

LAKE CHARLES WOODWORKERS CLUB, INC.

June 1999

Brent Evans, President
Dick Hopes, Sec./Treas.

Officers & Board of Directors

George Kuffel John Marcon
Barry Humphus, Newsletter

MEETING HIGHLIGHTS

Our scheduled presenter, Gary Breau of South City Paint was not able to attend. Stepping in were Vince Vincent and John Marcon.

Vince described several of the small boxes he builds along with a preview of how veneer is applied. The methods he described are simple and do not require a lot of special tools. Veneers can be applied with several methods but the easiest are to use veneer glues (a type of contact cement) sold by Constantines). Like other contact cements, this is applied and allowed to dry. The veneer is applied carefully and rolled down using a 'J' roller. Vince also discussed some of the finishes he uses on the boxes including spray lacquer. He brought several examples of the veneer material including beautiful burl walnut.

Aaron Andrepont showed some of the fretwork he recently did. Eltee Thibodeaux brought a very nice scroll saw basket and Dick Hopes, inspired by the LeGrues, brought a small turned bowl he had just finished. Barry Humphus handed out several toy car templates that members could use to create toys for the annual toy program.

John Marcon follows the German approach to sharpening wood carving chisels by using a series of grinder wheels to achieve an acceptable level of sharpness. To shape the chisel, he uses an aluminum oxide wheel with a clay binder of 60 grit. This type of wheel does a much better job because it is substantially softer than conventional wheels. Next, he uses a rubber wheel impregnated with silicon carbide to continue to shape the chisel edge. John then hones the chisel using a hard felt wheel and a jewelers dressing.

The grinders are set up to turn away from the tool. John says that this provides better control and the level of sharpness he achieves certainly demonstrates this. The tool is held horizontally so the grinding angle can be held to a precise level. While grinding, John always maintains a drop of water on the chisel back to watch for heat.

Basswood is John's preferred wood for carving because of its texture and grain. He sometimes must put together several pieces if carving a large work. He recommends avoiding a seam down the middle of the piece and emphasized that the center part of a glued up piece needs to have the bark side down to prevent serious wood movement as wood is removed from the piece.

Marcon demonstrated and discussed several techniques he uses to lay out a work with various aids such as tracing paper and proportional dividers. John also discussed proper lighting. As the carving progresses, it is important to see the shadows and lines being produced. Flat florescent lighting does not give the carver the proper lighting needed to see the depth of the cuts.

John wound up discussing various finishes he uses to gain the correct look and shadow in a work including the use of Watco brand liquid waxes, aniline dyes and Briwax. Final polishing is done with a 'tampico' brush that can be purchased locally.

PRESIDENT'S CORNER

A Board of Directors Meeting was held on Tuesday May 4th at the shop of Brent Evans. Mr. Richard Hopes was elected by the Board to fill the remaining term of Treasurer Bob Ferguson at the May Board of Directors meeting. A motion to establish a commercial checking account was presented and approved. Mr. Hopes and Mr. Humphus were authorized to sign checks on the account via a corporate resolution approved at the meeting. A checking account will be established at a local bank for the corporation prior to the June meeting. Mr. Humphus agreed to continue editing the monthly newsletter. A tentative schedule of speakers for the remainder of the year was established.

NEXT MEETING

Wednesday, June 23rd at PPG Pavilion
Annual Barbecue 6:15PM Drinks,
7:00PM Dinner \$8.50 per person

Subject: Ceramics with Jason Hess
McNeese State University

FUTURE MEETINGS

July 10th at 9:00 a.m.
Subject: Table & Band Saws

August 14th at 9:00 a.m.
Subject: Commercial Finishes

ABOUT OUR SPEAKER

Our speaker at the Annual Barbecue will be Professor Jason Hess of the Department of Visual Arts, McNeese State University. Professor Hess is a ceramist working with clay and fire.

