

Meeting Notice:

- January meeting: Tuesday the 17th at 5:00.
- Main Plant Cafeteria
- Bill Barvinek's RV Table
- January Project: Scraps & Firewood
- Door Prizes!!

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

January Meeting

This month Bill will be showing us how he build a Drop Leaf table for his RV.

Ok so January isn't exactly RV season in Iowa but it's a fine time to think about getting your RV ready for Spring.

Furniture lives a tough life in an RV. While you are stopped it's no big deal but this stuff bounces down every road and the

temperature and humidity aren't all that well regulated. Wood finishes and hardware all have to survive in the environment and when the hinges come loose your tools aren't anywhere near you.

Bill is going to talk with us about building this table for his RV and how it survives.

Bill Barvinek's RV table



January Project:

This project is not about making scraps and firewood, rather what you have made from those scraps. It doesn't count if you made a fire, that's too obvious and it's difficult to bring in and show.

We all deal with offcuts from projects. We either toss them or just save them up and when we need a small piece we use them. Every once in a while we come up with a small project so we can use all the short pieces.

Sometimes we can get interesting wood from the firewood pile. The lumber folks keep the better logs for lumber but cut the short pieces and anything with defects for firewood.

Even if you cut your own firewood gets treated badly so you find wood that has started to rot. As long as it isn't punky it will dry acceptable and work just fine for small projects.

Because scraps and firewood are almost always small projects made from them can tend to be small too. These are generally cutting boards, small boxes, and small turnings. That may not always be the case. The bench in my shop is entirely salvaged lumber that would qualify.

Scraps are a natural material for turnings. They can be laid up for segmented bowls or whole to make small turned projects

Scraps and Firewood



like pens.

We are after your ideas so bring in whatever you make as long as it's from the scrap bin or the firewood pile...



November meeting

Wow November seems like a long time ago. We finished off the Christmas toy build that we started the few weeks before and delivered the toys a couple of weeks after that.

The project in November was any box and there were certainly a lot of different ideas of what a box was.



Toy Build wrap up



Hand tools

Looks like we have a project. Several of us have signed up to build a plane from a kit. This plane is a pretty basic tool. It's a little bigger than a block plane but smaller than most scrubbers. It comes with a Hock blade. If you have never used Hock blades you will like it. They are a little harder than most and fairly thick

Planes are one of the truly ancient wood-working tools. Examples have been found at Pompeii and throughout the early Roman empire. There are surfaces found in Egyptian tombs that appear to have been worked with a plane but no evidence of the tool its self.

You have to wonder how bronze or iron blades would hold an edge. The Romans and Asians of the time had steel but it was made based on unreliable processes and not available on an industrial scale. Apparently they worked. Besmear steel had

to be a real improvement but that didn't come along until thousands of years later.

Like any tool this plane will require some maintenance. The blade will need to be sharp and the sole needs to be flat. If you plan to use this plane with a shooting board you want the sides square to the sole.

The sole of this plane is wooden with brass sides. Flattening the sole is no more than laying sandpaper on a flat surface and taking a couple of passes. If the sole isn't square to the side hold the side against a second surface that is square to the sandpaper (maybe your jointer fence).

This looks like a pretty simple project and you end up with a nice plane. People who have used it seem to like it. If you are interested please speak up. We have 13



people signed up and 15 kits on order. They will be here in another week. Your cost is \$35. The club gets a nice price break and is also subsidizing the cost. We will try to get everybody to bring them in when they are complete and have a session on the use and maintenance of wooden bodied planes.

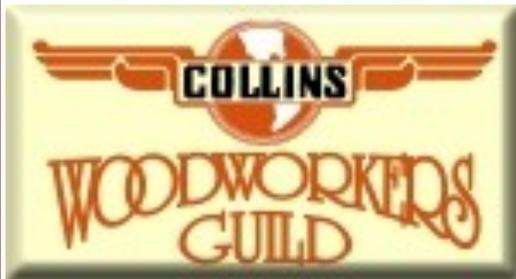
Upcoming projects:

February: Glass

March: Accurate measurement.

We need ideas for new projects. Here is an opportunity to show off something that you

have made. Suggest it as a project of the month.



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	Lee Johnson	

Meeting Notice:

- February meeting: Tuesday the 21st at 5:00.
- Main Plant Cafeteria
- Bryan Wesner's Chairs
- February Project: Glass.
- Door Prizes!!



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Chair Making

Chairs offer a lot of challenges. They have to stand up to treatment that few of our projects experience, they have very few straight lines or square joints and you see them from all sides so there is nowhere to bury mistakes, knots and sapwood.

There are obviously a lot of ways to make a chair. Bryans are a traditional frame with a padded seat but chairs can be anything from a one legged

milking stool to an easy chair to church pew.

Making a whole matching set comes with its own set of challenges. Small differences are visible when you have several together.

The joint have to stand up to the stresses of a large guy sitting, twisting and tipping. The mortise and tenon is the traditional choice because it works. Dow-

Bryan Wesner



els and screws eventually work lose because they are essentially end grain joints.

Bryan is using loose tenons and to make up for the fact that none of the joints are square. He made jigs so the fixture could be held at the required angle.

February Project:

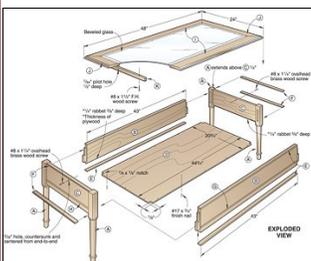
This is a really broad category. Like always a picture counts if you have made something that incorporates glass we want to see it. One obvious choice is a display case with glass doors. but if you think about it wine cabinets and lamps could count because bottles and bulbs are generally make of glass.



Glass

skills. Have you made a stained glass panel? Ever tried making something with leaded glass? This is a pretty versatile material and we would love to see how you use it.

This is the opportunity to show off your glazing



January meeting

In January Bill showed us the Drop Leaf table he built for his RV. It sounds like a pretty nice little table.



The project in January was anything made from scraps.

Toy Build wrap up



Plane Project

The planes are here and with one exception have been delivered to everyone who asked for one. There are even a couple of us that have finished them.

