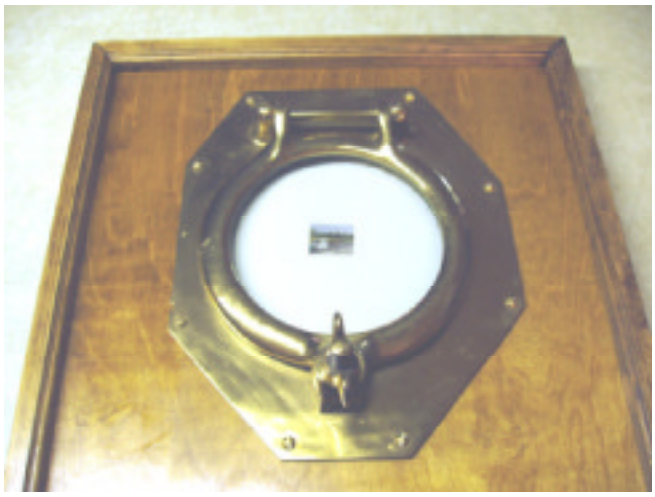
Lake Charles Woodworkers Club, Inc. June 2006

MAY MEETING HIGHLIGHTS

Dick Trouth was our host this month at his always interesting shop. Dick constantly searches for new or improved ways to do woodworking.

While we couldn't be at the meeting (busy at our beach house repairing a broken table), we figure that there were some great Show and Tell items. And we got a photo from Mr. Thibodeaux. It is a picture frame constructed from a porthole light. I think Eltee needs a bigger picture!



Bubba Cheramie has been doing a great job as president over the past several years, but due to work committments, he has to pass on the duties to someone else. A majority of the board confurred and has choosen Gary Rock as our presidential candidate. The board askes you to confirm Gary at the the June meeting. Gary has agreed to serve if elected by the membership present at the meeting.

TABLESAW ACCESSORIES

Tablesaws are often the central tool in many woodworking shops, and a long list of accessories make these versatile tools even more useful, and safer, than they already are. What counts in a good accessory are that the accessory must fit your saw properly; that it is sturdy; and that it is accurate and easy to install with readyiy available tools and skills.

Guiding work on the rip and crosscuts are the two most frequent needs with a tablesaw. Consequently, rip fences and miter gauges are the typically the first tablesaw accessories that are added to the woodworker's arsenal. What comes as standard on many tablesaws can be very disappointing. Fortunately, a number of manufacturers make aftermarket alternatives that will significantly improve the performance and accuracy of nearly any tablesaw.

Heavy fences — like those made by Biesemeyer and others — are less likely to flex under load and stay parallel to the blade. Models that do not require a locking rail at the back of the saw also make it easier to add an outfeed table.

There are a number of miter-gauge options that have more precise settings and more flexibility than the standard-issue gauge that comes with many saws. Some can be calibrated for precise joint-making.

Tenoning jigs and angle jigs that ride in the saw's miter-gauge slot are useful for cutting a variety of joints. A micro-adjust feature on some models makes it easier to dial in very precise settings.

Zero-clearance throat plates made from phenolic resin or a similarly stiff material help to prevent tearout in splintery materials like hardwood veneer plywood or melamine. Some versions have replaceable inserts that share a common frame.

Most blade gaurds that come with machines are one peice that inclues the gaurd and splitter — a very poor design from the point of view of usability. So what you often end up doing is removing the entire mechanism. Aftermarket blade guards are generally better than original equipment, which is why woodworkers remove these from their saws to improve visibility of the blade. Telescoping models may contain a dust collection hose.

Featherboards that fit in the miter-gauge slot or are held in place with an integral magnet keep stock snugly against the fence for straighter and safer cuts.

Splitters reduce the risk of kickback by keeping stock away from the leading edge of the saw blade. Aftermarket splitters can be added directly to the table insert or installed on a bracket; several offer a quick-release function to make removal easier. *Edited from Fine Woodworking.*

Please let Dick Trouth know at the June meeting if you want one of our custom name badges.

Coming Up . . . Saturday, June 10 at 9:00 a.m. The Shop of George Kuffel will be our meeting place and Gene Barnett our presenter.