TIPS AND TECHNIQUE

The change of seasons is here. Winter is gone. It is humid inside and out in Louisiana. At this time of the year, I'm always reminded that wood "moves." There's nothing more frustrating than putting a lot of time into a project only to find out six months later that a panel split apart, doors won't close right, or joints have opened up. It's all because wood moves. It expands and contracts with changes in relative humidity, and there's nothing you can do to stop it.

But what you can do is take wood movement into account when designing and building a project? My recollection is that Lynn Boddie demonstrated this problem last year with an excellent shop gage. He suggested that this might mean special joinery, or certain hardware that allows wood to move freely. It might even mean a different way of gluing parts together.

Wood moves because it acts like a sponge. When the surrounding air is damp, wood absorbs moisture from the air and expands. When the air is dry, it releases moisture and contracts. And this movement can be considerable. As a rough rule of thumb, a 12"-wide piece of hardwood can expand or contract as much as 1/8" (or about 1%) across its width. (It moves very little along its length.)

So with the seasonal changes in humidity, furniture is taking in and releasing moisture all the time. If a project isn't designed to handle this, then you're asking for trouble down the road. Fortunately, there are a number of things you can do to allow for this movement.

When trimming out a cabinet with molding, there's one thing to remember: molding should never be glued across the grain of a solid wood panel. (Note: this doesn't apply if the panel is built from plywood. Plywood is very stable and moves very little with changes in humidity.)

The problem is that a solid piece can expand and contract quite a bit across its width. But a strip of molding will change very little along its length. If the molding is glued to the panel and the width of the panel changes, the glue joint can break causing the molding to come loose or fall off. There's even a chance the panel could split because the molding is preventing the panel from moving. On the Pie Safe, we didn't glue the molding to the solid top at all. That would have prevented the top from expanding and

contracting. Instead, we pushed the molding up tight against the top and nailed it (using wire brads) to the frame that makes up the side of the Pie Safe. The stiles of the side frame are narrow enough that they will move very little. And even if they do, there's enough "give" in the brads to allow for movement while holding the molding in place.

SHARPENING REVISITED, 2

Honing Chisels & Irons

Here's the second part of our two part series on sharpening chisels and plane irons. Last time, we ground the bevel of the chisel using a bench grinder. That gave us a hollow ground bevel — the bevel reflects curve of the grinding wheel. This time we'll work on the cutting edge.

After grinding the bevel, you're ready to move from the grinding wheel to the stone. To hone a tool that's been hollow ground, I use a 800 to 1,000-grit waterstone. I like to use waterstones because they cut very fast. The 1,000-grit waterstone (a "medium" grit stone) will hone the cutting edge to a mirror finish. I typically also use a 4,000 to 6,000 grit waterstone to achieve the best edge.

When you've finished grinding the bevel, you'll notice that the grinding wheel raised a burr along the back of the cutting edge. So the first step is to remove that burr. To do this, hone the back of the last inch of the chisel flat on the sharpening stone. You do this by laying the work on its back on the stone.

After removing the burr, you're ready for the final step: honing the cutting edge. But why hone? After all, you've probably got a sharp edge already. The answer lies in what makes an edge last a long time. If you take a close look (with a magnifying glass), after grinding the bevel, you can see marks left by the wheel. Magnified, they look like deep grooves. These create a ragged cutting edge that feels sharp. But it doesn't stay sharp because the points on that ragged edge break off easily. The more they break, the more ragged the edge becomes, making it duller faster — a sort of snowball effect. To make a long-lasting edge, you'll need to remove that ragged edge.

The smoother you get the cutting edge, the longer the edge will stay sharp. To hone the cutting edge, hold the hollow ground bevel against the waterstone so both the front and back edges of the bevel touch the stone. Then gently push the bevel over the stone. You can push from end to end or make little arcs. Just do what is easiest for you to keep both the front and back edges of the bevel on the stone.

How long do you hone? Well, not long. Just until the grinding wheel marks along the cutting edge disappear. Then

check for a burr on the back of the cutting edge. When you feel a burr along the whole cutting edge, hone off the burr (like you did with the burr created by the grinding wheel), and your chisel is ready to use.