The kits include two brass sides, Mahogany infill pieces and a Hock blade and breaker iron set. You also get brass wood screws and a Allan head bolt to hold the blade.

You need to countersink the screws in the brass sides so that the heads stand slightly above the brass. You file them off later so you want to be pretty close to flush but not quite. Remember that you need both a right and a left side.

Drill pilot holes for the screws. The directions say to use 1/16th inch holes and that is the right size for that size screw in hardwood. That seems pretty tight considering that brass screws are easy to twist off. I opened the holes up a little with a gimlet

bit and lubricated the screws with dish soap. None of them twisted off. I set the front piece so that I could trim the mouth slightly. This let me set the mouth a little tighter than the directions called for and let me angle the mouth opening so that it doesn't open up as the sole wears.

Once the body was assembled I sanded the screw heads flush with the sides and the sole square. I then sharpened the blade and set it so the sharp edge is parallel to the sole.

This plane uses a bolt to hold the blade in place instead of the traditional wedge. You can adjust it by loosening the bolt slightly, setting the blade and tightening the bolt. That takes more time an messing around than just tapping the blade where you need it and seating the wedge but it



works.

It's a pretty nice little plane. The blade is harder than most so you can actually sharpen it. They promote it as a block plane but it actually works more like a small smoother. You can set it to take a fine shaving or hog off as much as you like. I'm probably going to pull the corners back on the blade so I can take a little more aggressive cut.

Upcoming projects:

March: Accurate measurement.

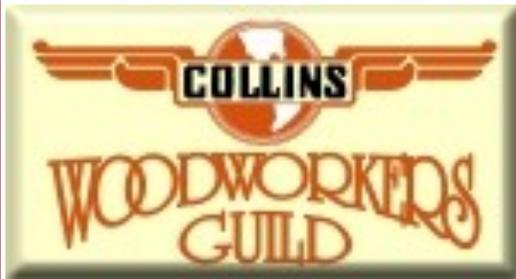
April: Table Saw Jigs

May: Router Jigs

June: Hardboard

July: Crosscut Sled

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Meeting Notice:

- **March meeting: Tuesday the 20th at 5:00.**
- **Main Plant Cafeteria**
- **Sharpening**
- **March Project: Accurate measurement.**
- **Door Prizes!!**



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Sharpening

Sharpening blades is pretty fundamental stuff for most woodworkers. Even the “strictly power tool” guys have a couple of things that they need to sharpen themselves. We all use the occasional pocket knife, and chisel. The turners and carvers among us sharpen chisels and gouges. Do we have anyone that makes traditional Windsor chairs? They use draw knives, adzes and spoon bits that the rest of us have never worked with much less tried to sharpen.

This whole subject came up because several people expressed concern about their ability to get the plane kit set up and working acceptably. The most basic part of that is getting the blade shaped and sharpened. The discussion this time will focus on flat, straight blades used in planes, chisels and knives.

If you have a method you really like bring it to the meeting and show us. Similarly, if you use blades that aren't flat and

should show us how to maintain a gouge.

There is an endless choice of abrasives and everyone has a favorite. From diamond dust to toe edge of a crock they all work for somebody, take your pick. No matter which one you use there are three steps. You shape the edge, sharpen it and hone it.

Besides abrasives there is a wide variety of jigs to hold the tool while you shape and hone. Like your choice of abrasives everybody has a favorite.

We want everybody to bring in whatever you use. Because there is such a wide variety of methods the discussion should be interesting.



straight bring those too and show how you keep it sharp. Hint: Some of the turners

March Project:

This is a project that the machinists in the group should love. Those guys routinely work to tolerances that the rest of us rarely think about; sometimes well under a thousandth of an inch. Considering that the cellular structure of most species is larger than that and even if you could cut it to that size it wouldn't be there an hour later, that level of precision would seem to be overkill.

So just how accurate do you need to be? Of course that depends on what you are trying to accomplish. An overlay door

can look fine if it's a quarter inch oversized but an inset door wouldn't close. That's why the cheapest cabinets use overlay doors. Better cabinets will probably use inset doors but they are much more fussy to fit so they look right.

Some of us try not to measure at all. There is a lot to be said for the old “cut to fit” technique and even some virtue to the “beat to fit” approach. “As long as this door fits that hole it's the right size.” That approach takes time but when it works it looks good.

Accurate measurement



Most of us at least use a tape measure and a steel ruler. There are cheap dial calipers that can get us closer over short distances. The limit is generally well under a foot. Some of the machinists in the group will have a micrometer.

So show us what you use: Witness stick or a yardstick.



February meeting

Bryan brought in parts for a set of chairs that he is building for his daughter and her family. These are a pretty traditional frame style design. He is using floating tenons for most of the joints.



Bryan needed to make a whole bunch of pieces that all matched. If you take a close look at the chair in the picture you can count fifteen individual pieces and most are in right/left or front/

back pairs. That's ninety pieces that all need to match. He described the process and showed us the patterns and how he set up the cuts so that they would all work right.

The back supports are curves that he roughed out and then routed with a pattern. The problem was that once cut, the stresses in the wood caused it to move so the curves were no longer the same. He ended up sorting out matching pieces. The pieces in one chair aren't quite the same as another chair but the differences aren't noticeable.

Bryan says that all six chairs are now as-

sembled. His daughter hasn't chosen the final color so they are pretty much white for now. She also



needs to pick the upholstery fabric. So while she's deciding he has a chance to get started on the matching table...

Steel

Do you have a tool or a knife that just won't seem to take an edge? You work at it until you are fed up and it's still dull. Lots of blades are made from materials that can't be sharpened.

A lot of the time someone tries to save money by using mild steel rather than tool grade steel. Mild steel can't be made hard enough to sharpen and even if you could sharpen it you would never get it to hold an edge. Sometimes they try to prevent rust using an alloy of iron, nickel, chromium, vanadium, or several other things. That's what stainless steel is made for and it can take an edge but like mild steel it won't last long.

Most hand tools use pretty basic carbon steel. It's just iron with a .7– 1.5% carbon and made under very carefully controlled conditions. It's been around for centuries and it's chemistry is well understood. The foundry incorporates other things to determine other characteristics.

