

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 volunteered to help. Give them a call. John Marcon: 478-0646; Gary Rock: 433-1679; Eltee Thibodeaux: 436-1997; Dick Trough: 583-2683. Each have years of experience and knowledge.

### August Meeting Highlights

John Griffith started us off by showing some of the photos he took at the recent luthier show in San Antonio. It turns out that the city is a hotbed of luthier organizations. Particularly interesting were the ones of a harp guitar and a banjo build. As John is considering a banjo build in his future, he found it interesting. Mitch Morgan followed with a photo presentation from the American Association of Woodworking and Finishing bi-annual fair in Las Vegas. Mitch showed great images of the show and described how very large an event it is. He had the opportunity to attend several of the fair demonstrations.

Returning member Aaron Andrepont brought some very interesting baskets he made and described their construction of some 100 or more pieces each for Show and Tell.

Aaron reminded us that they were all small pieces so when doing this, go slow and be patient with whatever equipment you are using. Safety always matters. Aaron also mention Woodworld of Texas that is similar in products and supplies to Penn State Industries.

Mr. Eltee Thibodeaux described some alternative uses to brake cleaning fluid as a stain remover. I know it works well as

it instantly cleans off permanent markers from almost any surface (such as the white boards I use at college). George Carr brought us a chip carved clock of basswood and gel stained. Gary Rock had a very nice spalted maple bowl he turned.

J.W Anderson had one of his lovely cutting boards on a stand made of cherry, ash and some of his mystery wood finish with mineral oil on the top and the legs finished with poly.. J.W. also brought some nice boxes of splated oak, black walnut and sycamore finished in poly J.W. also brought a Dunlap box finishing plane (like a Stanley 48) that was raffled off. Dunlap was the premium brand of Sears prior to Craftsman from the 1930s until the mid-1950s. Their planes were basically licensed copies of Stanley products.



Patrick LaPoint showed off his scrowled oak mirror frame. Steve Thompson showed us an oak, maple and mahogany segmented bowl of 820 pieces. Steve holds the record by far for segmented bowls and described the sled he uses to do the cuts.

Ray Kebodeaux had a really cool key box that actually mounts outside. The trick is that it has a secret magnetic lock that only opens it if you have the right magnet in the right place. The box was finished with MinWax spray poly for outside protection.

Steve McCorquodale brought this beautiful table the top of which was oak burl with water oak legs. Steve discussed how to properly cut burls for the best figure describing how the wood curls as it is formed by a tree. He reminded us that burl generally takes a great deal of time to dry to the point where it may be worked.

The winners this month were Joe Comeaux winning the raffle of the Dunlap plane. Member Jessie Casey won the raffle for that wonderful purpleheart timber that Joe contributed and Aaron Andrepont won the Show and Tell prize this month.

Coming Up . . . For Harvey Survivors only--Saturday, September 9 at 9:00 A.M at the wonderful Stines Store meeting room on Nelson in Lake Charles.

## Thoughts on Finishes (continued from last month)

Your level of experience, the environment in which you work and whether you're set up to spray, all play a part in deciding which finish to use. The temperature and dampness of your shop, as well as the amount of sanding dust in the air, will affect your choice. Dust falling onto a finish does not pose as great a problem with lacquer or shellac as it would with a slow-drying finish such as varnish. Shellac and lacquer are also the least temperamental when it comes to cold temperatures, and they can be modified with retarder additives for hot and humid conditions. Oils and oil-based products dry slowly in cold temperatures and humid conditions, and dust is always a problem when it has time to become embedded in the dried film.

Spray equipment requires a somewhat larger budget and, in most cases, expensive equipment to exhaust the overspray. There's also a learning curve with spraying, so it will likely take some practice before you get decent results. Choose a finish to match your skill level. In fact with spray, consider starting small with a low-cost spray unit and practice. Even spray-on paint can be good practice for a fine even finish of an object.

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Do you want a natural "in-the-wood" finish? Or does your work demand an elegant, deep, glass-smooth finish? Is the color of the finish a problem, or will yellowing of the finish be a problem down the road?

