

Southwest Louisiana Woodworkers Club December 2020

Bill Fey, President

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Barry Humphus, Editor, Eltee Thibodeaux

Patrick LaPoint Treasurer

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.

December Newsletter

Recently, member George Carr sent me an email that had attached last December's Newsletter that reminded everyone who planned to attend the annual Christmas party to be certain to let John Griffith know what food you will be bringing to the party. I recall that my wife and I had a great time.

We had not even heard the term COVID-19 and we had not had any threatening hurricanes. It was quite a year and most if not all of us are pretty well stressed out.

But there is some light at the end of the current tunnel with a vaccine nearly available, new roof and sheetrock and even a new president of the U.S. So we have to give thanks.

Butterfly Keys

A few years ago, I built what I call a mail table. It sits near the back door of our home and where the mail and house keys get dumped. It is made of red oak that was harvested from a tree that George Kuffel had felled and milled into lumber. Thus, the top of the table is rather thick (just under an inch). I turned the legs from the same material and finished it with poly.

While I prefer the thick furniture bases which root these tree sections to the earth, others place slabs on welded steel bases, reclaimed industrial equipment, or stylish hairpin legs that simply bolt on.

The main calling card of these beautiful log sections is their close connection to the tree, and natural defects are embraced. Large splits, however, can make big slabs unstable. But the perfect answer is butterfly-shaped inlays that bridge gaps and splits—a soulful, handmade touch that is both decorative and structural.

Because the inlay is shaped and traced onto the wood, which is then excavated to house it, butterfly keys can be almost any shape or size, and vary from key to key. That means you can, and should, design them to suit the job at hand—long and thin for wide gaps, short and fat for long cracks, and so on. Vary the angles and elements beyond the classic profile, and you can make an already unique slab completely yours. While the inlay process is simple in concept, it can be tricky in practice. And the stakes are high: Mess it up, and you get obvious gaps.

The key to getting the best fit is to use a side taper. Stealing a page from the master, I add a slight bevel to the sides of my keys—roughly 1 degree or so, depending on the hardness of the woods—which makes the inlay process more forgiving. Stray a little with your knife or chisel, and the key fills the gaps as you drive it into place. The wood in the slab compresses a little to accommodate the slightly over-sized key.

The question is how to add that bevel in a consistent way. If you bandsaw your keys, as most do, you can impart the slight bevel as you smooth the edges on a hard sanding block. That works OK, but I've used a more consistent approach.

If you have access to a benchtop sander or an oscillating edge/belt spindle sander, one of the best values in woodworking, in my humble opinion, you can create a new twist on the butterfly key and get perfectly beveled edges in the process.

What makes this sander great for this task is the access it allows to the round drums at both ends of the belt, and also its tilting table. By tilting the table a smidge—or shimming a piece of thin MDF or plywood on a table that doesn't tilt—and using both ends of the belt to smooth the keys, you get perfectly tapered edges and a gently rounded neck, which I find more graceful than the sharp junction on the classic key. As for the rest of the process, I've got some advice there as well.

For a start, here are some key dimensions and angles that work well. To create the mechanical strength you need, Continues on Page 2



Butterfly Keys continues

keys should be at least 1/4" thick, or 3/8" for big splits in big slabs. Some woodworkers inlay much thicker keys, but I find that to be overkill, and not worth the increased difficulty. If the split goes through the entire slab, I just add a similar key on the bottom side. As for the dovetail-shaped angles, I find that anything between 8 and 10 degrees looks and works great.

For the side bevels along the edges, 1° is a good target. For very hard woods like maple, or less-forgiving are-as of a slab with knots or wild figure, I ease up on the bevel angles a little, maybe closer to 0.5°. In those cases, I place a flat block over the key as I bang it into place, to help keep it from cracking or splintering upward. In softer slabs like fir or pine, a 2° bevel works well, and hides even more of your subtle mistakes.

Always use a marking knife to trace your keys. It's a little harder to control than the sharp pencil that some prefer, but the knife hugs the inlay much more closely and leaves a line I can drop my chisel into for the final paring cuts.