Upcoming projects:

April: Table Saw Jigs

May: Router Jigs

June: Hardboard

Steel, at least the kind of steel that we use, is usually specified using a single letter and number like O1 or A6. The letter specifies the grade and the number specifies the exact alloy within that grade. Most of the steel we use in woodworking hand tools are Oil hardened (O grade), Water hardened (W grade) or Air hardened (A grade).

Water hardened steel is pretty much Iron and Carbon but sometimes includes very small amounts of other things. It can be made much harder than woodworking tools require but you can temper it. Water hardened tools can be very brittle if they are too hard and would be difficult to sharpen.

Oil hardened steel includes other metals in the alloy. It will be tougher but won't get as hard. Oil hardened steel will get hard enough for most woodworking hand tool applications except files. The blade in the plane kits that we are working on is O1 Oil

hardened steel that has been hardened and tempered to about Rockwell C 60.

Air hardened grades have more (and different) metals in the alloy and generally are used for things besides woodworking tools. They can be really tough and abrasion resistant but won't get as sharp.

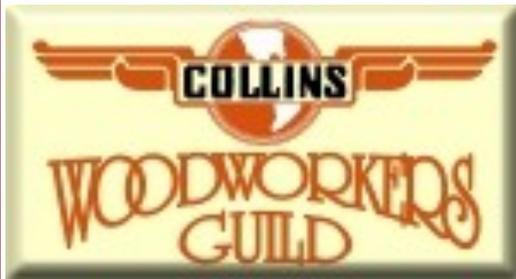
There are a lot of other choices that we might run into. Lathe tools are frequently "high speed" steel that work at higher temperature and resist abrasion but won't get as hard or as sharp.

There is a lot of information on steel chemistry on the web. Hock tools has some great information on sharpening: <http://hocktools.com/>.

You can buy tool steel in small quantities from McMaster Carr: <http://www.mcmaster.com/>. Their website has some good information on steel properties too.

an opportunity to show off something that you have made. Suggest it as a project of the month.

We need ideas for new projects. Here is



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- **A1 Precision Sharpening**
- **March Project: Accurate measurement.**
- **Door Prizes!!**

A-1 PRECISION SHARPENING
 (888) 478-3661

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

A1 Precision Sharpening

Last month we talked about sharpening “edge tools”. That would include chisels, planes, knives, axes and adzes. That still leaves a lot of tools that we use all the time. Most of us have a table saw and maybe a chop saw that use carbide blades. Even sharpening a steel circular saw is a task best left to a professional service.

Sharpening a conventional hand saw is no big deal but the carbide table saw blade that most of us use presents challenges. There are tools and techniques out there that can let you take care of them yourself but most of us let someone with the knowledge and equipment to do it right. It’s pretty easy to mess up the profile of a carbide toothed blade with an attachment for a Dremel tool and we

tie up enough money in saw blades that it’s probably not worth it.

A1 can replace teeth in a carbide blade too. It may not be worthwhile for a cheap blade but before you trash it check it out.

They can handle straight blades too. Jointer and planer knives can be sharpened at home but you need specialized jigs and wheels for your grinder.

They can sharpen both carbide and steel router bits. Steel bits are generally cheap enough that it’s worth just replacing them but good quality carbide bits can be sharpened. So can matched pairs of bits like rail & stile sets and they will still match when

they are done.

There are some sharpening tasks that work you generally need to perform yourself. A1 can sharpen your chainsaw chain but you do that frequently and it’s easy enough that it’s not practical most of the time.



April Project:

Most of us have a table saw. Its not quite a universal thing but pretty close. They make a lot of sawdust very quickly and with very little effort. Table saws have some limits. They’re pretty much made for straight cuts and can be dangerous if your work

isn’t well supported. You never want to free hand anything.

That’s why we make and buy jigs. They let us perform more tasks accurately and safely without a dedicated specialized tool. Most of us use a crosscut sled and sometimes we have one dedicated to a task that we do a lot.

Table saws have one feature that lends itself to fixtures: the miter gauge slots. They run parallel to the blade the whole length of the table. It’s easy to make runners that fit the slots

Table Saw Jigs

and setscrews take up any play. You don’t need to be a machinist to be very accurate. Beyond the miter gauge slots the fence adds possibilities. Before the ‘80s fences were a joke but they have become precise, solid features that can be exploited for fixtures too.

The possibilities are almost endless and that’s why we want to see what you use. If you have a table saw jig that you think is pretty slick bring it in and we will take look.



March meeting

Last month we talked about sharpening edge tools. Several people brought in their favorite methods. We had a couple of variations of ceramic shafts, an old standby Arkansas stone and a diamond plate with loose abrasive.

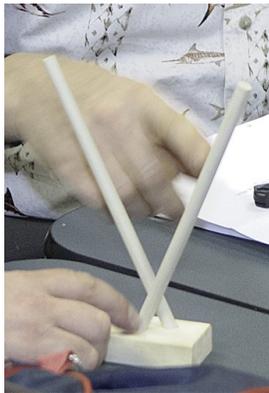
Sharpening edge tools isn't rocket science.

You polish the back whenever you sharpen to be sure that the area behind the bevel is flat and smooth then work the bevel side until a wire edge develops. When you have a uniform wire

edge move to a finer grit and repeat the process. It works whether you use sand



paper, water stones, Arkansas stones, diamond plates, or any other abrasive. You only need to grind if you need to remove a lot of material; for example to take out a nick or reshape the blade. You can grind a hollow on the bevel side if you like. It makes sharpening faster but isn't strictly necessary.



Stones generally need lubrication. Water stones use water, oilstones use oil — go figure. It floats the bits of steel away from the surface of the stone so it cuts a lot faster. Dave's diamond plate on

Sharpening Edge Tools



the left has the lubricant in the paste.

Stones require very little maintenance. Wipe them down when you are done. That just keeps them from being a mess in storage. They need to be flattened occasionally but you can do that with sandpaper. Water stones generally need to be kept wet and not allowed to freeze.