TRIG JIG

With this simple jig and a little trigonometry, you can cut odd angles on the table saw more accurately than with the saw's miter gauge. First, construct a sliding table using two maple or oak rails and a piece of 3/4-in. plywood. To ensure perfect alignment, lay the rails in the saw's grooves and tack the plywood to them temporarily, then flop the plywood over and screw the rails down. Next, raise the saw blade and cut about halfway across the jig. What you want to do is precisely cut a line from the front of the jig about half way from the front to the back. This will result in a jig that exactly conforms to your blade.

Trigonometry provides an easy and accurate method for laying out the angled fence. Find the tangent of the desired angle from a trigonometry table or with a pocket scientific calculator. The tangent gives you the ratio of the angle's vertical rise to its horizontal run. If your angle is 11.25, for example, the tangent is 0.19891 (rounded to 0.2). Therefore, for each inch of horizontal run, the vertical rise is 0.2 in. To make layout easier, scale up the measurements by multiplying by 10. This results in a base horizontal line of 10 in. and a vertical rise of 2 in. Mark these measurements on the jig and draw a line between the two points to locate the fence. *Edited from Fine Woodworking Magazine — www.finewoodworking.com.*

WOODWORKING CONTEST

The folks at *Woodworking Magazine*, www.woodworking.com are offering a contest to woodworking clubs. The magazine provides a great many plans in each issue and they are looking for more. The contest started 1 May 2006 and ends 1 November 2006. There are 10 categories with 25 winners with prizes of up to $5,000 and to be announced in the May 2007 issue. You can enter up to three times. Each item must be able to fit into a box no larger than 2' x 2' x 3'. Entry forms can be downloaded from their web site and are reproduced in their magazine.

POWER SHARPENING GEAR

Many woodworkers assume that the place to start their tool sharpening collection is with power sharpening tools. After all — machines can do it faster and better, right? This is a common assumption among new woodworkers. The truth is that power grinders don't sharpen tools better — they just do it faster. These tools are great for removing large amounts of materials quickly. In the case of gouges, they are essential for sharpening. In many cases, if you keep your tools sharp, all you need is a touch up with a stone to keep on working. Where the grinders do excel is in major edge re-shaping such as grinding back an entire edge to remove a nick.

Most shop grinders are not suitable for sharpening woodworking tools as they are sold. There are two parts that will need to be upgraded before they are ready for fine woodworking tools. The first and most important is to remove the wheel and replace it with one designed for sharpening woodworking tools. The "stock" wheel is better suited for sharpening lawnmower blades and general metal grinding.

The second part that should be upgraded is the tool rest. The rests on most grinders are unbelievably small and difficult to adjust. It is nearly impossible to control your grinding with these small rests. There are after-market upgrades available for grinders. However, you can also build your own shop made grinder rest.

Dry grinders are the most common. They are made from a motor with a grinding wheel attached to the arbor. Fixtures help protect you from the spinning stone and rests are used to help guide your tools in the sharpening process. As mentioned earlier you should upgrade the wheel.

Dry grinders are typically setup with the wheel in the vertical position. When shopping for a grinder you should look for a wheel size of at least 6" and preferable 8" or larger. This will minimize the amount of hollow grinding that occurs on the tool. Hollow grinding is caused when a small wheel grinds a depression into the tool due to its tight radius.

There are two primary disadvantages to dry grinders. First, they can overheat the edge of your chisels and turning tools causing them to loose their strength (known as temper). The second disadvantage is that materials from the grinding operation can form a "glaze" on the stone and reduce its effectiveness. A dressing tool (see below) must then be used to re-condition it.

Wet grinding is useful for sharpening tools because; 1) it helps keep the tools cool and preserves their temper and 2) it helps to wash away the shavings from the stone. Typically wet stones run at a slower speed than dry stones. They are available in vertical and horizontal arrangements.

The vertical systems are the most common and many woodworkers find them easier to use. The stone rests partial submerged in a trough of water thus allowing a continuous supply of water. Larger stones are better as they will allow for a flatter finish when grinding.

