

Chuck Middleton, President  
Dick Hopes, Secretary/Treasure

Officers and Directors

John Marcon, Barry Humphus Editor,  
Bubba Cheramie, Brent Evans, George Kuffel

### JULY MEETING HIGHLIGHTS

If you didn't quite get enough BBQ on the 4th of July, you could have made up for it at the Annual Lake Charles Woodworkers Club Annual BBQ at the PPG Pavillion Park. Once again, we need to thank Bob Baker for arranging for the use of this nice facility.

Chief Chef Brent Evans did his magic baby back ribs along with chicken, sausage and other goodies while other members showed off some of their latest projects. For some reason, the food seemed even better this year (maybe because I ate more of it) and the "killer" beans were especially outstanding. Despite repeated begging and pleading, Brent is still keeping his rib recipe secret. You could watch the process and take notes, but most folks were content to sit back and just eat them. Brent started cooking at about 2:30 p.m. and by the official start at 6:00, everything was ready to eat.

One member's spouse mentioned that the menu was obviously picked by a bunch of guys! No salad and no regular Coke.

Eltee Thibodeau brought some of his great scroll work as did Aaron Andrepont. Rod Nunley carried in this great plant pot holder he built.

Bryan Moore graciously described his solar powered wood drying kiln. The kiln is actually a building built to specifications according to the wood being dried. Adjustments to the vents and airflow can be made to allow for different types of wood. Currently, Bryan has the unit set up for drying red oak and said that it takes about 30 days to dry a load. This compares to 6-8 months for the "stick and stack" method of outdoor drying. Bryan said it costs about \$15 per month to run the exhaust fans.

Chuck Middleton described his new Delta mini-lathe and Barry Humphus had some foam blocks that are not only free (they come in electronics packing), they make great disposable foam brushes when cut to need.

The magazine and book swap also was again a hit as members traded woodworking magazines they no longer needed.

Members and former members were mentioned: Vince Vincent and Dr. Norman Morin have had recent hospital visits. Norman has recovered enough to take a trip to Colorado and Vince is resting at home.

### OUTDOOR ADHESIVES

Titebond II®, Polyurethane and epoxy are suitable adhesives for outdoor applications.

Of this group, Titebond is probably the most straightforward to use. It is a Type II PVA glue, except that an acid salt catalyst has been added to the formula. This causes the molecules of the glue to cross link to each other as they polymerize  
<http://org.laol.net/woodworker>

into long chains. This latticework of molecules substantially increases the cured glue's ability to resist both heat and water.

PVA glues, in general, are simply emulsions of plastic in a water carrier and this makes them easy to use. Clean-up is done with water and there are no hazards in disposing of unused or old glue. Also, they are one part; that is, they are pre-measured (unlike epoxies, for example).

It is a common misconception that these glues are waterproof. Titebond II is actually labeled "weather resistant". This is an important distinction and stems from there being some confusion over just exactly what is a "Type II". Not surprisingly, different standards organizations have distinct rating systems and they don't always agree with each other. The simplest thing is to be aware of this and not expect glues in this group to withstand constant immersion, although they do excel for general outdoor woodwork.

Polyurethane glues are relatively recent introductions to North America; however, they have been in use in Europe for about 20 years. As you would expect, these glues are related to polyurethane finishes. The resins in the latter polymerize to form a coating, whereas in polyurethane glues they create an adhesive film.

Actually, the chemistry is pretty interesting, because water acts as a catalyst in the reaction. This is one of the few glues that can successfully be used on damp lumber (not green wood, where there may be trouble with shrinkage later), but air-dried material for outdoor use in the 14% to 20% moisture range. In fact, unless moisture is introduced to the system, these glues perform poorly if the conditions are too dry.

One of the by-products of the curing process is carbon dioxide gas and this can be seen as the excess glue oozes from the joint and "foams out", much the same way that expanded polyurethane insulation does. This is important to realize, as anyone who has worked with the canned insulation can relate, that too much makes an incredible mess, but that the foam is also very weak.

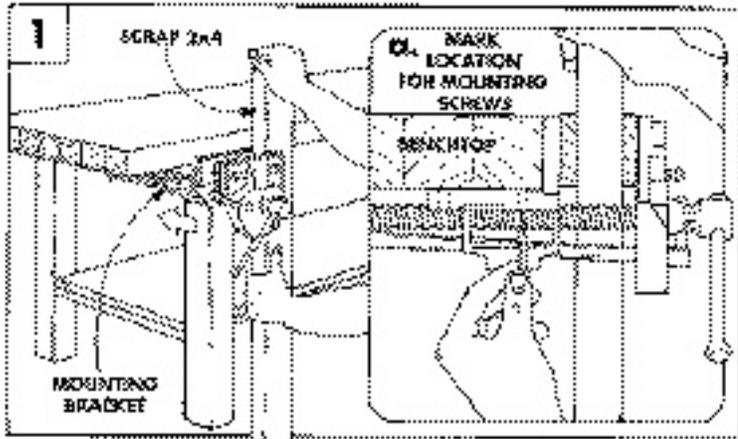
Apart from the presence of water, the most critical point is that the mating surfaces must meet cleanly. The joinery must be impeccable and any laminating areas must be free from snips or tear-outs.