Traditionally, woodworkers have turned to oil, wax or oil and varnish blends (such as Watco) for a natural-looking finish. None of these easy-to-apply finishes dries to form a hard surface film. However, you can get a natural-looking effect with any finish — including varnish, shellac and lacquer — as long as you don't build it up more than a few coats and you rub out the dried film with steel wool. But if your goal is a filled-pore, deep, lustrous finish, you must use a hard, film-forming finish (varnish, shellac or lacquer). This type of finish is also mandatory when you have to perform complex coloring options like toning and glazing.

The color and the penetration of the finish itself may be an issue. Orange shellac and phenolic-resin varnish both have colors that may be too dark for woods that you may want to keep as light as possible. In addition, many finishes deepen or darken the wood surface. In most cases this is desirable, because it adds depth and increases luster. However, you may want to downplay any deepening effect. Some delicately figured woods (such as pearwood) will appear muddy when an oil finish is applied.

Oil and oil-based varnish, solvent-based lacquer and shellac all deepen the color of the wood and increase surface

luster the most. These finishes wet the cells of the wood, penetrating into the surface. Other film finishes — notably water-based finishes and some catalyzed lacquers — tend to lie on the surface. By not penetrating it as much, they make the wood appear lighter in color.

The plastic look that's sometimes ascribed to polyurethane and catalyzed lacquers has more to do with the incorrect application of these finishes than it does with the finishes themselves. On open-pored woods (plainsawn ash or oak, for example) the application of thick varnish and lacquer can result in a soupy look on the surface. This is a consequence of the finish film bridging across the open pores rather than flowing into them. By reducing these finishes you can achieve more attractive results. My favorite method to apply oil-based polyurethane is to thin the finish 50% with mineral spirits, add 25% boiled linseed oil and a few drops of Japan dryer and wipe it on. It is the finish that George Kuffel and I used on a beach house dining table nearly twenty years ago and it's held up very well.

A finish film that turns yellow with age will be noticeable with unstained, light-colored woods, such as maple or birch. An acrylic finish, water- or solvent-based, does not have this problem. Paste wax and some catalyzed finishes also will not yellow. But you must also think about safety and the environment.

A solvent-based finish, such as varnish and lacquer, contains a good deal of organic solvents, which can affect the environment as well as your health. It's also highly flammable. If these particulars pose a problem for you, use a water-based finish to eliminate the fire hazard and to mitigate the environmental and health impact. Pure oil is a surprisingly good alternative to a solvent-based lacquer or varnish: Pure oil contains no solvents and comes from renewable resources. However, oil-soaked rags must be disposed of carefully. Shellac is also a good alternative. The solvent for shellac, ethyl alcohol, is distilled from corn, and most people don't find the fleeting sweet odor objectionable.

All finishes are nontoxic when fully cured, despite what you may have read or heard. Once the solvents have evaporated, any cured film is safe for contact with food. This does not mean that the finish itself is safe to gobble up. It means simply that additives such as heavy-metal driers and plasticizers are encapsulated well enough that they do not migrate into your food. Wax and shellac (apples and candy are coated with these) are the only edible finishes that I'm aware of, besides mineral oil, which is sold as a laxative.

Spraying wastes a great deal of the finish material, and the organic solvents are dispersed into the air. Brushing or wiping on a finish is a practical, though less speedy, alternative. So consider the reliable brush while not as fast, it does help reduce airborne pollution in the environment and your lungs.

## SawStop and It's Legal Future

In 2015, about 4,500 people in the U.S., lost a finger or other body part to table-saw incidents -- about twelve per day in the U.S. alone. Most of those injuries did not have to happen thanks to a technology invented in 1999 by entrepreneur Dr. Stephen Gass (PhD in physics and a JD). By giving his blade a slight electrical charge, his saw is able to detect contact with flesh and stop spinning in a few milliseconds. A widely circulated video shows a test with a hot dog that leaves the wiener almost unscathed. In fact, member Ray Kibodeaux has one of the saws produced by SawStop and highly recommend the machine and Mitch Morgan just got back from a conference where he saw a demonstration of the technology.

At first glance, SawStop seems like a safety dream. A garage tinkerer comes up with a great idea, builds a product around it, and the world becomes a better place. As time has gone on, other companies have introduced similar products. In March, 2017, SawStop successfully stopped Bosch from importing saws equipped with their REAXX safety system into the USA via a FTC ruling. This not only impacts sales of new saws, but parts for existing equipment. Who gets screwed here? Unfortunately, it's the owners of the Bosch saws, who now have a safety feature they might not be able to use in the future. This has earned some bad press for SawStop in forums and on websites, where users have gone as far as to call SawStop a patent troll. But there is no question that the SawStop system works by saving grievous injury to hands, fingers and other body parts.

