All the News that fits

Lake Charles Woodworkers Club, Inc. April 2017

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.

March Meeting Highlights

We had several guests this month including Mike Castile, Clay Neverland, Charles Demerest and Tom Bocay (might not have Tom's name spelled correctly). Once again our location was hosted by the great folks at Stine's on Nelson Road. Always give them a thanks as you check out after the meeting.

John Griffith started us out by showing a test board he prepared to look at different finishing styles and sanding for his guitar projects.He compared poly and lacquer with different sanding. This lead to a discusion regarding different buffing techniques. One of the favorites is Meguiars who offers many componds and options.

John also called for alternative meeting locations and Mitch Morgan will have the April meeting at his shop. See the directions on the last page.

For Show and Tell, Mr. Eltee Thobodeaux showed off a nice scroll work image of the Beatles. Ray Kebodeaux brought one of his fine bows. This one was made from laminated hickory with antler tips and a leather grip. He combines osage, hickory and horn bean to form the bow and then used dry heat to acheive the bend.

Darren Hood discussed using laser printer toner as a colorent in finish. It blends very well with most finishes and produces an intense black with just a very small amount. J.W. Anderson produced a fine new cutting board combining cherry, sycamore, mahogany and mystery wood. He also had a good looking Welcome sign of pecky cypress.

Patrick LaPoint built a great double jewelry box (His and Hers) with separate compartments made of cypress and birch. Bubba Cheramie had a photo of a nice service tray made of pine fencing material. He also has a bunch of interlocking mats for your shop and said you can get them for $1 each.

Gary Rock did a beautiful water oak crouch platter and full of holes finished in wipe-on poly. Robert Pertuit described his contrution and turning of a glued up set of large dowels into a perfect sphere toy. Scott Pias did an ashes box (fora pet that passed) of maple, cherry and birch finished in tung oil.

John Griffith showed off his latest classic aucutical guitar and even stummed a few bars for us.

Comming Up . . . Saturday, April 8 at 9:00 A.M. at the shop of Mitch Morgan. Be sure to see the directions and map at the end of the Newsletter.

Before the Phillips There was the Robertson

Trusty, iconic and as all-American as Mom's apple pie, the Phillips screw driver is in everyone's tool box.

Bearing the name of a Portland, OR businessman who didn't invent it, the Phillips is the reigning standard in the U.S. Henry Phillips bought the design from inventor John Thompson who was not able to muster up any commercial interest for his screw head Phillips was obviously a better or luckier, salesman or else we'd all have Thompson screw drivers in our toolboxes at the moment.

The Phillips wasn't always the choosen one. Back in the early 1900s, the Robertson was Henry Ford's choice for a high-torque screw for his Model T. Robertson, inventor of the eponymous screw and driver, refused to license his design, having been screwed over by a previous licensing agreement in England. Ford, needing the license to ensure a steady and reliable supply of screws, looked elsewhere and found the Phillips.

Aside from Phillips' superior salesmanship, what made the Phillips so successful in the early days of manufacturing? The Phiilips is built for more torque, but it is also desgned to "cam-out" under too much torque. On the surface, that might seem like a counter-intuitive thing for a screwdriver to do. But the curves on the cross-blades help the driver slip out of the socket rather than break when under too much pressure.This feature saves both the tool and work piece and that is especially important in places like an assembly line or on a factory floor.

The pointed bit design and gentle outward curve on each of the four blades also makes the bit "self-centering" when inserting the bit into the fastener. Once socketed, the bit and the fastener have a great amount of surface area in the direction of the applied force. Increased applied force means a significantly tighter hold than the traditional slotted screw and drive. This is exactly what Ford and other manufacturers wanted. From anchoring tiny watch or clock pieces to securing car frames through every medium: wood, plastic and metal, the Phillips screwed its way to the top.

As screw-turning technology improved and automatic torque limiters became standard in even the most basic power drills, the cam-out design has become both irrelevant and limiting. For example, some manufactures now use anti-cam-out Phillips bits and others have switched bits entirely. Though it was designed by and for a bygone era of American manufacturing, this has not spelled the end for this trusty fastener.

The Phillips driver is ubiquitous as most everyone has one. When a manufacturer uses Phillips screws instead of security screws, they are sending a message that their device can and should be opened. The same Phillips screwdriver you use to tighten your eyeglasses can be used to service a smartphone. The Phillips #2, a houshold heavyweight, fits everything from light switches to cars. With the twist of a screw, you are in control of your stuff.

The next time you pull out a tiny Phillips bit from your driver kit, you are a part of the resistance. That Phillips #2 in your junck drawer will be useful for decades.