Like Type II PVAs, polyurethanes are not waterproof but stand up to intermittent exposure to water very well. Polyurethanes outperform both epoxies and Type II PVAs in resisting heat and this makes them a very good choice for objects exposed to direct sunlight. From *Lee Valley Tools*.

### COMING UP.....

Saturday, August 11 — 9:00 a.m. at the shop of  
Bubba Cheramie for a scroll & table saw  
demonstration by a manufacturer's rep.

## WISE MOUNTING THE EASY WAY

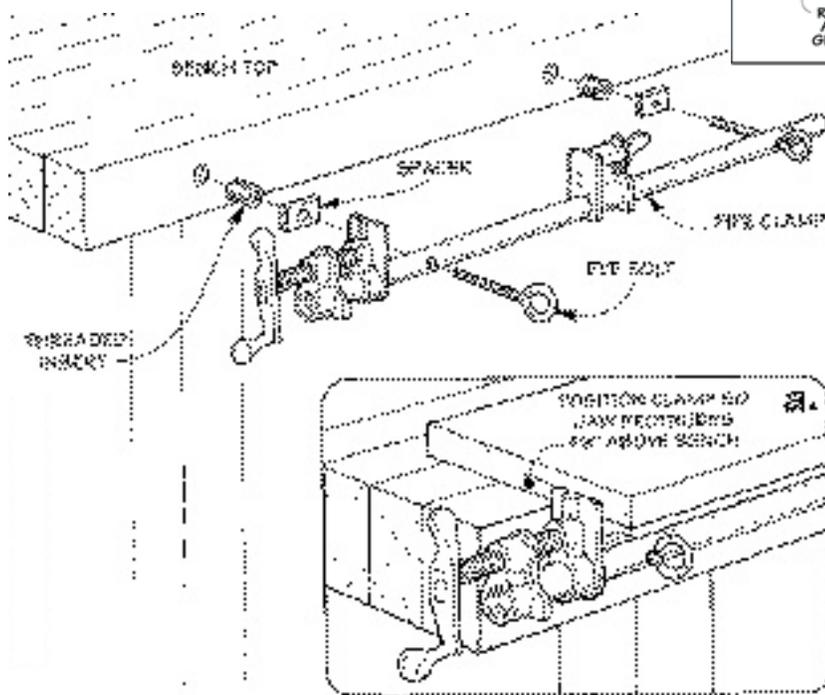


Good bench vises are heavy to lift and awkward to move around. So installing one can be a real chore. You can disassemble the vise or else tip the bench on edge or upside down to do the job. But there is an easier way.

Use a piece of scrap 2x4 about 36" long, see the figure above. On the 2x4, mark the distance between the floor and the bottom of the benchtop (less about 1/8"). Then clamp the 2x4 in the vise with the vise's mounting bracket lined up to this mark.

Now just lift the 2x4 up and balance the vise against the front edge of the bench. Then mark the position for the mounting screws on the bottom of the benchtop, see Fig. 1a. After drilling pilot holes, raise the 2x4 again to hold the vise as you drive in the screws.

If you use two 2x4 scraps clamped in the vise rather than one, the vise will almost stand up by itself. From *WoodSmith*.



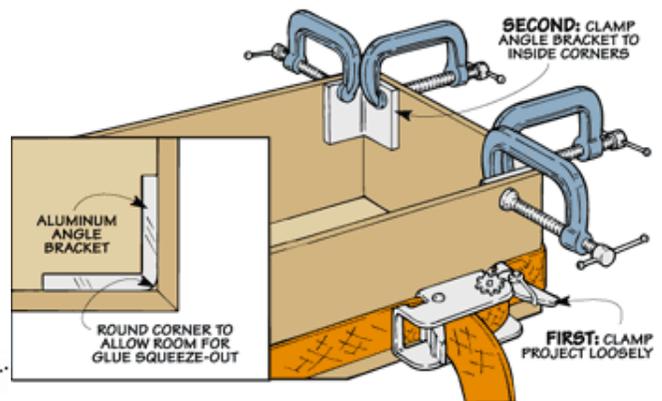
## SHOP MADE VISE

When you plane or sand a board, it's a good idea to clamp it down. The problem is that the clamps can get in the way. The solution is to use a pipe clamp and a few pieces of hardware. See the figure below, left. From *Workbench*.

If you already have a bar clamp, such as the Sears Aluminum Bar Clamp, you can do the same thing by drilling a couple of holes in it to suit your workbench. In fact, I have two wood vises on my bench and clamp the bar between them to provide a 36 inch clamping unit for larger panels and pieces. *LCWW Editor*.

