

Brent Evans, President
Dick Hopes, Sec/Treasure

Officers and Directors
Chuck Middleton

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Camile Vincent, George Kuffel

FEBUARY MEETING HIGHLIGHTS

Classic Doors is the area's largest producer of cabinet doors averaging 120 doors per work day. Jerry Mills is the owner and our presenter was his forman and QC man Robert Inam. Classic produces about 40% oak and 40% painted (mostly MDF) cabinet doors. The remainder are specialty items made from cherry, alder, cypress, walnut, mahogany and other exotic woods. All of the doors they produce are made to order. The shop is some 5,000 square feet.

The first station we visited was the panel glueing area. This consists of a large gluing rack that allows Classic to produce panels ready for machining. The glue used is Titebond II which they find adequate for their operations. Wood is supplied with one edge square and they rip and cross cut panels pieces from this.

Their optimizing cross cut saw allows them to get the most material out of the stock. A computer controled system provides for precise cutting of lengths for styles and rails that make up the doors. The next station is a C&C panel and rail cutter they use to quickly create the jointery needed to assemble the doors. All of their styles of doors are programed into this machine. The C&C replaces 6 other standard manual cutting stations and costs about \$100,000. The C & C produces the same number of rails and styles in 1/4 of the time it took to produce the parts on their conventional cutters.

Classic also has an edge profile machine that produces panel bevels. This machine creates and sands the bevels on panels for some of the various designs that they make.

Doors are assembled on a precision assembly bed with compressed air clmaps that make the work go quickly. A "spaceball" is inserted in the rabet of each joint to allow for expansion before the panel is glued. After drying, the panels are run through a large surface sander to provie a final finish prior to sizing. The two-stage sander finishes the doors to 220 grit.

Prior to shipping, the doors are quality checked and sized to the specification of the order. Next the panels are pakaged and marked for shipping to the customer.

The entire shop has a dust collection system that pulls waste and dust from each station. The system produces about 3 barrels of saw dust per day. Waste cuts ("drops") are collected as well. The members were able to take as much of the maple, oak, mahogany and other "drops" as they wanted for their personal use as well as for the Annual Toy Program.

This month's Door Prizes were won by Bill Tolin (shop tool kit) and Lawrence Walker (sheet of oak plywood donated by Classic Doors). Obviously you can't win one of the Door Prizes unless you attend the meetings.

Classic Doors is a fascinating operation with high quality and attention to detail. Jerry Mills and Robert Inman treated us to a great demonstation of their operations and quality work.

<http://org.laol.net/woodworker>

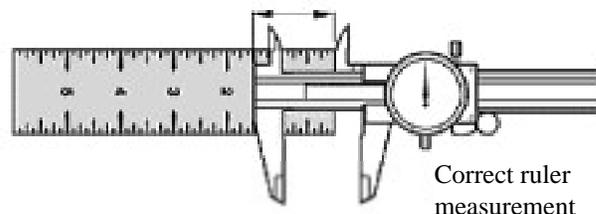
USING A CALIPER

Most people use a caliper only for inside or outside measurements, but most calipers can also be used as a depth gauge. Users tend to forget that aspect.

Moreover, there is one other useful feature of a caliper that most people do not even know exists; that is the ability to read distances from the end of the movable head to the end of the caliper body. This is useful whenever you have to measure from the end of something to a point on its side, e.g., when checking the accuracy of a ruler. If you try to check end accuracy of a ruler using the inside of the jaws, you will always introduce a small error.

This may seem to be trouble free, but first, it is difficult to adjust accurately and second, the more you extend one tip over the ruler end, the greater the error you will introduce. The reading will always be greater than the distance you want to measure.

You can do it all simpler, faster and more accurately by measuring from the tip of the movable head to the tip of the body. Standard dial or vernier calipers are built to facilitate this by having the movable head and the body machined flush when the jaws are closed. From *Lee Valley Tools*.



FOR SALE

Cormark International has a large selection of excellent hardwoods available from \$3.80 to \$7.69 per board foot. They specialize in exotics from Africa including Zebra, Saliga, Sapele, Rosewood, Avodire and many more. Most items are 1" to 2" thick. A 10 piece sample of their woods is available for \$10 (refundable with first order). They also carry hardwood flooring in the exotics starting at \$2.95 a square foot. Call them at 828-658-8455, Fax 828-645-8364 or email them at cormarkint@aol.com

COMING UP . . .

March 11th, Saturday, 9:00 a.m. Precision Wood working and jig making with Gene Young.

April 8th, Saturday, 9:00 a.m., Steve & Terry

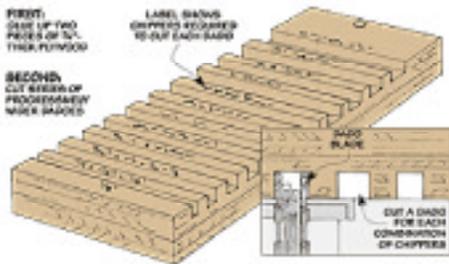
LaGrue from The Cutting Edge, Houston.

