LCWW and that is great as he always has so much to add in terms of his woodworking expertise. Scott is a carver for the most part and briefly discussed rough-outs and billets that are available from many sources for carving. We welcome Scott back.

George Carr reported his experience at the Houston Area Wood Carvers Artistry meeting recently. George entered several pieces he had carved in several catergories and won 3rd place for two areas over the three day event.

For the safety discussion, Bob Theaux discussed his building of a safety turn off of a cook range top. Bob contacted Barry with a request about how to do this and Barry suggested a couple of commercial products. Yet Bob found a lower cost solution: a simple timer that controls his range top that is one tenth the cost of a commercial solution. Bob's solution works very well but should you have a gas range, you will likely need to use a commercial solution found in the January issue of the Newsletter.

Treasurer Patrick LaPoint reported on the financial position of the LCWW. The balance of our account is $1,424 as of the end of the year. Barry will send to the members the full report in March.

For Show and Tell, Mr. Eltee Thibodeaux led off with a carvered pistol book (a book with a space removed for a pistol). Ray Kibodeaux had a finger jointed box with really nice wood hinges using a custom jig he made from a design. Frank Tartamella had a really nice carved holiday scene.

Joe Comeaux showed some of the colorful laminates he uses for his turnings. This time he had a traditional shaving kit with brush and razor stand as well as some wine bottle stoppers all finished with CA glue. George Carr had two chip carved boxes -- carved on all sides using bass wood with careful staining.

J.W. Anderson did some nice pistol handle grips for a .38 auto in sycamore with great figure. Gary Rock is turning more than wood with beautifully turned aluminum holiday ornaments from round aluminum stock.

Steve Thomas brought another electrict guitar he constructed but this was one where he had robbed parts for his first one then acquired enough new parts to return this one to playing condition through a kit of a luan body and maple neck. The body was constructed from bending the luan ply that was relief cut. He mentioned that the hollow body provides a deeper tone than solid body instruments.

Scot Pias brought us a table sawn box using a custom sled he made. The box was of ambrose maple and walnut. Scott mentioned that Bee Tree Lumber in Ashville was the source of the maple. Joe Comeaux was the winner of the Show & Tell drawing, a gift card from Stines.

Please see Patrick LaPoint during the next meeting to pay your annual dues of $20. This keeps us going and provides you with mcuh entertainment.

Coming Up . . . Saturday, February 11, 2017 at 9:00 A.M. at the Nelson Road Stines meeting room.

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The Kaleiddoscope

If you have had the previlege of seeing or looking through one of Steve Thomas' kaleidoscopes (particularly the binocolur one), you have had a great treat. You may have wondered how these beautify things came into being.

The modern kaleidoscope was created after several design variations by Scottish scientist David Brewster. In 1814 Brewster conducted experiments on light polarization by successive reflections between plates of glass and first noted "the circular arrangement of the images of a candle round a center, and the multiplication of the sectors formed by the extremities of the plates of glass". Like Steve uses, these early kaleidoscopes were first reflection mirrows with the reflecting surface on top of the glass and not on the back as is common today.

An early version had pieces of colored glass and other irregular objects fixed permanently and was admired by some members of the Royal Society of Edinburgh, including Sir George Mackenzie who predicted its popularity. A version followed in which some of the objects and pieces of glass could move when the tube was rotated. The last step, regarded as most important by Brewster, was to place the reflecting panes in a draw tube with a concave lens to distinctly introduce surrounding objects into the reflected pattern.

Brewster thought his instrument to be of great value in "all the ornamental arts" as a device that creates an "infinity of patterns". Artists could accurately delineate the produced figures of the kaleidoscope by means of the solar micoscope (a type of camera obscura device), magic lantern or camera lucida. Brewster believed it would at the same time become a popular instrument "for the purposes of rational amusement". He decided to apply for a patent British patent (no. 4136) for a new optical instrument called "The Kaleidoscope for exhibiting and creating beautiful Forms and Patterns of great use in all the ornamental Arts" and was granted the patent in July 1817.