## MITERED CORNER SQUARING

For some projects, like the mitered box shown below, a band clamp is the easiest way to hold the project together while the glue dries. But there is one small problem. The mitered corners tend to slip out of alignment as the clamp is tightened. So in addition to the band clamp, clamp short pieces of aluminum angle bracket to the inside of each corner to draw the miter together. As you can see in the detail, filing a slight roundover on the outside corner of the bracket provides room for glue squeeze-out. From *WoodSmith*.



Tightening a pipe clamp can be a real knuckle buster when the pipe clamp sits on the workbench. So make a couple 3/4"-thick wood spacer blocks to raise the pipe clamps up and make it easy to turn the handle.

These clamp blocks have the added advantage of acting as clamp pads to protect the workpiece from the clamps. From *WoodSmith*.



### LOW-COST FOAM BRUSHES

I use foam brushes for many finishing applications. You don't have to clean them—just pitch them out when you are done. But every time I throw one away, the bag of brushes gets smaller and I know I'll have to buy more. And it seems that I never have any or the right size when I need them.



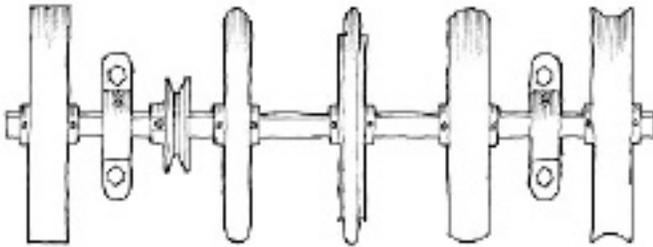
So you can make "instant" foam brushes by sticking pieces of self-adhesive foam weatherstripping on sticks made from scrap pieces of wood. For larger brushes, wrap the weatherstripping around the end of the wooden stick.

An even lower cost source is packing foam—the grey medium dense foam used for shipping electronics. It is the same density as the brushes you buy. I just rip it with the band saw to the width and shape I need. *Barry Humphus.*

### CARDBOARD POLISHING WHEEL

You can put a sharp, polished edge on your tools with shopmade, laminated cardboard polishing wheels. The wheels are dense, long lasting, easy to customize and inexpensive to make.

1. Laminate pieces of shirt cardboard.



2. Drill out center and cut cardboard circle to rough shape on the bandsaw.

3. Mount cardboard polishing wheels on a mandrel and shape profiles as needed with a gouge.

To make a polishing wheel, use wallpaper paste to laminate shirt cardboard into a thick plank, 1/4 in. to 3/4 in. thick, depending upon your need. With a compass, mark the circumference of the wheel and the center. Rough the wheel round with a bandsaw or jigsaw. Drill a hole in the center, mount the rough wheel on a mandrel, or shaft, and true it to shape with a turner's gouge. Now is the time to customize the wheel's profile. If you need the edge convex or concave, cut it to suit. Be sure to wear

goggles and a dust mask for this step because cutting the cardboard makes a lot of fine dust. If you do a lot of carving and need polishing wheels of varying radii, you may wish to mount five or six wheels of different profiles on a mandrel between two pillow blocks.

To use, load up the wheel with polishing compound and carefully press the tool against the wheel with the edge pointing in the same direction as the rotation. The polishing compound made for stainless steel is excellent for carbon steel as well. From *Fine Woodworking.*

### RECYCLED WOOD PATTERNS

One of the many specialized woodworking skills that exist is pattern making. Historically, metal casting patterns have been made out of wood. Any foundry that wants to cast a part, whether it is a simple metal item or even a bulldozer blade, had the pattern for the casting, made out of wood by a pattern maker. Woodworkers who do pattern making must form a wooden pattern that is the outside of



the item to be cast. So a lot of skill was involved as well as the ability to visualize and create the form in three dimensions.

Herbert & John Crookshank recently purchased part of an old foundry. Their real find was the 100 year old cypress boards and timbers they got out of the old building. This fine material will be turned into cabinets, chests, doors and other great projects for their customers. See an example of a chest made by the Crookshanks out of old cypress (above right).

But they also found lots of old patterns used for casting all sorts of parts and equipment. These odds and ends really show the skill of pattern makers. Until recently, most patterns for castings were made out of wood.

So pattern makers were very proficient at woodworking. Today, most patterns are formed from styrofoam as it is much easier to work and melts out during the casting, very much like the lost wax process. Some of them are marked with the name of the company having the casting made but many are simply numbered.



The Crookshanks will be selling the patterns and maybe going through their big pile of old patterns to select usable wood for other projects. They are scheduled to receive even more items in the next few days.

If this sort of material is of interest, contact Herb Crookshank at his office just off Nelson Road: Crookshank's Custom Cabinets and Woodworks, 1858 Easy St., phone 337-477-7933.