

Southwest Louisiana Woodworkers Club July 2020

Bill Fey, President
Patrick LaPoint Treasurer

Officers and Directors

Barry Humphus, Editor, Eltee Thibodeaux
Daren Hood, John Marcon, Robin Richard

Mentoring Program - If you have a project, a problem in any woodworking area, these members have volunteered to help. Give them a call. Frank Tartarmella 802-8989; John Marcon: 478-0646; Eltee Thibodeaux: 436-1997; Ray Kebodeaux: 583-2378. Each have years of experience and knowledge.

No June Highlights

Our monthly meetings are still on hold as the pandemic continues in our area. At the beginning of each month, Bill Fey, Patrick LaPoint and Barry Humphus confer regarding the next meeting. Beginning in April, we decided that it was too risky to bring the members into a face to face meeting. We will assess the situation carefully each month and will let you know via the newsletter.

During this shelter in place time, we've had lots of time to start a number of projects around my home including clearly brush, replacing a wooden walkway in the back yard and repainting the kitchen cabinets.

The time off also means we've had lots of time to watch woodworking and other videos on Youtube.com. One of our favorite channels is one called Project Farm.

Project Farm is great because the blogger Todd tests all kinds of products to see if they work. These include testing various lubricants, shop tools and much, much more. Todd does this very well and always takes a scientific approach in the testing and is not sponsored by any of the manufacturer's products he examines. A new video comes out almost each Monday.

While Project Farm does not focus entirely on wood related tests, it is a Youtube channel we watch regularly and well worth the time.

Another interesting web site you may find enjoyable is Hoopladigital.com. This site has many thousands of TV shows, movies, documentaries, audio and more that you can watch for free. You do have to have a Calcasieu Parish Public Library account (also free) to watch. You can "borrow" up to 30 titles per month per CPPL account in your household. So, if you, your spouse, children, etc. each have a library account, multiply that number of accounts by 30. For example, my spouse and I each have an account, so we can "check out" 60 titles per month. The service is great.

Do you Need a Tool Chest? Probably

The sizes of woodworking tool chests are fairly standard – between 35" and 43". This range allows the chest to hold full-size handsaws, which have a 26" blade, plus another 5"

of wooden tote. Ripsaws can have an even longer blade, up to 30". Plus you need to get your hand in there to grab the tote of your longest saw. In addition to long saws, the chest needs to hold a jointer plane. While metal planes top out at about 24" long, wooden-bodied planes can be as much as 30" long.

Short tool chests are difficult to use. They are about 14" to 16" high, and when you put them on the floor, it is painful to bend over to fetch a tool. So you put them on top of your workbench or table saw. Now the toolbox is taking up valuable space.

Traditional toolboxes are usually about 22" to 27" high. Those heights are ideal for the human form. The rim of the tool chest is below the pivot point of your waist. So you bend over and place your off-hand on the rim of the chest to stabilize yourself as you use your dominant hand to shift trays around. Your off-hand becomes the third leg of a human tripod.

The depth of the chest is usually about the same dimension as its height. This makes sense for a lot of reasons. For one, it looks nice. A square profile is a pleasing form. But it also makes practical sense. A shallow tool chest wouldn't be as stable, especially with its lid open. A deeper chest would be a pain to use. Imagine a 36"-deep chest. Your arms would have a heck of a time fetching tools in the back.

One of the guiding principles of chest construction is to make the chest both lightweight, to make it easier to move, and strong, because the chest might take a beating on a voyage.

Lightweight woods aren't typically as strong as heavy woods. So here's what you do: Use a lightweight wood such as pine. But join the corners using a bombproof joint: through-dovetails. Use this lightweight wood with dovetails for every component of the chest, except for the parts that endure friction. Soft and lightweight woods are easily worn away if they rub constantly against other parts.

Let's talk about the four walls of the chest. That's where material selection and construction begins. Old wood

Continues on Page 2

Tool Chests continues.

working books are specific about the material for the shell: the clearest pine possible, free of knots and sapwood.

Most tool chests have shells made from pine that is between 7/8" and 1" thick. Early furniture was more likely to have thicker structural components, so a 3/4"-thick shell would be unusual.

