Lake Charles Woodworkers Club, Inc. August 2004

JULY MEETING HIGHLIGHTS

Jeff Cormier, our resident chemical engineer and premier cabinet maker, was our host and one of the presenters this month. Jeff's shop is fully air conditioned (just like mine)— hot in the Summer and cold in the Winter. But the day was raining so the shop was just about right.

There were many Show and Tell items, including a few bowls by Gary Rock, a couple of walking canes by Aaron Andrepont, a great many carved canes by Jimmie Everett, Dick Trouth had a set of 30 beautiful turned pens and pencil sets in a display case. New member Pie Sonnier brought a couple of the completely articulated wooden cars he's built, while Eltee Thibodeaux showed a couple of recent scroll boxes. You can see all of the items brought to Show & Tell on our web site at www.lcwoodworkers.com in the Gallery.

Kyle Andrepont started things off by describing basic jointery. He said all it takes is some practice and the application of either power or hand tools.

Kyle went through a simple demonstration of the creation of a jig to make box (finger) joints with a table saw. This is a tried and true method that takes only a simple jig to do and a few minutes to build and set up. The idea of a finger (box or dovetail) joint is to maximize the glue area and therefore strengthen the joint. These types of joints also mean that you are gluing face grain to face grain, which provides a much better glue bond than any other joint.

The jig consists of two parts: a miter gauge extension and a key. The extension is secured to the miter guage to support your work while the key determines the width of the dados and box joint tenons. There are many plans on the Internet for these and in lots of standard woodworking books on jig and jointery. Lowes has a good one on their web site. Use their Search feature to find Making Box Joints. Their design is simple, straight forward and fool proof.

Note that there are also commercial jigs kits you can purchase to do box joints from folks such as woodstore.woodmall.com or call them at 888-636-4478. For several years, Shopsmith sold a horizontal router stand called a JointMatic that made box joints a no-brainer. Several LCWW members have them and I use mine regularly.

Mortise and tenon joins offer tremendous mechanical support and lots of surface area for glueup. Kyle suggests that you should always make the mortise first as the tenon is made to fit the mortise. Use a try-square or a mortise marking gage to mark out the dimensions needed.

Removing the bulk of the material can be accomplished several ways: with a mortising chisel, a drill press and chisel or with a dedicated mortising machine or mortising drill press attachment. With any of these techniques, you want to leave smooth, flat sides in your mortise. I find that even with a mortiser, I always dress the sides with a sharp chisel.

Carefully measure the width, length and depth of the mortise and transfer each of these measurements to a marking gage. You don't have to use one, but a gage is the most accurate. After scribing the tenon, go over the scribed marks with a fine pencil to give them a high contrast to the wood.

You can cut the side cheeks using a table saw and the faces with a tenoning jig on your saw. However, I often use a Japanese back saw as it is quick, finely controlled and no setup time. You should also be prepared to do slight tuning of the fit and be sure to cut the tenon short of the depth of the mortise for glue squeeze out.

Jeff then showed us how to make and use a disposable dovetail jig. (there are lots of free plans for these on the Internet and in books on jigs). They are simple and cheap. Jeff also described his 'store-bought' dovetail jig. There are lots of brands and some are better than others. In a future issue, we'll review several.

Coming Up . . . Saturday, Aug. 14, 9:00 am. Sharper Edge Saw Shop. Michael Malone, Jr. is the new owner of the old Thibson Saw Shop. Mike is a professionally trained sharpener and purchased the shop a couple of months ago. 724 Orange St., LC

LCWW WEBSITE UPDATE

OK, it is not one of those This Old House deals where they have a webcam set up to see progress on their latest project. But it is local and it's one of our own members. As you may recall, Charlene and Chuck Middleton are building a new home. What we hope to do is show the progress from the idea to move-in day on their home on our website. We've set up a special page just for the work

going on. To see it, go to our main page and click on the link to the This New House project. The link is also in the Projects section. Now if they would only put up that web cam . . .

We realize that Charlene and Chuck have lots to do over the next several months, but we hope they'll take lots of photos and maybe write an article or two about their experiences or at least describe what is going on so you can share.

We have also put a few new links on our Links page. Take a look at Woodezine, John English's great site (you have to sign up to get his newsletter, but it's free). We've also added a wood working site called Saw Dust Alley. The site is run by an experienced 17 year old! That's right, James Mulvany runs a woodworking web site that you will enjoy. Great for beginners and the grizzled ones as well. Saw Dust Alley is designed to educate and inspire. He has projects, plans, tool reviews and techniques. Another addition is the New Orleans Wood Turners site. Take a look at what they do.

TURNING SCHOOL

Member Gary Rock is off to a turning school in Provo, UT. The school is sponsored by WoodCraft and is a five day event with a different trainer on each day. He took off on Monday of last week driving his Harley to Provo. Gary promises he will report back on his experience. He also promised to take some photos while he is there.

BASIC WOOD JOINTS

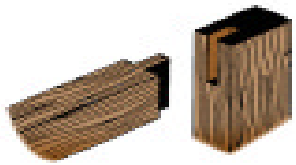
The simple butt joint is most commonly used. This joint is formed by nailing or screwing the end of one piece of wood to the end of the other. While this is simple, fast and effective, the butt joint cannot be used on many types of end joints. A simple butt joint leaves the heads of the screws or nails exposed. The heads can be countersunk and covered with water putty or wood filler if desired.