Where some simply hold down the inlay while tracing it, I don't trust my shaky hands to keep it stable, and gaps in my furniture keep me up at night. So I use a few blobs of hot glue to lock down each key for tracing.

Sand the edges as before, using both ends of the belt to create a smoothly rounded neck in the middle. Hold down the key on the tilted table to be sure the edges are beveled evenly.

The ends get beveled too. For safety and accuracy, work against a stop.

Apply a few dabs of hot glue, flip the key, and press it down firmly. It will hold tight for tracing and pop off easily afterward. Be sure to number your keys (and mortises), as each one is slightly unique.

Use the flat side of your marking knife to trace the straight edges of the key, starting with light passes to establish the line without wandering. Then flip the knife and use the bevel side to hug the curved areas closely.

The rest of the process is pretty typical for all types of inlay: you rout to establish the depth of the pocket, and chop to the line with chisels. It's all covered in the photos.

Visibility trick. In dark woods like this walnut, I trace my knife lines with a white gel pen, which surrounds and highlights the thin scored line.

For fixed-base routers, drill a big flat-bottom starter hole with a Forstner bit, slightly less than your router-bit depth.

Set the bit depth to roughly 1/16" less than the thickness of the key and use the starter hole to tilt the spinning bit to full depth. Rout in easy overlapping passes in a counter-clockwise direction, bracing the base with your free hand to keep the router from jumping suddenly. Then switch to a climb cut to rout close to layout lines without goin over.

Careful chisel work is the key. Using a 1/2" chisel for good control, you'll be able to set the tip directly in the scribe mark in most spots. The router will leave extra material in the corners, however, so nibble up the mark in those spots, placing the chisel in the line for only the last thin paring cuts.

An angled chisel is very helpful for removing the last bits of taste in the tight corners. Take a last look at all of the mortise walls and make sure they are square (or back-beveled slightly) so they allow the key to seat fully.

Glue goes in the mortise only. Spread it around onto all surfaces with a small brush. You can wet the key slightly with glue, but most of it will just squeegee off and become troublesome squeezeout.

Drive the key evenly. After chamfering the bottom edges with a sanding block, I use a rubber mallet for most woods, but when driving keys into harder woods, I sometimes place a hard block on top to prevent the key from splintering or splitting as it goes in.

Plane and sand keys flush. Switch planing directions to avoid tearout, and feel free to plane across the grain as needed.

Stop when flush or almost so and finish the job with a random-orbit sander.

You'll be proud of the results, and your slab will be stable for decades to come. Don't be afraid to vary woods and designs. For example, these ebony keys would contrast nicely with most slabs.

By the way, I don't like filling defects with epoxy—tinted or otherwise. Wood moves and will eventually pop out some of that hard plastic filler. I strip the bark off the edges too, for the same reason: It's bound to work itself loose over the years. Barry Humphus with lots of great advice from Fine Woodworking's Asa Christiana.

There are some very good videos on Youtube.com on making butterfly keys such as:

<https://www.youtube.com/watch?v=NUc38d9v9q0> and https://www.youtube.com/watch?v=jXYmxwdK9_4

Or just search for Wood butterfly keys in the search box.

Christmas Gifts, Anyone?

It is the time of year when you are thinking of what you (or your loved ones) are going to give you for the holiday.

For some woodworkers, building your own mallet is a rite of passage. I believe that many of us would be better off with a well-balanced, professionally made mallet. If you are a person who wants to buy a thing once and be done with it, you should look at the new rectangular joiner's mallets from Blue Spruce Toolworks [www.bluesprucetoolworks.com/]

Unlike other mallets, these are designed to last a lifetime thanks to the resin-infused heads, which are nearly indestructible. I've used a Blue Spruce resin-infused round mallet for years as my primary striking tool, and it hardly has a mark on it. The company's new rectangular mallets are built with the same material and are holding up nicely after a few months of use in my shop.