Unfortunately, the manufacturer originally engaged to produce the product had shown one of the patent instruments to some London opticians to see if he could get orders from them. Soon the instrument was copied and marketed before the manufacturer had prepared any number of kaleidoscopes for sale. An estimated two hundred thousand kaleidoscopes were sold in London and Paris in just three months. Brewster figured at most a thousand of these were authorized copies that were constructed correctly, while the majority of the others did not give a correct impression of his invention. Because relatively few people had experienced a proper kaleidoscope or knew how to apply it to ornamental arts, he decided to publicize a treatise on the principles and the correct construction of the kaleidoscope.

Also unfortunately, the patent was reduced in a Court of Law since its principles were supposedly already known. Brewster stated that the kaleidoscope was different because the particular positions of the object and of the eye, played a very important role in producing the beautiful symmetrical forms. Brewster's opinion was shared by several scientists, including his friend James Watt (who invented the first practical steam engine). Both Brewster's and Watt's statues can be found in Edinburgh, Scotland.

Sadly, Brewster made little money from his kaleidoscope but was very successful with his lenticular stereoscope, the first portable 3D viewer (remember the View Master from your childhood?). Perhaps Steve Thomas, we hope, will make one of these as well as the originals were made of wood and optics. *Barry Humphus*

The Resaw

The first time I saw a piece of furniture with book-matched door panels was at a museum (Smithsonian Museum in D.C.) exhibit of 17th- and 18th-century woodworking. After looking at those nearly identical panels with mirrored grain, I was amazed. My small shop has an old Craftsman bandsaw. Its "one size fits all" blade provided usable radiused cuts, but is far from ready for the resawing work that I now had planned for it. Frankly, the saw needed more than just a new blade to resaw accurately and consistently. The saw needed more than just a new blade to resaw accurately and consistently.

There are a lot of lessons about how to make any bandsaw a can't-miss resawing device. The first step is giving your bandsaw a good tune-up to set the table perpendicular to the blade, get peak performance from the guides, and ensure the blade tracks are true.

With your saw well-tuned, turn to the blade. Resawing wide boards requires a blade that cuts evenly throughout the stock's thickness while evacuating large amounts of sawdust. The wider the blade, the straighter the cut, so use the widest blade your bandsaw can handle. Most saws accept at least a 1/2 "-wide blade, and many even wider. Typically, a wide 3-tooth-per-inch (tpi) blade provides the perfect blend of aggressive yet smooth cut and sawdust evacuation that resawing requires.

Finally, consider the fence on your saw. The workpiece should be no more than twice the height of the

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Resaw Continues

fence. For example, a 4"-high fence will accommodate an 8"-wide board. Use an auxiliary shop-made fence when more height is needed.

Begin by squaring up your stock and a piece of similarly sized scrap. This will ensure that the stock sits flat on the table and plumb to the fence. Using the scrap piece, test the saw setup. Position your fence for the desired thickness and feed the stock slowly into the blade. The saw motor should run smoothly without bogging. Finish the cut by using a pushstick to move the stock past the blade. Now, check the cut.

If the cut piece is thicker at the top or bottom, check that the table is 90° to the blade, and adjust if necessary.

If there is a bow or belly in the cut, the problem could be insufficient blade tension. Many bandsaws' built-in tension gauges are less than accurate. A properly tensioned blade should deflect no more than 1/4 " when pressed in the middle. A too-rapid feed speed, using a narrow blade with too many teeth, or a dull blade can also cause a bow in the cut. If the cut piece is thicker at the top or bottom, check that the table is 90° to the blade, and adjust as necessary.

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If the workpiece ends up thicker at one end than the other, the problem is drift, meaning the blade drifts out of parallel to the fence. If a sharp blade, well-set guides, and proper feed speed don't fix the problem, adjusting the tilt of the upper wheel so the blade runs on the center (crown) of the wheels may bring relief. If not, adjust the fence to compensate for the drift.

Square up a piece of stock similar in thickness and density to your project wood and scribe a pencil line parallel to an edge. Without the fence in place, freehand cut the stock following that pencil line. Before you reach the end of the cut, turn off the saw and, without moving the piece, mark a pencil line along its edge on the bandsaw table. Setting the fence parallel to that line, effectively counteracts the effect of the drift. Whenever I change blades on my old Craftsman bandsaw, I run through the checks again and make any needed adjustments to the saw setup.