So why not make the shell out of 1-1/2" material? You could, but dovetailing those corners would be a major pain because your material is so thick – you'd probably have to use a tenon saw to cut the dovetails. And I don't think the extra-thick material would add meaningful strength. Chests made from 7/8" material stand up just fine for a couple hundred years.

So after all this talk about dovetails, it might seem odd that I recommend tonguing and grooving the chest's bottom boards and nailing them on. Why not put in a solid bottom that's captured in a groove?

A single solid-panel bottom will move a lot compared to five or six individual bottom boards, which will share the seasonal expansion and contraction. So if you use a solid-panel bottom you must leave a sizable gap for the panel to swell and shrink in the groove in the shell, which isn't ideal. You want everything to be as tight as possible.

There are other good reasons to use individual boards secured by nails. If the bottom gets damaged, replacing one cracked board is easier than replacing an entire panel, no matter how the bottom is attached. And replacing one nailed-on board is easier than replacing a board secured in a groove.

The chest's skirt and dust seal are nearly as prone to damage as the chest's bottom. They are the first line of defense when the chest is slid onto a truck or rammed by machinery.

The skirt and dust seal (the skirt near the top rim of the shell) should be bulletproof. Simple miters will not do.

Dovetail the corners of your skirt and dust seal. Yes, it's a pain to fit everything around the shell. But a dovetailed skirt and seal will last forever. Their corners will never open. So the exterior of your chest will look as sturdy in 100 years as the day you built it

There are several ways to make a lid. Some work great. Some are temporary. The best solution is to build the lid as a frame-and-panel assembly. This confines almost all the wood movement to the panel, which floats harmlessly in the middle of the rails and stiles.

American tool chests tend to have two things on the bottom layer of the tool chest: planes and saws. Some English chests put the saws in a till affixed to the underside of

the chest's lid, some did not. Some American chests would put a saw or two on the lid at times, but mostly the saws went in a rack near the front of the chest.

The back of the chest is a good place for moulding planes and rabbet planes. Set them on their toes with the wedges facing the inside of the chest. A dividing wall under the wedges will hold the planes upright. The good thing is that most moulding planes are the same length and width. Storing the planes upright in your chest is ideal. This allows you to see their profiles and sizes.

This part of the chest will take up only a small part of the bottom area – about 3-1/2" of space plus the thickness of the wall. So there is lots of space left

The simplest and best way to divide the upper section is to build trays that slide forward and back. Two or three trays are typical. Chests that have trays that slide left and right are out there, though they are rare. Why? Probably because it makes it difficult to fetch the long tools below.

The trays slide forward and back on runners that are nailed and glued to the sides of the chest. These runners are like shallow steps up the side of the chest so that each tray can be pulled out of the chest should you need to repair it.

Don't forget that the front wall and the lid are good places to store flat stuff. On the lid, some people put a framing square or a few squares. I've seen a few handsaws and backsaws hanging on the lid, too. On the front wall of the tool chest you can hang try squares and joinery saws – this is the traditional approach. I simply rest my dovetail and carcass saws against the wall.

This is the easy part. The outside of a tool chest should be painted. The modern choice is to use milk paint, which is durable and looks better as it ages. We don't have lead-based paints available, which were the paints of choice in the pre-Industrial world.

On the inside of the chest, I recommend skipping a finish. If you must finish the inside, use shellac, which will cure quickly and won't leave a nasty oily smell like linseed oil will. Article derived from Chris Schwartz.

Rules for the Work Bench

Our last in-person meeting was held at the shop of Kyle Andrepont and Kyle showed off a soon to be completed work bench. The following is derived from Chris Schwartz.

When it comes to building or buying a bench, most woodworkers get wrapped up in what form it should take. Should it be a continental bench popularized by Frank Klausz? A Shaker bench like the one at the Hancock community? How about a British version like Ian Kirby's?

Continues on Page 3

Work Benches continues

Copying a well-known form is a natural tack to take. After all, when woodworkers buy or build their first workbench, they are in the early stages of learning the craft. They don't know what sort of bench or vises they need, or why one bench looks different than another. So they pick a form that looks good to them — occasionally mixing and matching bits and pieces from different forms — and get busy.