The horizontal stones lay flat and the grinding is done on what would be the side of the stone in a vertical system. The advantage of horizontal grinding is that you

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can achieve a flatter surface. One of the biggest disadvantages is that water is typically dribbled onto the stone from a small reservoir mounded above the stone.

The differences in principal between a vertical and horizontal wet grinder aren't really all that significant. The real difference comes in the actual quality and usability of the individual machine. And that is often illustrated by their price.

There are numerous jigs available for grinders. In most cases, the factory rest is not suited for anything more than general shop grinding or sharpening axes and lawnmower blades. There are commercially available grinding rests that can replace the one on your grinder. These rests allow for more control and precision in the grinding. They typically have a larger base, are more adjustable for angle, and have guides to allow you to move the tools without changing the angles. There are also grinding attachments for the long turning gouges that are especially difficult to sharpen freehand.

Dressing stones are used to grind a grinding wheel. The stones are made from processed materials or metal and are used to flatten the surface of a grinding wheel. This is very important, as a flat wheel is needed to ensure a flat true and accurate grind on your tool.

A new stone needs to be properly dressed to ensure it is "true" on the grinder before use. This important process helps to eliminate wobble and hop in the stone that can affect the quality of your grind. Dressing tools are available as stones; diamond tipped rods, and starwheel dressers.

Dressing tools can also be used to revive a stone that has become filled with glaze and other materials. Many woodworkers mistakenly throw away old grinding wheels and buy new ones at the local hardware store when all they need is a dressing stone to fix the wheel.

Felt wheels are available for fine polishing of chisels and woodturning tools. They are available in a wide variety of shapes and sizes. They are often "charged" with an abrasive to help in the process. They can also be used for polishing of other metals. Felt wheels work better than cloth wheels, as they are more rigid and hold their shape when a tool is pressed into them. Specially shaped wheels are also available for polishing gouges.

The label "polishing" is somewhat of a misnomer. Polishing is typically a process where the wheel is used to remove a fine oxide layer from the metal in order to make it shiny. When a felt wheel is "charged" (or coated) with compound it will actually hone (or remove) metal from the tool. The amount of removal is typically much smaller than a grinding wheel and this can be used for finer sharpening.

It often comes as a surprise to many woodworkers but sanders are an excellent way to sharpen tools. Many woodworkers are more likely to have sanders in their shop than a grinder and it is an excellent place to start when moving into machine assisted sharpening. There are essentially two different types of sanders that can be used for sharpening; belt sanders and drum sanders.

Bench mounted belt sanders can be used in the same way as a bench grinder. The abrasives can be used to quickly remove metal. The large surface of the belt helps to dissipate heat within itself. Keep in mind that your tools will still get hot. Belt sanders have the added versatility that they can sharpen flatter or with a custom curve. This may allow you to closely match the shape of your tool. Custom curves can be added to a belt sander by inserting curved blocks between the belt and the sander's plate.

There are now a wide variety of belts available in grits ranging from extremely coarse to extremely fine grits. Leather belts are also available in some sizes and can be charged with honing compounds and used as an electric strop.

Drill driven sanding drums can be used to sharpen the inside of gouges and other curved tools. The drums are most often made from rubber and have a shaft mounted internally. Quality varies dramatically so watch what you are buying with these. The drums are available to accept a sleeve or a sheet of sandpaper. There are advantages to both. The sheet drums allows you more versatility on your sanding grades. The sandpaper also costs less. Drums are advantageous as they are quick and easy to use. They are limited in their grits though.

The drums can be mounted in a drill press or in a hand drill locked in a vice. Alternately the tool can be locked in the vice and the drum brought to the tool. The decision on how to mount the drum is really a matter of personal preference.

Power tools are a great way to sharpen woodworking tools quickly and efficiently. They remove metal quickly making them efficient at removing nicks from the edges of chisels and turning tools. Care should be taken though as power sharpening tools can quickly remove too much metal and also cause damaging over heating of tools. Bench stones are ideal for touching up and keeping an edge sharp. *Edited from Woodzone.com*

LCWW ANNUAL BOARD MEETING

New LCWW president Gary Rock has called a meeting of the Board for Thursday, June 15, 2006 at his shop starting at 6:00 p.m.