May 13th, Saturday, Dr. Joe Cash, La. Preservation Association. Restoring Old Homes.

DADO BLADE GAUGE

When it comes to cutting a dado, nothing beats a stacked dado blade set. Like other dado blade sets, some come with a 1/32" chipper (in addition to the standard 1/16" chipper). This gives you a lot of choice when it comes to "tweaking" the fit of a dado. Especially when cutting dados to accept "off-size" thicknesses of plywood.

The problem is it takes awhile to find the exact combination of chippers needed to produce a good fit. So use this



handy gauge to tell you at a glance which chippers to use, see drawing to the left. The gauge is nothing more than two glued-up pieces of 1/2"-thick plywood with a series of dados cut in it - one for each different width of dado that you can cut

with your blade. The combination of chippers required to cut each dado are labeled underneath.

Using the gauge couldn't be easier. Simply test fit the plywood (or other workpiece) in each dado until you find the one that produces the best fit, see photo. Then read the label to get the right combination of chippers. From *ShopNotes*.

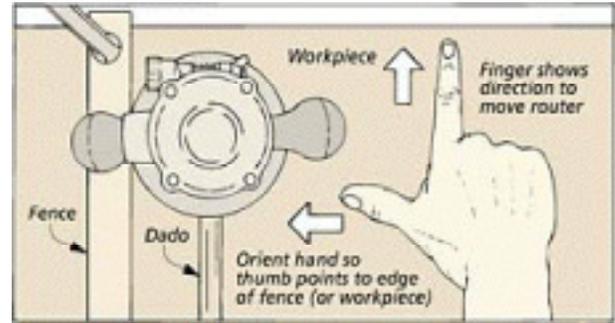


THE "RIGHT" WAY TO ROUT

What is the "right" way to feed a hand-held router across a workpiece. When it comes to routing along the edge of a workpiece, everyone agrees it's best to feed the router from left to right. This way, the bit cuts cleanly into the wood and won't bounce along the edge. But what about when routing a groove or dado? With wood on both sides of the bit, is there a wrong direction to push the router?

After trying both directions, we found out that yes, there is a correct way to rout a groove. Like any hand-held router operation, the router should move left to right (assuming the fence isn't between you and the router). If the router is moved in the wrong direction, the rotation of the bit can cause the router base to drift away from the fence. When fed the correct way, left to right, the rotation of the bit keeps the base of the router pulled tight against the fence. (Or if you're using an edge guide, the guide is held tight against the workpiece.)

This reminded me of a little trick I learned a while back. Whenever I have to stop and think about the right direction to feed the router, all I do is look down at my right hand. I simply hold my right hand with the knuckles up and my thumb



extended out, see drawing. Then I orient my hand so my thumb is pointing to the edge of the workpiece or the edge of the fence. My index finger will automatically be pointing in the direction I need to move the router.

By the way, this also works with a router table, as well. But since the router is suspended upside-down, I simply flip my hand over, so it's also upside-down. This time, when my thumb points to the router bit, my finger points in the direction I need to feed the workpiece, which is usually right to left. From *Woodsmith Magazine*.

WOOD FILLERS

What kind of wood fillers should you use and why? The answer is there are two kinds of wood fillers — hardening and non-hardening — and you should use both. It depends on what you need to fill and the finish you are using.

If the project is going to be stained, fill the nail holes with non-hardening filler, such as Color Putty, after the staining and before applying the top coat. But if the project is going to be painted, then use a hardening filler like Wood Dough (DAP) or Plastic Wood (Boyle-Midway).

NON-HARDENING FILLER. The advantage to the non-hardening filler we use is it's easy to match color. Because Color Putty comes in 17 shades, it's fairly easy to match it to a project that has been stained. And that makes the filled areas nearly invisible. And since this type of filler doesn't harden, you don't have to wait overnight to apply the topcoat of finish. Another thing about non-hardening filler is its long shelf life. It doesn't harden in the container. And if it gets too dry to work with, you can just add a couple drops of boiled linseed oil or mineral spirits to soften it.

HARDENING FILLER. You should use hardening fillers, as well. They're perfect for when you have a hole, a gap, or a knot that's too large or deep for the soft non-hardening filler, especially if a project is going to be painted. When using a hardening filler, fill the holes before sanding the project. Then wait overnight to allow the filler to dry, and sand the wood and filler smooth.

The biggest drawback to hardening fillers is they don't accept stain like wood does. When stained, these fillers tend to stand out from the surrounding wood. But regardless of the filler you use, it's a good idea to first test it on a piece of scrap wood that's finished the same way as your project. This way you don't get any nasty surprises. From *Woodsmith Magazine*.