The dowel joint is basically the same as the butt joint except dowels are used to hold the two pieces of wood together instead of screws and nails. You can make the dowel joint by drilling holes completely through one piece of wood and into the other. Dowels are driven into these holes, completely through one piece of wood and deeply into the other. Then glue the dowels firmly into position to provide strength and prevent slippage. Construct blind dowel joints by drilling the holes only partway into each piece of wood. Then drive the dowels into these holes and glue them into position. The dowels are not visible.

The end lap joint is made by sawing halfway through each piece of wood and then knocking out or sawing away half of this area. You can then put the two pieces of wood together with screws, nails, corrugated nails. The end lap joint provides a great deal of strength, but the heads of the nails, screws or corrugated nails are exposed.

The through mortise and tenon joint is easy to make with a power saw and a dado head. The mortise and tenon joint is suitable for various woodworking jobs. To form this joint, saw a slot into one piece of wood. The end of the other piece of wood is then notched out to fit the slot in the first piece. When making a through mortise and tenon joint, be sure to measure the areas to be notched and slotted before making any cuts.

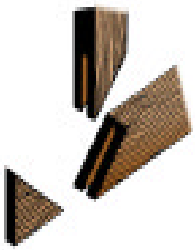
You can make an open mortise and tenon joint by cutting the slot or mortise only partway into one piece of wood. Then create a notched-out area on the other piece that fits into the slotted area in the first piece of wood. The slot can be cut with a router, mortising cutter or by hand with a chisel. You can also cut a 'blind' mortise using this same technique.



Continues on Page 3 . . .

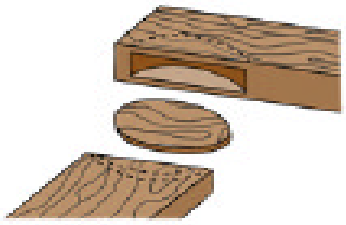
BASIC JOINTS Continued . . .

The open mortise and tenon cut creates a stronger joint than the through mortise and tenon joint. It can easily be cut with a mortising chisel on a drill press. Although the open mortise and tenon joint provides more structural strength, it is a little more difficult to make than the through mortise and tenon joint. However, with a little practice and the proper tools, you can make either joint easily. The conventional miter joint is widely used for making corners in various types of woodwork (Fig. 6). However, it is not recommended where the joint is subject to excessive weight or unusual strain.



The conventional miter joint is made by mitering each corner at a 45-degree angle. If you'll be using many miter joints, you'll need a regular miter box or a homemade miter box.

You can use dowels, nails, screws or corrugated nails to attach the two pieces of wood in a conventional miter joint. The conventional miter joint is common for making trims around cabinet doors and other trim pieces. A miter joint with a spline is easy to make and adds great strength to a common miter joint. First cut a regular 45-degree-angle miter joint. Then cut a groove in each end of the pieces to be mitered. Or if you prefer, you can lay out the 45-degree angle on each piece of wood. This will show you how deep the groove needs to be. Go ahead and cut the groove while the end of the wood is still square. This makes cutting the groove much safer and much easier. Next cut the 45-degree angle.



After sawing the grooves, saw a spline to fit the grooves. Use a top-grade adhesive to hold the spline in the mitered joint in position. If appearance isn't important, it can be nailed or screwed into position. A newer version of the spline is a biscuit, a football-shaped spline. The biscuit requires a power biscuit jointer tool that is easy to use and produces excellent results. Biscuits can be used on almost any type of joint.

Joining a Top Piece of Wood to a Side Piece. You occasionally need to join a top piece of wood to a side piece. The standard butt joint can be nailed or screwed together if appearance is not important. This provides a strong joint and is completely satisfactory for ordinary jobs. If you are experienced, you might want to use the lock miter joint for joining a top or bottom to side pieces of wood. You need a power saw to make the lock miter joint.

Accuracy is important when sawing the lock miter joint. When sawed correctly and properly grooved, the lock miter joint is strong and inconspicuous.

The mitered rabbet joint is similar to the lock miter joint, and it too must be made with power equipment. Accuracy in sawing and rabbeting is important. The two pieces of wood on a mitered rabbet joint can be held together with screws, nails, adhesives or dowels.

Regardless of how the mitered rabbet joint is secured, it provides an excellent joint with a professional look and a great deal of strength. The regular rabbet joint is much easier to make than the mitered rabbet joint. Although power equipment is helpful, you can make a regular rabbet joint with ordinary hand tools.

The rabbet can be cut into either the side piece or the top piece when two pieces of wood are joined with a rabbet joint. The position of the rabbet cut depends largely on where you want the half-section of grained end to appear. With a rabbet joint, the grained end of one piece of wood is completely hidden.

Rabbet joints are normally held together with glue, but you can use screws, nails and dowels. Again, it is a matter of how important the appearance is to you. The box corner joint is one that should be undertaken after practice with scrap — take some time to try this joint. It requires sawing a groove in one piece of wood and a tongue or flange in the other.

The box corner joint provides a strong joint that can be held together with glue, nails or screws. In most cases, glue alone is used. Use power equipment to construct the box corner joint. If you have the required skill and time, this is a very strong corner joint and leaves no end grain showing.

The milled corner joint also creates a corner with no end grain visible. This is highly desirable on some types of woodwork. The milled corner joint is widely used with drawers. This joint is much stronger than the box corner joint and is less likely to crack.

Use power equipment to make a milled corner joint. Be sure to saw the tongues and grooves accurately.

The half-blind dovetail joint is used almost exclusively for making drawers. Don't undertake this joint without some practice. Hold together the half-blind dovetail joint with glue to provide an excellent joint with no end grain visible. You can make a complete open dovetail joint by simply cutting through the second piece of wood. This joint is equally strong, but the end grain is visible on both sides of the joint. You might or might not want this.