Lake Charles Woodworkers Club, Inc. August 2008

Jeff Cormier, President Dick Hopes, Treasurer Officers and Directors

Barry Humphus, Editor, Bubba Cheramie George Kuffel, John Marcon, Chuck Middleton

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; Chuck Middleton: 625-3134; Gary Rock: 433-1679; Eltee Thibodeaux: 436-1997; Dick Trouth: 583-2683. Each has years of experience and knowledge.

July Meeting Highlights

George Kuffel's great shop was our meeting place this month. Jeff Cormier began the meeting holding up a large old angle grinder and seemed to threaten us with it.

Indeed, an angle grinder can be a very dangerous power tool if not used properly and with appropriate personal protection equipment (PPE). While some angle grinders have a guard, most don't and thus you always need to wear at least goggles if not full face protection when using one. Actually, the ones with a guard should be used with PPE as well.

Most grinding disks for these are resin based. That is, the disk is made of fiberglass and resin that is embedded with a grit. The problem is that these have a shelf-life. When you are buying the disks, buy enough for the job at hand and never use one that is more than two years old from the date of purchase. When you buy the disks, mark them with the purchase date and discard old ones.

Jeff also discussed bench grinders. These high speed machines will take metal off in a hurry. They are great for rough sharpening tasks such as a mower blade or axe. And like the angle grinder must be used with PPE. The reason is that the wheel is spinning at 2,400 - 3,600 RPM. If that wheel comes apart, you don't want to be there without protection. Composite grinding wheels also have a shelf life (measured in years for the most part), but a wheel, over time, will absorb moisture which can weaken the material.

For Show and Tell, John Marcon described and showed photos of several Russian Orthodox churches he visited while on a trip to Russia. The 300 year old structures were built of pine and were hand jointed using no nails or fasteners. That is, the frames and other components were built using mortis and tendon, wedge or peg-in-hole jointery.

Mr. Thibodeaux showed us a great picture frame jig, a couple of scroll work boxes and one of his mysterious joint puzzles. I always ask him to tell me how he does these and he always says "Sure" and never does. He also brought a nice scrollwork portrait of Jesus. Plus, Eltee won the door prize. If Eltee says he's going to the 'boats' you better follow him and let him put the tokens in the slot machine for you.

John Perry discussed the building of a large filing cabinet out of wood and brought an example of one of the drawers that will become part of this project. He used a ShopSmith Jointmatic for the finger joints at the front of the case work but said that the machine often does not make very tight joints as a consequence of bit flexing in the router. Someone suggested using a 1/2 inch bit where possible to reduce bit flexing.

J.W. Anderson always brings us such interesting work. This month is was a home built ladder. It was strong, sturdy and innovative as always.

Jeff Cormier showed photos of a couple of raised panel entry doors he built for a friend. They were built of cypress with M/T construction. He actually doubled the panels with one inside and one outside to reduce splitting.

Jim Couvillon showed us an old hand vise he collected, a sharpener, turned candle stick holders and a segmented bowl of willow. The hand vise, I found, was made for the plumbing trade.

Pie Sonnier brought us a 1937 Studebaker replica made of walnut, maple and other woods from a die cast model he found.

Gary Rock showed off a magnolia platter finished with Danish oil, a white oak vessel with purple heart decoration, a box of white oak with purple heart and a sycamore vessel with purple heart finished with the Beal System. And Jimmy Everett brought a couple of his wonderful canes including one that was a 'self portrait.'

Larry Eagle is an artist more than a woodworker and his pieces are so innovative and creative, they always blow everyone away. This time is was a carved mahogany candle holder with bronzed cooper and a fruit wood stain.

Bob Theaux showed off one of the many oak and glass cookbook holders he has made over the years. Turns out he is the father of one of our former members, Camile Vincent Theaux. We miss Camile and wish she would take a bit of time out from teaching and visit us at a meeting.