Sharpening

Ok, we get it: our tools need to be sharp. Most of us give it some real effort but we have other things going on. Projects to get finished, taxes need to be done, and the grass doesn't cut its self. Maintaining tools seems to be one of the things that get's put off until it just doesn't cut. It's a hassle to take things to the sharpening shop too. A1 isn't exactly on the beaten path and neither are the others. Besides that when your jointer knives are being worked on the jointer is down and you get to put it back together when the shop is done.

We can and should do some of these things our selves. Nobody but the professionals are really set up to handle carbide. The stuff to maintain carbide is prohibitively expensive and even that needs to be maintained. You can touch up a blade

with diamond hone but even then you risk wrecking an expensive blade.

These things do benefit from cleaning. If your saw blade or router bit is burning the wood rather than cutting it try cleaning it before you take it to be sharpened. You will be surprise how well that works. Of course there are times it's pretty obvious that you need to sharpen. Right after you cut through a couple of drywall screws is a good time (mea culpa).



So how about the less common stuff that we use? Forstner bits can be sharpened but remember to sharpen the inside of the rim

and not the outside then sharpen the raker.

Other drill bits can be sharpened. Spade bits can be touched up with a file. Auger bits have a special file but a conventional triangular file will work. Twist drills need a fixture but the club owns a Drill Doctor that works and you can check it out.

A conventional hand saw is easy to sharpen but the pros can do it too. You have to be careful because they really don't know how you like your saw set up. It's always best to ask for very little set and open it up if you need to. It's more difficult to take set out of a blade but easy to add more. They can grind new teeth in a saw. If you have an eight tooth crosscut saw and want a five tooth rip it's easy for A1 and a real pain for you.

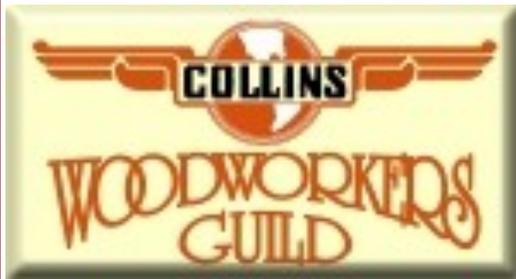
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Failing joint

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Outdoor woods and finishes

It's time again to work on those projects that spend their time outside. Last weekend my son and a friend tried to move the picnic table and the top came off. It's not all that surprising because the table is about 25 years old and hasn't been all that well cared for.

The top came loose because the nails holding it to the lower frame pulled out. As I looked it over the joints in the lower frame have started to decay but haven't failed yet.

The only reason it's still together at all is because I made it from Redwood. Most woods decay in this part of the country. In a very dry or very cold environment most woods will last a long time without much protection. Here in Iowa that's not the case.

Eventually bacteria, insects and vermin will destroy most woods.

We all know that some wood species survive much better than others. Eventually all of them will decay but redwood, cedar, white oak, and several locust species will last a very long time.

Several mechanisms are responsible for decay and they act in concert. If you leave an ash ax outside it won't be useful a year later. Powder Post beetles



Honey Locust

will eat it full of little holes and bacteria will turn it punky. Moisture will fill the tissues and freeze breaking it apart. White oak has tyloses

that keep moisture out of the tissues and the high tannin content and low starch discourage insects and bacteria.

Wood that will normally decay quickly can be treated with chemicals to slow the process. This process has several problems: the chemicals are generally not good for people either and the wood that gets treated is generally very poor quality wood. You frequently end up with unstable wood that splits and twists but lasts for decades.

A lot of us have a favorite wood to use outside. When I rebuild the picnic table I'm probably going to look for honey locust. It's stable, light, cheap and lasts for decades. Redwood would work just as well but it's much more expensive.

May Project:

Almost all of us use routers. If you use it for more than edge treatment you need a jig of some kind. That's what we want to see this month.

If you use a router for cutting joints you generally need a jig. When we need a bunch of parts that match we make a pattern and use a piloted bit. We want to know what



you like to use.

Of course you can buy some jigs. Hinges can be set in with a router and it's easier if you use

Router Jigs

the jig that the hinge company sells.

Anybody have a dovetail jig that works with a router? It ahs to be the easiest way to cut them in any large number.

Whatever you us bring it in and let us see it...



April meeting



In April we toured A1 Precision Sharpening. They have an assortment of numerically controlled machinery including one that normally does a lot of their work and isn't working. With all of the technology they also sharpen lawnmower blades using a grinder like any of us use at home.

We asked if there was anything that they just wouldn't sharpen. Apparently they have turned down sharpening swords a few times just because they couldn't think of a legitimate reason to need a sharp sword. At least not in this century.

There is at least one person that ships

Outdoor finishes

Take a look at your deck, porch, window frames, or almost anything you have outside that is wooden. Does it have a finish? Most outdoor woodwork is painted or stained. Almost all manufacturers of finishes have versions that are intended to use outdoors.

Have you ever seen (maybe at a neighbors house) a deck that has been finished with conventional urethane? It looks great for a couple of weeks then it turns milky and peels off in little curls. In general transparent finishes don't survive all that well. There are Spar Varnishes that are intended to be used on boats but even those have to be stripped and replaced frequently.

If you really want the natural wood feel you may want to think of a water repellent pre-



Upcoming projects:

June: Hardboard

July: Crosscut Sled

kitchen knives from New York. They must have some extra knives because it has to take a couple of weeks round trip even if they get to them as soon as they arrive in the shop.

Most of us have some ability to sharpen some of our own tools. We almost have to use a service to cover carbide saw blades and router bits. There are diamond



A1 Precision Sharpening Tour



hones out there that can be used but the results are almost never acceptable.

A1 Can sharpen things besides woodworking tools too. Ever try to sharpen scissors? They will do it for \$5. Pinking shears too for the same price.

While it's not practical to sharpen bandsaw blades (most of the time) they will weld up a new one or repair one if it breaks.

servative. It contains a wood preservative, a small amount of wax as a water repellent, a dryer, and a solvent. Water-repellent preservatives don't contain coloring pigments. The resulting finish will vary in color depending upon the kind of wood. The preservative prevents wood from graying by stopping mildew.