Once the setup tests are complete, it's time to turn your attention to the project pieces. Rummaging through my wood storage bin I found a piece of stock with an interesting grain pattern that I thought would look great as 1/4 "-thick book-matched panels on a pair of box surfaces.

I set the fence 5/16 " from the blade (1/4 " plus 1/16 " for subsequent sanding) and began the cut. The feed speed was based on the density of the stock (this was sweet gum) and the width of about 7". A quick check of the first piece indicated that the saw setup was on target, so cut the second piece. The resul was complementary faces and what I wanted.

If I had decided to use this stock to make my own veneers for a project, the steps would be only slightly different. You might set the fence to produce 1/8 "-thick slices, and thickness-plane or sand the blank between each successive cut. This technique provides one flat and smooth side for gluing on each of the veneers. And you thought that your bandsaw was just for cutting curves!

By the way, why resaw? The simple answer is to get more from your stock. For example, rather than planing a 1"-thick board to 3/8 ", resawing can net two boards from the same piece. As an additional benefit, each of these boards will have nearly identical grain patterns, resulting in book-matched faces. Slicing that same 1"-thick board into 1/8 "-thick veneers makes an expensive wood species go even further. For example, a blade with 3 teeth per inch and large gullets more efficiently removes sawdust that can cause the blade to bind and deflect.

Keep the stock firmly against the fence and the tabletop. A pushstick keeps needed pressure against the fence, and your hands away from the blade as it exits the cut.

Stand a square 1/4" from the blade (you may have to raise the blade guard to accommodate your square), and press the center of the blade. Moderate pressure should deflect the blade to touch the square.

A blade too far back on the wheel, tends to make the cut drift toward the fence. A blade that runs too close to the front edge of the wheel does the opposite. Pivot the fence to match the drift angle. An adjustment bolt on this fence simplifies this task. Aftermarket magnetic fences, such as the Carter Magnafence (carterproducts.com), also make temporary adjustments easy.

One more thing: Stickering allows rebalancing the moisture content so stock stays flat. The stickers (scraps of plywood in this case) should be evenly spaced and a weight placed atop the stack to reduce warping.

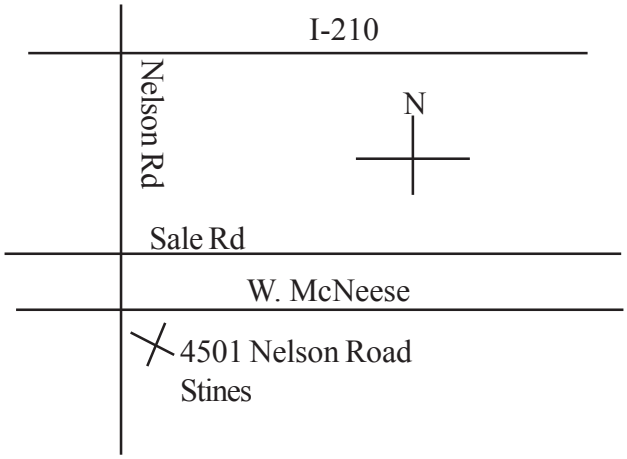
It's not always easy to predict the book-match. All woods have potential for great figure. Choosing stock with interesting grain patterns most often yields the best results. Look what may be inside the lowly 2×4 scrap you used to test your bandsaw setup.

Fenruary Meeting Location

We have the wonderful opportunity to meet at the Stines Lake Charles kocation at 4501 Nelson Road Please enter the store and go to the back left in the store to the meeting room.

To get there go South on Nelson Road in Lake Charles going from I-10 or I-210 and tuen into the parking lot. Go to the back of the main entrance to the very back to the meeting room to find us.

Please take an opportunity to explore Stines before you leave to find the items for your shop or home that you may need. As always, thank the folks at Stines as you check out.



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Lake Charles Woodworkers Club, Inc.
www.lcwoodworkers.com
1039 Timberlawn Dr.
Lake Charles, LA 70605