BEADING TOOL

In a world where everybody seems to have a router, why would anyone want a beading tool? The truth is that a beading tool can do many things that a router cannot; it can do them faster and it certainly can do them more quietly.



Stanley Tools developed a beading tool in 1886 that they sold until 1941. It was designed much like a spokeshave but suffered from the limitation that it could be used in one direction only since the blades were bevelled. This caused more than a little difficulty when dealing

with variable grain. Varitas' beading tool has very finely detailed blades with square-cut profiles; they will cut on either the push or pull stroke. The tops are formed by electro-discharge machining, which makes them extremely accurate.

Some of you may have already used a hand beader. If so, you know that it is easy to set up and use and can do a number of things that a router cannot. Routers deal poorly with stop-cuts of any kind, but particularly the type often required in the reeding and fluting of furniture legs, stiles and rails. Also, multiple-beading cutters for fine work are not available for routers, since they tend to be fragile and do not have a long enough neck to reach the center of any leg more than about 1" wide. For all this type of work, a hand beader excels.

But a beading tool is not only useful for all those jobs that a router cannot do; it is better than a router for many simple jobs such as putting a cock bead on a stile or along the edge of a bookshelf. Quick to set up, it makes extremely clean cuts and never burns the wood. This is particularly important in woods like cherry, which are prone to scorching.

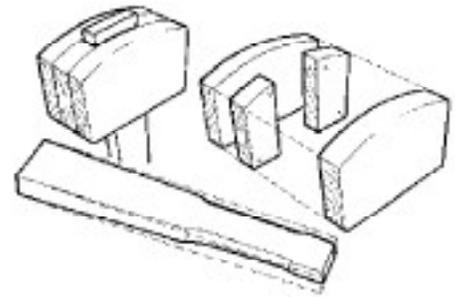
Does this paragon of virtue have any drawbacks? Yes, it does. It works extremely well in hard wood, but is more temperamental in soft wood. You can still get a good cut in soft wood but you are more likely to get a fuzzy finish if the blade is not well honed. Fortunately, the blades are easy to hone since they only need to be lapped flat on a honing stone. From *Leevalley Tools*.

MAKING YOUR OWN MALLET

A fast way to make a mallet is to use the sandwich method. Make the center slice the same thickness as your handle. The faces of the mallet should be end grain and the handle tapered so that it is always tight in the head. Don't try to glue the whole thing together at once. Glue the center sections to one outside slice and then glue the last slice to this assembly. This sequence

is much easier than trying to keep all four pieces organized as you clamp.

If you are a Type A personality and insist on gluing everything at once, tap tiny brads into both sides of the center sections and nip off all but 1/16". As you press everything together this will keep these small pieces from sliding around.



Don't worry about glue failure with this method. If you are using a good glue (and if you don't starve the joints!), the joints should outlast you. From *Leevalley Tools*.

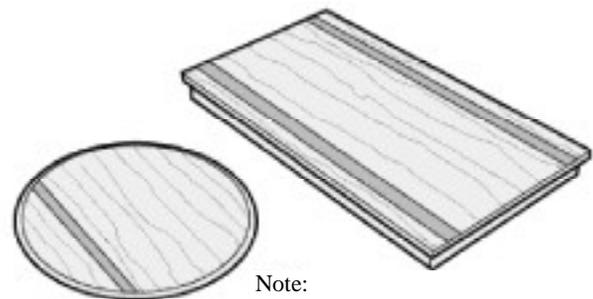
USING BUFFARD BANDING

If you find that your in-laws are unimpressed with finely made dovetails or perfect mortise and tenon joints, you can always wow them if you incorporate a piece of banding into a piece of furniture.

This is amusing, since cutting dovetails or any fine joinery is substantially more difficult than inlaying banding. Putting a piece of banding into something is really quite straightforward; it is as simple as routing a groove and gluing the banding in place. Virtually all of the banding is .040" thick, which is more than 1/32" but less than 1/16". You can set the router (either hand or electric) by testing on a piece of scrap, then you just have to stay inside the lines.

By far and away the easiest method is to apply the banding to the backing before the backing is incorporated in the final project. As an example, if you're going to put banding in a rail or stile, it is easier to put the banding in that rail or stile before either is incorporated. Banding can be used on table-tops, on rails and stiles; it can even be applied to turned bowls. It is much easier to apply than most people expect, and it invariably amazes modern viewers.

Undoubtedly the use of Buffard banding is going to cause problems to antique dealers in the future. They are going to find pieces of furniture that they believe to have been made around the year 2000 but that incorporated banding from about 1900. They should have some fun trying to date the pieces.



Note:
It is important to run the banding parallel to the grain of the wood.