Semitransparent stains are moderately pigmented and don't completely hide the wood grain. They penetrate the wood surface and don't form a solid film like paints. As a result they won't peel if moisture gets into the wood. Penetrating stains are alkyd or oil-based, and some include a fungicide or water repellent. Latex-based stains are available, but they don't penetrate the wood surface as do the oil-based stains.

Paints and solid color stains are probably the most common coatings we use on

wood and provide the most protection. Latex-based paints and stains are water borne, and oil or alkyd paints are solvent borne. Paints are used for aesthetic purposes, to protect the wood surface from weathering and to hide defects.

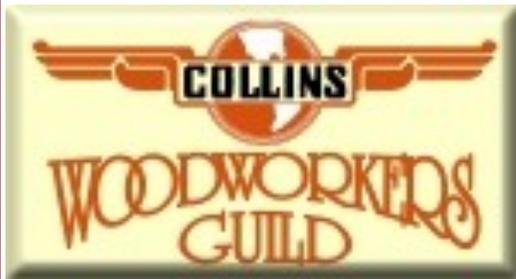
Paints are applied to the wood surface and do not penetrate. The wood grain is obscured and a surface film is formed. This surface film can blister or peel if the wood is wetted.

Latex paints are generally easier to use since water is used in clean-up. They are also porous and will allow some moisture movement. Oil based paints require organic solvents for clean-up and some are resistant to moisture movement.

Follow the manufacturers directions to apply these finishes. There are differences and what works with one will cause problems with another.

you have made. Suggest it as a project of the month.

We need ideas for new projects. Here is an opportunity to show off something that



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- Access to our EXTENSIVE library of books, magazines and Tool Collection
- Open exchange of ideas, from project help to house building; and a hand when needed
- Social Activities
- Workshops
- Toys-For-Tots and other Programs to help our Community
- Educational and Informative Presentations
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Meeting Notice:

- **May meeting: Tuesday the 19th at 5:00.**
- **Main Plant Cafeteria**
- **The Kreg Jig.**
- **May Project: Pocket Hole Joints**
- **Door Prizes!!**



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

The Kreg Jig

This month we have Larry Ihle, the representative from Kreg talking with us about their new products. Most of us are familiar with Kreg; they make pocket hole jigs. They also offer a lot of other products from clamps to industrial machinery.

Lots of us use pocket hole joints when we make face frames. They are quick and almost fool-proof. Of course there are a lot of other places for that technique; it's the screw version of the toenail joint.

The pocket hole joint can be made without a jig. It's just an

angled hole to clear the screw shank and a counter bore to clear the head. It's easy with a hand brace and an auger bit. It takes more effort but you can use a Forstner bit to counter bore and a twist drill for the clearance hole.

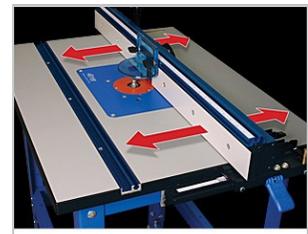
This is another technique that gets easier with tools designed for the task. Kreg's jigs and bits make it easy and lots of people use them. Their systems will work on material thicknesses from 1/2" to 1 1/2".

There are other pocket hole systems for sale. Porter Cable makes one, so does Freud. There are several less known systems out there, some look pretty good, others you really have to wonder about. Kreg is the standard everybody chases.

Kreg makes lots of things besides pocket hole jigs. They



have a line of clamps. They sell a router table and router table pieces if you want to build your own. If you are into pocket holes on an industrial scale and have some money to spend they have multi spindle pneumatic boring machines.



June Project:

Ok, we're changing things up a little. Because the subject is pocket holes we're going to



change the project this month.

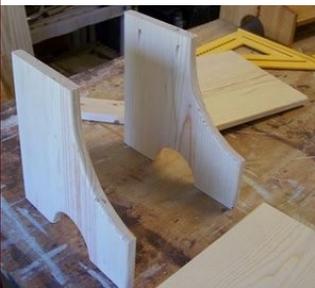
Do you use pocket hole joinery? Lots of us do. It's a versatile joint and easy to make. If so we want to see it. We also want to know about your experiences with whatever fixturing you use.

If you have a project where you used Pocket Hole joinery bring it in. Even if you used something besides the Kreg jig we

Pocket Hole Joints



want to see it.



May meeting

Last month we talked about woods that would stand up outdoors and finishes to help that.

There are a lot of good choices but most of them aren't going to be available at the Home Center.

The National Forest Products Laboratory has a wealth of information on the subject.



Honey Locust

They are a wonderful source because their data isn't intended to sell a product and there is real science behind it. Lots of their information is available on line for free. Much of their information comes from

tests performed in Madison Wisconsin so the climate is very much like ours.



One test involved building fences from 19 different species and checking for decay every day for 25 years. While 19 species isn't exactly exhaustive; there are thousands of species, it does give us a lot of good information. Here is what lasts:

Douglas Fir, Western White Pine, Lodgepole pine, Ponderosa pine, Western white pine, Redwood, Western red cedar, Eucalyptus, Red oak heartwood, and White oak.

Several species that are commonly used outside were not included in the test. Honey Locust is frequently used for fence posts but was not part of the test.

Most construction lumber is sold as SPF:

Outdoor woods and finishes



Spruce Pine Fir. It's a mix of different species that varies depending on where you buy it and the time of year. In general it doesn't last long when it's exposed to the elements.

The Project in May was Router jigs. Several people showed what they have.

Woodworking Jigs

Ok, We've seen the demonstration. Dave & Ron's Dado jig is finally in production and we can buy it. If you are interested give Ron a call.



Upcoming projects:

July: Hardboard

August: Crosscut Sled

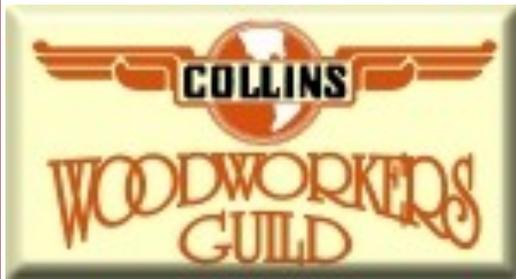


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Meeting Notice:

- July meeting: Tuesday the 17th at 5:00.
- ~~Guthridge park in Hiawatha.~~
- Annual Picnic
- July Project: Anything that uses hardboard.
- Door Prizes!!