The controversy started around Gass, who invented the system. Gass isn't a carpenter by trade. Woodworking was a hobby for Gass. Dr. Gass didn't want to be in the tool industry. He came up with an idea, patented it, and wanted to license the technology to the tool industry. SawStop began selling tools because the tool industry wasn't onboard with Gass's ideas. Glass almost did a deal with Ryobi that fell through and then several suit insured between the two firms.

In 2008, another organization decided to step into it - the Power Tool Institute (PTI) which represents a number of power tool manufactures. They claimed before Congress that the SawStop unit had several defects. Included in these were: required the user to come into contact with a blade before activation; unproven durability; false trips (wet wood); costly (blade and cartridge); more expensive. The PTI also complained that tool manufactures might have to pay royalties (oh no!).

In 2015, Bosch introduced the first real competitor system called REAXX Jobsite which also used a technology

that saves fingers. Like the SawStop, REAXX withdraws the blade below the table but does not damage the blade. Pro Tools published an article comparing the saws. They found that both did the job of preventing significant damage in their tests and both were well designed. The SawStop made two minor scratches with the Bosch making four. Both save fingers.

In September 2016, Judge Thomas B. Pender made an initial determination that the new Bosch design infringes on certain SawStop patents, confirming the FTC ruling. In February 2017, the ruling entered a 60-day review period, giving attorneys time to comment before it would become final. In a separate legal action, Bosch attempted to have the SawStop patents invalidated. On March 31, 2017, the Patent Trial and Appeal Board denied Bosch the institution of Inter Partes Review, thereby leaving the SawStop patents in force.

The International Trade Commission ruled to ban the import of REAXX saws and equipment. Bosch has said they will appeal the decision. While the saws can't be imported, you can still buy them from Amazon. This most likely is distributor stock. For people who already bought the saw, this means they won't be able to buy the activation cartridges. So the safer saw they paid extra for is now an ordinary table saw. For now, Bosch is getting around this import issue by producing the activation cartridges here in the USA.

In May, 2017, the Consumer Products Safety Commission (CPSC) announced plans for a new rule possibly taking place in the coming months. The regulators are considering whether to make the Gass technology mandatory in the table-saw industry.

On Wednesday, August 9, 2017, the CPSC again held hearings on table saw safety. Despite statements made by the saw industry (PTI) claiming they are making their saws safer, without resorting to a finger detection technology, injuries and amputations continue to rise, and now stand at over 4000 per year. Joshua Ward testified that he lost two fingers in a high school accident, and is unable to continue as a firefighter.

The closest parallel we can find to a story like this is that of the seat belt. The three-point belt was invented by Nils Bohlin while he worked for Volvo. The difference is that Volvo recognized how important belts were and ensured the technology would be free for any automaker.

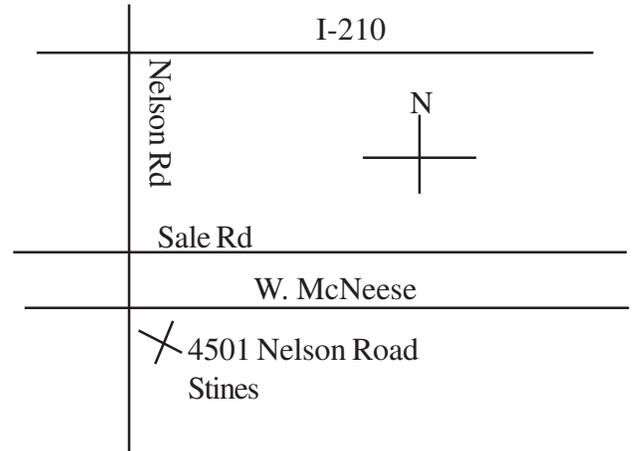
Is the SawStop the story of an inventor who is just trying to make the world safer? An egomaniac who wants to control the tool world and force everyone to use (and rightfully pay for) his system? Or something in between? *Barry Humphus*

### September Meeting Location

We have the wonderful opportunity to meet at the Stines Lake Charles location 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 turn 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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