Many commercial workbenches are missing key functions that make work-holding easier. And many classic bench forms get built with modifications that make them frustrating in use.

It's fair to say that a lot of the best commercial wood-working today is done on benches that disregard many of these rules. In production shops, it's rare to find a traditional bench used in a traditional manner. More often, a commercial woodworker will have something akin to a clamping table, or even a door on sawhorses. And they can turn out high-quality work that will blow you away.

What's important here is that while you can build with the door-off-the-floor approach, there are many commercial woodworkers who still see the utility of a traditional workbench.

The point is that a good bench won't make you a better woodworker, and a not-quite-a-bench won't doom you to failure. But a good bench will make many operations easier. It's simply a tool: the biggest clamp in your shop.

Always overbuild your workbench by adding mass. There is a saying in boatbuilding: If it looks fair, it is fair. For workbenches, here's a maxim: If it looks stout, then make it doubly so. Everything about a workbench takes punishment that is akin to a kitchen chair in a house full of 8-year-old boys.

Early Roman workbenches were built like a Windsor chair. Stout legs were tenoned into a massive top and wedged in place. Traditional French workbenches had massive tops (6" thick), with legs that were big enough to be called tree trunks. Later workbenches relied more on engineering than mass. The classic continental-style workbench uses a trestle design and dovetails in the aprons and vises to create a bench for the ages. Good-quality modern workbenches use threaded rods and bolts to tighten up a design that lacks mass.

Many inexpensive commercial benches are ridiculously rickety. They sway and rack under hand pressure. You can push them across your shop by performing simple operations: routing, sawing, planing. If the bench looks delicate or its components are sized like a modern dining table, take a closer look before committing.

A big thick top and stout legs add mass that will help your work. Heavy cabinet saws with lots of cast iron tend to run smoother. The same goes with benches. Once your bench hits about 300 pounds, it won't move unless you want it to move.

Overbuild your workbench by using the best joints. These are times to whip out the through-tenon and dovetail. If you followed rule No. 1, then rule No. 2 should be no problem. Your joints will be sized to fit the massive scale of your components. If you cannot rely on mass, then you should beef things up with superior joinery. While dovetails and through-tenons are overkill for a towel rack, they are good for a bench.

There's a lot of confusion on picking a wood for a bench. Most European benches were built using fine-grained steamed European beech. European cabinetmakers didn't choose beech because of some magic quality of *fagus sylvatica*. They chose it because it was dense, stiff, plentiful and inexpensive. In the U.S., beech is dense, stiff, hard to find and costly. You can, of course, use it to build a bench, but you will pay a pretty penny for the privilege. You will have no demonstrable advantage over a bench built from a cheaper species.

Your bench design cannot be too heavy or too long. But its top can easily be too wide or too tall. Your benchtop should be as long as possible. Find the wall where your workbench will go (pick the wall that has a window). Measure that space. Subtract four feet from that measurement and that's a good length for the top. The benchtop must be at least 5' long unless you build only small-scale items. Furniture-sized parts typically range up to 48" long and you want to support these fully with a little room to spare.

It is the thickness that allows the top to be that long. If you make the top really thick (4" or more), then it will offer unerring support and allow you to build your bench without any support system beneath. The top can perch on the legs and will not sag under its own weight.

The width is a different matter. You can have a bench that is too wide for a one-person shop. I've worked on benches that are 36" wide and they have downsides. For starters, if you park them against the wall you'll have to stretch to reach the tools hanging on the wall. If you assemble projects on your bench, you will find yourself dancing around it a lot more than you should.

Cabinet work is sized in standard chunks. These sizes come from the human body; they aren't arbitrary.

Next month, we'll finish this. Stay tuned.

July Meeting Location

We will not have a face to face meeting for July. We hope to have one in August, but that depends on where we are with the pandemic.

We will keep you up-to-date for the future meetings.

So, stay safe, keep your social distance and wear that mask.

Stay Safe, keep your social distance and wear a mask as needed.



July 2020