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Picnic

This month is our annual picnic. This time we are holding it at ~~Guthridge park in Hiawatha~~ the Main plant Cafeteria.

Ok, Change of plans: We have decided that it's much too hot so we are moving it indoors to the Main Plant Cafeteria.

It will be catered by BBQ-This. They will be serving pulled pork, maid-rites, potato salad, and baked beans. You need to bring your own drink and you can bring something to eat if you like.

If you've never been there you should try it. It's pretty good especially for a barbeque place this far north. Here is their web site: <http://bbq-this.com/>

This time we will talk about the little free library. See Page 2 for more information and follow the link. It looks like an easy thing



that could be fun. The Project is something with Hardboard.

There is a chance that Wayne will have at least some of the Kreg order but no promises.

See everybody at the relocated picnic....

July Project:

Hardboard is pedestrian stuff; we use it because it's cheap. There are several brands but the generic name has been "Masonite" since the 1920's. We use it for patterns, cabinet backs and drawer bottoms. It's not a bad choice for projects that will be painted.

Masonite now makes doors and got out of the hardboard business many years ago.

Hardboard

necessary.

Tempered hardboard goes through some additional processing where linseed oil gets baked in. It's harder and more water resistant than conventional hardboard.

So bring in whatever you have made that uses hardboard.



Hardboard is made by pressing wood fibers under high pressure and high temperature. The lignin that naturally occurs in wood binds the fibers and in most processes no further adhesive is



June meeting

Last month Larry Ihle, the representative from Kreg spoke to us about the products they provide. Kreg is best known for their pocket hole jigs but they actually make quite a few other things too.



Larry showed us their new, updated version of the pocket hole jig. This one will handle material of thicknesses other than 3/4 inch. That had been a limitation of the previ-

ous version. They have a tool to build decks using recycled plastic without surface screws. They have a version of a combination square.

Larry brought the pocket hole set and their new tool box as door prizes. Loras and Steve took those home.

Kreg rarely gives discounts but they made an exception and offered a 10% price break that Acme matched. The club picked up the cost of the sales tax so we got quite a bargain on any Kreg products that we ordered. Wayne submitted the

Kreg Representative Visit



order about a week after the meeting and we may get some of the stuff soon. The

Libraries

Have you seen the new library in Marion? Not the new library that has been there for the last several years, the two new libraries that showed up this summer in Thomas Park and in Lowe Park. These are mounted on a post and are a little bigger than a mail box.

The organization that maintains



these has asked us to make some. They have a general plan but there is a lot of room for creativity. The whole point is to protect the books from the rain and snow and to let peo-

ple in that want to use the books. Here is a good link: <http://www.littlefreelibrary.org/plans-and-tips-for-builders.html>

This could be a group effort or several individuals could step up and build a few. We will talk about it at the meeting.

Intarsia

Intarsia has been around for centuries. It's a form of inlay similar to marquetry used to form mosaics in wood.



Fourteenth Century intarsia by fra Damiano da Bergamo; Basilica of St. Dominic, Bologna, Italy

Where marquetry is generally produced using veneers and is used on carcass pieces and panels intarsia is thicker pieces of wood that frequently are shaped in three dimensions. In-

tersia frequently incorporates ivory, bone, stone and other materials. Because it's more substantial than marquetry intarsia can be used to decorate floors and table tops. The floor of St. Peter's Basilica in the Vatican has large areas of stone intarsia.

The technique fell from fashion during the industrial revolution.

Today we have a small but growing group



Intarsia by Judy Gale Roberts

that is trying to revive the tradition. One of those people in this area is Joannie West. Joannie is pulling together a three day workshop featuring Judy Gale Roberts. Roberts is a nationally recognized artist working primarily using intarsia. She has written several books on the subject and has been published in many magazines, and on the cover of Wood Magazine.

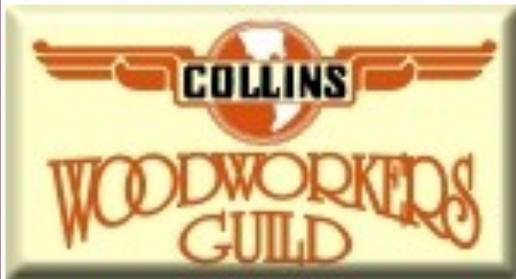
Joannie is looking for people who would be interested in attending the workshop or volunteering at the event. She is working out the details of when and where. If you are interested please call her at 319 551-3126.

Upcoming projects:

July: Hardboard

August: Crosscut Sled

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Meeting Notice:

- **August meeting: Tuesday the 21st at 5:00.**
- **Main Plant Cafeteria.**
- **Weatherproof design**
- **August Project: Crosscut Sled**
- **Door Prizes!!**

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Making a weather tight box

In case you missed the last meeting Wayne threw down the gauntlet. We are building the libraries we as individuals. We will bring them to the October meeting. There are really very few rules for this project and a lot of places to look for inspiration. The website for the organi-



zation has a lots of pictures. If you like to look at actual boxes there are several around. The picture to the right is Jack Neuzel, a woodworker in Solon with a library that he made that is

near the lake. There are a couple in Marion and several others in the area. The website has a map with hundreds from all over the world. <http://www.littlefreelibrary.org/index.html>

There's really no problem making a box weather tight. You just eliminate all the openings and make tight joints. It's not terribly useful that way but it is tight. The problem is the openings need to be tight too and positive enough that they stay closed. And kids use these things so they need to stay closed easily.

These libraries we are all working on (you have yours planned out, right?) are a little more complicated. They need to provide access to their contents and need to be easy enough to open that kids can use it and it needs to close tightly enough to ex-



clude snow and rain. It should probably be vented so any water that gets in or condenses inside will dry out without damaging the books.

These are very similar to the requirements that your house has except that it's a lot smaller and it only needs one door. Many of the same techniques that apply to home construction apply here too. This month we are going to talk about those techniques.