Coming Up . . . Air Conditioned Shop of Jeff Cormier. 9:00 a.m., Saturday, August 9, 2008 for Safety, Show and Tell and more.

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Dumber Than a Bag of Hammers

Although the hammer is one of the simplest tools—consisting of a handle and a head—there is nonetheless a great variety of sizes, styles, and functionalities. For a basic shop, which ones should you have handy?

In general, there are some tools that fall into the "hammer" category that are only used for more specialized tasks. These include: mallets and mauls, which are woodworking tools; ball-peen hammers, used for metalwork; and more heavy duty options such as the roofers' hammer or sledgehammer. Assuming you are just looking for something that drives nails and occasionally breaks things apart, we'll discuss the more common varieties.

Hammer heads, which have the striking surface, are typically made of steel with a hardened head and peen.

The handle allows a good grip, extends the arc of your swing thereby increasing speed and velocity of the strike, and—in modern times—serves as a shock absorber. The most common and inexpensive handles are made of wood, just as they have been since the hammer was first invented. Although wood handles have okay shock absorption, keep in mind that they will probably need to be replaced at some point. Another problem unique to wooden handles is that over-striking and hitting the handle against the piece you're working on will cause a wooden handle more damage than it would to a metal or fiberglass one.

Most of us don't often consider hammer safety, but a bashed finger can quickly bring hammer safety into focus. But there are other considerations as well. The way you use a hammer to strike somethingshould also be considered. For example, use your whole arm in the swing and not just your wrist when nailing common nails into wood. Not only is this more accurate (after practice, of course), but you will less likely to damage your wrist over time.

A freind of mine, Tim Meaux of Wil-Meaux Contrustion had to undergo painful surgery a few years ago simply because he used his framing hammer incorrectly. He's since altered his technique, but what happened is that he deleoped tunnel carpal syndrome. It wasn't caused by using a computer mouse all day, but hammering incorrectly.

Also around for hundreds of years, metal hammer handles are extremely durable and resist damage from overstriking. The weakness of a metal hammer is its lack of shock absorption. To combat this, most metal hammers also have a well-cushioned grip.

Finally, the new kid on the block in hammer handle materials is fiberglass. Fiberglass handles have the best of both worlds—they absorb shock as well as or better than a

wooden handle (with the addition of a rubbery grip), and they are nearly as rigid or durable as metal handles. Fiberglass hammers are a good choice for electricians.

The most popular hammer weights are between 16 to 24 oz. The state hammer weight consists of the weight of the head only—not the handle. A 12-oz hammer is known as a tack hammer and can be used for driving small nails, brads, and tacks. While 20 oz hammers drive larger nails efficiently, the middle size of 16 oz hammers is the most popular and versatile.

Most general work hammers have a flat striking face on one end and a peen on the other, with the balance in the head. Peens vary in design; the most common hammer is the claw hammer, in which the peen is shaped like a two-prong, curved fork. This claw design is most useful for pulling nails. Similarly, a rip hammer has a two-prong, straight fork. The rip hammer is designed to pry apart two joined pieces of wood.

Although the purpose of the hammer is the most important factor in your decision, you should also consider how an individual hammer feels to you. When you have narrowed down your choices based on weight, type of materials, and style, pick up your finalists and swing them. If possible and safe, hit something with it. Consider how the hammer feels in your hand, whether the shock level is acceptable, and if you have a good grip and a good amount of swinging power for the project at hand.

Now that you've bought your hammer, learn what to do with it! A few basic hammer use pointers are addressed below.

To make a job easier and avoid damage to either your tools or the project, always choose the appropriate hammer for each individual job.

If you notice a hammer slipping off nails, use medium sand paper to roughen the face.

Never use the side of a hammer head to make contact, because the metal at this point is not hardened like the striking face and could incur damage.