Despite that the Phillips is every toolbox, it is only half the story. The Canadians have been hiding the other half from the rest of us for decades. Before the Phillips, there was the Robertson.

In the early 1900s, a traveling Canadian tool salesman named Peter Robertson was demonstrating a fancy new spring-loaded slotted screwdriver. When the blade slipped off the screw headand cut his hand, he was inspired to come up with something better. His invention was a square socket in the screw head, with a matching driver that fit snugly in the center and could not dlip off to one side or cam out under heavy torque.

This actually wasn't anything new as a square-drivehad been invented and patened in 1875 by Allen Cummings but was too difficult to manufacture. Robertson's design tapered the sides of the square, making it possible to cold form screws by stamping them with a die. This unlocked mass production and combined with Robertson's talent for sales, made his screws and driver a huge success in Canada.

Robertson got to work on his idea right away and borrowed money to open a factory in Ontario to start fulfilling orders. By 1908, Fisher Body was building Ford Model T bodies inn Canada with Robertson screws for $2.60 per car less than bodies assembled with slotted screws. That is significant for a car that retailed for $390. Henry Ford learned of these savings and did his best to work out a deal to equip all of his factories with Robertson screws. Unwilling to give up control of his invention, Robertson refused the deal ("screw you, Henry Ford") and lost the Fisher Body customer. Seeing the merit in a screw that his workers could install faster and more effeciently, Ford instead struck a deal with Henry Phillips and the lines were drawn.

Just as the Phillips is the defacto standard of screws in the U.S., the Robertson reigns supreme among our norther neighbors. The Robertson also serves as a point of national pride and minor smugness as any Canadian will tell you, it is the superior bit in all ways. Just ask John Marcon.

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, right. Slicing that same 1"-thick board into 1/8 "-thick veneers makes an expensive wood species go even further.

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.

The first step to successful resawing 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 true. We've covered band saw tune up several times and even done some hands-on in a couple of shops over the years. You can find this in previous issues of the Newsletter or simply on to Youtube.com and look up band saw tuneup.

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. There are also specialty blades designed just for resaw but as long as you use at least a 1/2" blade with 3 teeth per inch, you are ready to get started. A blade with 3 teeth per inch and large gullets more efficiently removes sawdust that can cause the blade to bind and deflect.

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

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, below. A too-rapid feed speed, using a narrow blade with too many teeth, or a dull blade can also cause this bow in the cut.

Stand a square 1/4" from the blade (you may have to raise the blade guard to accommodate the square), and press the center of the blade. Moderate pressure should deflect the blade to touch the square. If you can do this, then your blade should be at the correct tension.

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. 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.

Here's how. 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, below, effectively counteracts the effect of the drift. Whenever I change blades, 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 jewelry-cabinet doors.

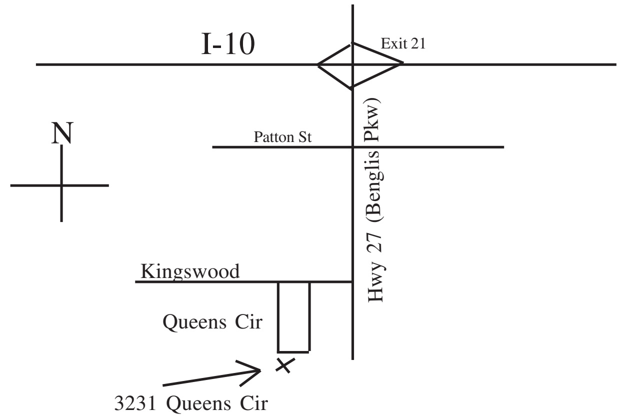
Set the fence 5/16 " from the blade (1/4 " plus 1/16 " for subsequent sanding) and began the cut. Your feed speed is based on the density of the stock.

If you had decided to use this stock to make your own veneers for a project, the steps would be only slightly different. 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. Finish-sand the "show" side after gluing the veneers onto a substrate. MDF or multi-ply plywood make excellent substrates because they are relatively unaffected by expansion and contraction. And you thought that your bandsaw was just for cutting curves.

April Meeting Location

April's meeting is at the shop of Mitch Morgan. His address is 3231 Queen Circle, Sulphur.

From LC, take Exit 21 Beglis (La. 27) off I-10 and turn left on to Hwy 27 going south. Go south past red light 1/2 mile to Kingswood. Turn right and then next left on to Queen Circle. Go to the end turn right. His home is red brick with white siding. Mitch's shop is in back.



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