If you want the edge even better, next hone the cutting edge with a 6,000 to 8,000 grit water stone. If you have a Veritas or similar sharpening jig, you can make a microbevel by turning the angle up either 1 or 2 degrees. It will only take a couple of minutes to achieve a mirror finish. Be sure to check the back of the tool for a burr again and hone as needed.

One of the really nice things about this technique is that touching-up the edge after use is really quick. This is because you don't need to re-grind the bevel, just re-hone the edge. You should be able to touch-up the edge several times before you need to re-grind a new bevel.

Steve LeGrue suggests testing the sharpness of the edge on a piece of hardwood end grain. If the edge cuts this easily, you've done the trick.

BUYING PINE

You'd think it would be easy to walk into a buy a pine board. But sometimes it gets confusing. One way to simplify things is to keep in mind that most of the pine lumber you see can be divided into three main groups: white, southern yellow, and western yellow.

WHITE PINE. As you'd expect, white pine is the lightest in color. It's also the most lightweight. One nice thing about white pine is it has a subtle grain pattern. And it machines well and takes a finish better than the other pines. That makes white pine ideal for making furniture.

SOUTHERN YELLOW. You'll also find southern yellow pine at some lumberyards. Besides the fact it's considerably yellower than white pine, it's also quite a bit heavier and harder. (Don't try to drive a screw into it without drilling a pilot hole.) The striking thing about southern yellow pine is the alternating bands of light-colored earlywood and darker latewood. Run your hand across the board and you can feel the difference in coarseness. This abrupt transition makes southern yellow pine more difficult to work and harder to finish.

WESTERN YELLOW. It goes without saying that the pines in the western yellow group are yellow. But there's not as dramatic a contrast between earlywood and latewood. A good deal of the lumber you find at home centers falls in the western yellow group. It's also an excellent choice if you're building "country-style" knotty pine furniture.

GRADE STAMPS. Even when you know what to look for, it's still sometimes hard to tell one pine from another. So look at the grade stamp imprinted (or stapled) on the board. There's no doubt whatsoever if it's stamped "white pine." Some white pine will also be stamped 'TWP' which stands for Idaho White Pine. Another grade stamp that's not obvious at first is SPIB. It stands for the Southern Pine Inspection Bureau. So you'll know right away you're dealing with southern yellow pine. Finally, you may see two back-to-back 'Ps'. That's ponderosa pine. Sometimes you'll see the 'Ps' combined with an 'LP' (for lodgepole pine). Either way, it's one of the western yellow pines.

SELECT & COMMON. Another thing to consider is the grade of the lumber. There are many different grades. But all you need to know is that they generally fall into two basic categories: select (or finish), and common. As a rule, a board that's generally knot-free and consistent in color is assigned one of the "Select" or "Finish" grades. And if there are more knots (or the color is uneven) it's one of the "Common" grades.

COST. The thing to be aware of is that "Select" pine is considerably more expensive than "Common." So if you want to build a project out of clear pine, you may be surprised to find that it ends up costing as much as one made of oak or walnut. The solution is simple. For the short pieces of a project, buy "Common" boards and cut around the knots. Buy "Select" only when you need long pieces.

Besides working around the knots, there are also some defects that you'll want to avoid:

LOOSE KNOTS. Loose knots are easy to recognize. They slide back and forth in the knothole. And in time they're likely to fall out, leaving a hole in your project. If the loose knots fly out when you're cutting or routing a board, they can be dangerous as well.

PITCH POCKETS. Another defect to steer clear of is pitch pockets. These are slits in the board that ooze sap. The sap gums up saw blades and router bits. And it can bleed through a finish long after the project is completed.

PITH. On some boards, the pith (core) of the tree runs lengthwise down the center. It's so soft you can dig it out with your fingernail--too soft to sand or finish. But there's usually straight-grained wood on each side of the pith. So if you're making narrow rails or stiles, cut out the pith to get the usable lumber.

WIDE GROWTH RINGS. One final note. Some boards have growth rings that are extremely far apart. This is the result of a tree that has grown too rapidly. These boards tend to be a bit punky, so they're not as strong. And I find the grain pattern is less desirable.