Check on a regular basis to ensure the steel wedges holding the hammer handle in the hammer head are tight. Wood can shrink in dry conditions. If a wood handle does become loose, submerse the head in water overnight. This will rehydrate the wood, causing it to expand and tighten up again. A piece of scrap wood inserted between the work piece and hammer will prevent damage to the work piece when crafting delicate projects.

Another way to prevent damage to the work piece is to use a nail punch to sink nails into the timber. *Barry Humphus edited from Wood Magazine*

Basic Joints

Joinery makes or breaks a project. Generally, the more difficult the joint, the stronger it is. That's why woodworkers decide on the joints they'll use early on in the planning stages. Here's a sampling of popular joints, some simple, some more difficult.



Butt Joint. A simple joining of two pieces of wood, either at a corner or edge to edge. Make it stronger with glue blocks or screws.



Dado Joint. You'll see this joint on bookcase shelves. A dado cut in one piece receives the end of the other.



-Dowel Joint. Drill aligning holes in each piece of wood, then glue dowels in place for a tight joint. Perfection requires a centering tool.



Lap Joint. Add gluing surface and strength to a butt joint by cutting a rabbet in the overlapping piece.



Miter Joint. Create this corner joint by sawing one end of each piece to 450. It demands accurate cutting.



Mortise-and-Tenon Joint. A strong, traditional joint that can be made even tougher by adding a peg. Not all mortises go all the way through.



-Through-Dovetail Joint. There's not a better-looking joint, nor one that requires more patience and accuracy to cut. The interlocking feature makes it really strong, but adds visual interest.



Tongue-and-Groove Joint. This joint allows for wood shrinkage. Cut a groove in the edge of one piece and a tongue on the other to fit into the groove.

Low-angle Block Planes

Tools with motors cut faster and with less effort than many hand tools, to be sure. But the quiet and simple block plane performs some tasks better and faster without all the racket. Whether removing milling marks from the edge of a jointed Page 3 Lake Charles Woodworkers Club, Inc.

board, trimming the end of a tenon, or softening the hard edges of a bedpost, the diminutive block plane serves even power-tool devotees well.

There are three jobs a block plane does better than a power tool.

Smoothing end grain. You won't believe how glass-smooth your cross-grain cuts (such as dovetails, box joints, and tenons) can be until you've sliced them clean with a sharp block plane. Power-tool crosscuts in hardwoods can burn and softwoods may fuzz.

Planing edge grain. Think a jointer gives you a perfect gluing surface? Think again. Any rotating cutter, including router bits and a power planer, creates a series of closely spaced scallops. A few quick strokes with a block plane levels those peaks and valleys into a truly smooth surface for gluing.

Chamfering. To soften the sharp edge where two adjoining faces meet on, say, a table leg or bed post, you might be tempted to reach for your router or a sanding block. By the time you find your chamfering bit (much less install it), you could have knocked off those hard edges with a block plane with less effort and smoother results than sandpaper. Not only is a block plane faster, but it also can chamfer in ways power tools cannot, such as creating a tapered or asymmetrical chamfer.

Now that you've been sold on the idea that even power-tool woodworkers should own a block plane, you're probably ready to run out and buy one. Not so fast: Make sure you get a low-angle model. Low-angle block planes use a cutting angle of about 37°, compared to a standard block-plane cutting angle of 45°. The difference is in the



bed angle. A low angle plane will have a 12° angle where a standard plane will have a 20° angle. The low angle works well in face grain and edge grain because it's easy to part the soda-strawlike wood fibers. On a low-angle block plane, the shallow cutting angle helps the blade cut more efficiently in end grain. Yet, it still cuts well going with and across the grain, making it the more versatile of the two styles.

Some low-angle block planes to consider are: Veritas Low-Angle Block Plane - \$80; Lie-Neilson 102 - \$95 (or the Adjustable-Mouth version - \$150); Record 60 1/2 - \$46; Stanley 60 1/2 - \$30; Bridge City HP-1 - \$600! Barry Humphus adapted from Wood Magazine.