August Project:

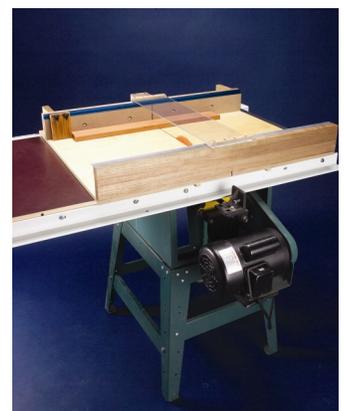
Most of us use a table saw. Even if we use a chop saw for most crosscuts there are limits that a table saw overcomes. For example it's possible to crosscut wide boards using a table saw. Repetitive cuts are much easier on a table saw. Dadoes, lap joints, and tennons are easy on a table saw.

You need a good way to support the wood for most of these operations and the miter gauge that came with the saw is always a

weak point. If you do very much with your table saw you probably built a crosscut sled. You can buy after market miter gauge and they really make a difference but don't take the place of a crosscut sled.

There are a lot of ways to build one. We want to see yours so bring it to the meeting Tuesday. If you have any specialized fixtures to work with the sled bring those too. We want to see what you use.

Crosscut Sled



July meeting



Well we moved it indoors. Something about the heat and humidity both hanging close to a hundred wasn't all that appeal-



ing. Good thing the cafeteria was available.

BBQ this catered so we didn't have to eat potato salad that sat in the car all day and it all worked out.

A number of members brought things that they have made using hardboard including a couple of very similar box joint jigs and drawers with hardboard bottoms.

It was also the day that most of the new tools from Kreg were delivered. I can say

Group Purchases

Last month we were able to organize a group purchase of Kreg products with the help of ACME Tool. ACME gave us a 20% discount and the club provided an additional discount to cover the sales tax. Our total order (full retail) was \$3080 and the discounted total was \$2354. A total of thirteen people ordered over 50 items. We had a number of other smaller purchases (hand planes, digital angle guides) and hope you all are benefiting.

ACME indicated they would be open to

Upcoming projects:

September: It's almost like woodworking... projects that are not strictly wooden.

October: Home Improvement: Projects around the house.

November: Projects fit for a feast. Anything food related.

more group purchases with no particular limits on what we buy. The group purchase was an advantage to them since they only filled one order, didn't require much time on their part and probably took sales away from other retailers. Just to be fair, the discount was about the same as their twice yearly sale events so its not like we scooped the retail industry. However it was on our schedule rather than theirs so some advantage there.

We don't have specific plans for future group purchases but would be happy to help organize future ones. I would like to

January: New-years resolution: You put it off long enough.

February: Your Honey-do list: Stuff for someone else.

Picnic



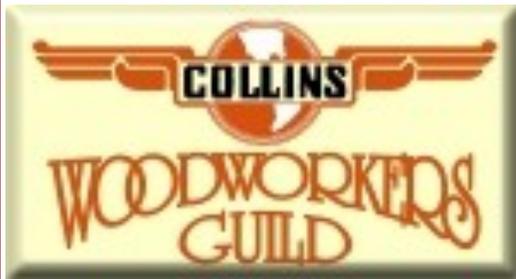
that my new Kreg miter gauge is a huge improvement over what came with the saw. I still use crosscut sleds for 90 degree cuts on long and wide boards but for most cuts. It's right on the money for angled cuts. The tool boxes that a couple of people ordered are here now. How did the rest of the tools work out?

Wayne Hanson



buy more Bessey Clamps would make my list for a group purchase. If anyone has other ideas let your club officers know and we can see what we can do.

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Meeting Notice:

- **September meeting:**
Tuesday the 18th at 5:00.
- **Main Plant Cafeteria.**
- **Officer Election**
- **Food! We have !**
- **September Project: Pocket screws, Miller Dowels and non traditional joinery**
- **Door Prizes!!**



Quondo Omni Flunkus Mortati
(if in doubt play dead)



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Annual membership meeting

It's that time of year again...

We need to elect officers. If you ever felt the desire to be Red Green here's your chance. While this isn't exactly "Possum Lodge" the two organizations have a lot in common. You too could lead of this bunch.

This election works a bit differently than the bigger one that makes all the news. We basically have nothing bad to say about Steve and the rest of the officers; or if we do we're too polite to say it.

The risk, as in previous years is that if we don't get volunteers to serve as officers we railroad somebody. You've been warned: Come to this meeting or you could be elected.

This is also the meeting with the good door prizes. This time we have a Kreg Jig and Fixture Bar, Hearing Protector, Mag Switch Feather Board, Kreg Large Face Clamp, Kreg Right Angle Clamp, Clamp It Assembly Square, Kreg Feather Board, Rockler Universal Fence Clamps, Kreg MultiMark, Kreg Draw Mounting Brackets and some Acme gift

cards. Your odds are pretty good this time.



The Guild is providing food this time too. This year we are bringing in Zio Johno's.

September Project:

We're changing it up this month. In July and August we all received the stuff we ordered from Kreg. Everyone spent the next couple of weeks in the shop trying it out, right? And a couple of years ago we made a similar group purchase from Miller Dowel. We have had the chance to use both systems now and time to show off your results. If you have a project that you made using the Kreg Jig, Miller Dowels or anything else other than conventional joinery bring it in, we want to see it.

Pocket screw joints are quick to make with Kreg's system. Just clamp the piece in place and drill. When you need to assemble the parts clamp it where it needs to go and sink the screws. It's much faster than cutting mortise and tennon joints or dovetails. In the right place

it's a great choice.

In some places pocket screws are the only good choice. Ever try add a drawer to a face frame cabinet. You need to add a rail to the face frame. You can either remake the entire cabinet or shoot a couple of pocket holes in the new rail and screw it in place.



Nontraditional Joinery

Miller Dowels are another story. Conventional dowels don't work on cross grain joints but that's where they are frequently used. Think about how many chairs you have seen (and fixed) that had the legs doweled to aprons. The problem is that the leg end of that joint is cross grain. No matter how many times you put in bigger dowels or use "better" glue it's going to fail.

You can just use a wood screw but it's going to pull out of the end grain. A Miller Dowel has a couple of steps that will keep the joint solid when the glue fails. It's not as strong as a mortise & tennon but it's will hold better than a conventional dowel. The end shows so you have to decide if that's a problem.