The striking surfaces of each mallet's maple head are properly angled so you hit tools and your work with the full face. One of the two faces is covered in thick leather, which allows you to use the mallet to knock assemblies apart without denting your wood. The leather has survived surprisingly well.

The resin-infused heads add a little weight to the tools, but both sizes of mallets (16 oz. and 24 oz.) are balanced because the heads are compact. And like all Blue Spruce tools, the fit and finish is somewhere north of outstanding. The small mallet is good for light chopping, such as removing dovetail waste and chopping out hinge mortises. The big boy is good for mortising and knocking things together and apart.

These might be the most expensive wooden mallets (\$85) on the market, but a Blue Spruce mallet is likely the last one you'll ever have to buy (or get as a gift?).

Is There a Kreg in Your Future?

Pocket hole joinery has been synonymous with the name Kreg for years. Kreg's jigs have always been affordable and user-friendly. With the new K5 jig, the folks at Kreg have managed to tweak their flagship kit to make it even more user-friendly.

For starters, there's the almost-automatically adjusting clamping mechanism. It's a ratcheting, spring-loaded affair that's really simple to use. I say almost automatic simply because you still have to slide the clamping head up to your workpiece; but that's about it. At that point, you just hold the back of the clamping mechanism and raise the large paddle-style handle until you've heard two positive clicks. That's it. No trial and

error. And there's no need to reset the clamping head until you change stock thickness.

The K5's drilling guide has also been upgraded in a couple important ways. First, instead of the knurled knob-and-screw to change the height for different stock thicknesses, the K5 employs a spring loaded knob. It's just plain faster. Secondly, the graduations on the side of the drilling guide are highlighted white, making them much easier to read than before, where they were just indentations.

The folks at Kreg also changed the method for setting the bit's stop collar. The previous version had a recess where you'd lay the bit and set the stop collar according to the engraved stock sizes next to the recess. The K5 uses a setting block in conjunction with the drilling guide instead. It's simple, positive, and quick. Initially, I still preferred the old method, but have since come to like the improvement on the K5.

The K5's support wings also serve as storage boxes for bits, screws and accessories. The dust port swivels for optimal vacuum hose positioning. A quick-attaching adjustable stop can be used on either side of the drilling guide for easily repeatable drilling.

Bottom line, there are lots of little changes here that add up to an improvement in the whole by making the jig faster and more utilitarian.

The K5 kit includes the base with ratcheting clamp, extension wings, dust port, drill guide block, spacer block, adjustable stop, drill bit setup block, hex-shank stepped drill bit with stop collar, 6" driver bit and a starter screw and plug pack. Edited from Popular Woodworking by Barry Humphus

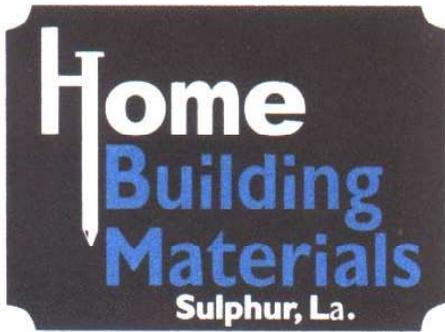
Need a Dowel or Tenon?

Dowels and loose tenons have been around for some time. Both have stood the test of time, making strong, simple, reliable joints. While there are a number of manufacturers, these Expansible Dowel Pins and Compressed Loose Tenons from www.justjoinery.ca are a nice, well-thought-out option.

They manufacture their dowels and tenons in Canada using domestic hardwoods. The dowels and tenons are dried, milled oversize and then compressed. Compression is the key. When Laurier's compressed dowels and tenons are glued, moisture in the glue allows the dowels and tenons to expand to their original size, for an exceptionally tight, strong joint when the glue dries.

The other important feature of Laurier's dowels and tenons are grooves. The importance of grooves on dowels and tenons is manyfold. For starters, a chemical bond forms between wood and glue. The more grooves there are, the more surface area there is for this chemical bond to form.

No Meeting This month



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