Miller Dowels

August meeting

Last month Joannie West spoke with us about her new Intarsia group. She has several things planned including an organization separate from the existing area woodworking and carving clubs. She is setting up a show that will include a nationally recognized speaker (Judy Gale Roberts) and a wood exchange. More infor-



mation is in the July Newsletter. We also talked about the "Little libraries" It sounds like there may be some interest but how many get built is unknown.

There is a similar library in Thomas park in Marion. The builder took a very straight



foreword approach. It has a simple overlay door and a magnetic catch. Nothing elaborate at all. You can take a look at the library in the park. Enter Thomas Park from 7th Ave and turn right when you get to the parking lot. The library is on your right. Borrow a book while you are there.



Just a magnetic catch

Traditional joinery

Traditional joinery got to be tradition because it works and it's easy to make with the tools at hand. I'm not talking about anything elaborate here, just hammer and nails stuff.

We have an industry devoted to inventing tools so these traditions change. Promotional materials for these tool companies frequently resort to heavy handed hyperbole and Kreg has that mastered. Kreg tools are fine. I use some of them and they have a place in the arsenal.

But...



silly.

Most of us frame a wall using nails either driven through the sill into the studs or toenailed through the stud into the sill. With pneumatic tools it takes a few seconds per stud. Even with a hammer you can do it under a minute. Can you think of

Their web page talks about all the uses for their tools. That's expected, after all they're advertising here. One of the suggestions is that the Kreg jig can be used to frame a wall. That seems a little

a reason to use screws?

They show a way to use pocket holes to put together panels. The alternative is to just leave out the screws and holes. Somehow the screws seem unnecessary.

Pocket screws are great in places where you need a quick & dirty joint that's hidden or where you have limited access. It's not going to stand a lot of stress so it's a poor choice to hold chairs together. They are great for face frames. But there is no such thing as a single joint that's always the best for every purpose.

Upcoming projects:

October: Home Improvement: Projects around the house.

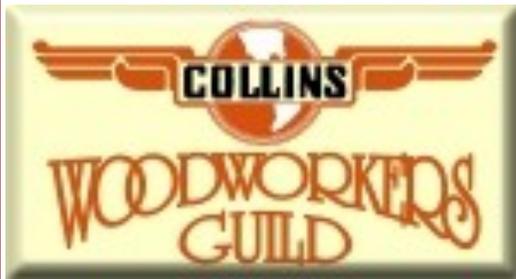
November: Projects fit for a feast. Anything food related.

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Meeting Notice:

- **October meeting: Tuesday the 16th at 5:00.**
- **Main Plant Cafeteria.**
- **Toy Build Discussion**
- **October Project: .**
- **Door Prizes!!**

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Toy Build Discussion

We have a plan. Well part of a plan at least. Ok, we have this much: We're building toys again this year at Marion High School. We have spoken for two evenings: October 25th (a Thursday) and November 2nd (Friday) from 6:30 to 9:00.

We need to decide what we are building this time. We have some standards: The crayon trucks, doll beds, airplanes and flipper games are popular. We should probably add some things so we need ideas.

Several years ago I made yoyos for the sweet corn festival and they went very quickly. Yoyos are a fast way to use up scraps

if you like lathe work. I made a couple of square ones that were an experience; they're knuckle crackers.

There are some limits: The rules about small parts apply. If you can fit it in the tube from a toilet paper roll it's too small for young children. We are still stuck with the restrictions on finishing toys. None of us would hurt a child under any circumstance and while there are serious problems with the rule we still need to follow it. We can't put finish on any toys we make because the required testing and reporting is much too expensive. These apply to

projects you make for your own families too.

Have you made something that your grandkids like? Have an idea for a project that can be reproduced in quantity? We need those. Dig through your plan file and start thinking; we're going to be talking about it this week.



October Project:

There really is no end to it. If you want to live indoors there will be maintenance. That's been true since Cro-Magnon Woman decided there needed to be a mastodon painted on the cave wall. Some of these things are woodworking projects so



Home Improvement: Projects around the house

they apply here. We'd like to see what you have been up to. It's a wide and roughly defined field and we have had several past projects that are similar so if you have something that you didn't bring in before feel free to bring it now. Home improvement projects can be inside or outside and can cross over into carpentry.

Kitchens projects are always popular because we spend so much time there. Projects there can be anything from a simple shelf that holds a clock to a whole set of cabinets and we all end up working on them.

Have you built a set of cabinets? It's not all that complicated but

they are big and have a lot of parts.

How about adding a window? Not all that complicated either but any time you cut through a stud you need to know what you are doing. A sky light? They can be done but that's where I call a contractor. That and plumbing.

So whatever you have been up to, as long as it's an improvement to your home bring it in. We will probably see a lot of pictures this time.

September meeting

We reelected the lot. Is that because these guys are doing a great job or that everyone else just doesn't want to deal with it? I can say that it's not a lot of work and it really doesn't take much time.

In any case we have Steve Geurts as President, Joel Gillett is still V.P. and the author of this rag, Ray Collins is still treasurer. Paul Gibbs is still keeping track of the library and John Cox is taking pictures.

We discussed the recent Kreg purchases



and showed off what we have made using their jigs and Miller Dowels.

Following the election we drew for the door prizes and we had a bunch.



Election of officers



The Woodsmith Store Seminar Schedule

We have been having some discussion lately about road trips to some of the seminars that the Woodsmith Store hosts. Here is the schedule that's been published so far. These are typically held on Thursday nights from 6:30 - 7:30 so while it's a good drive it's possible. Are you interested?



- Nov 8: Machine-Cut Dovetails
- Nov 15: Scrollsaw Holiday Ornaments
- Nov 29: Frame and Panel Doors on the Router Table
- Dec 6: Mortise and Tenon Joinery
- Dec 13: Decorative Turning
- Dec 20: Finishing Techniques

- Oct 18: Design Fundamentals
- Oct 25: Table Saw Basics
- Nov 1: Router Table Techniques

Here is a link if you want more information: <http://www.woodsmithstorespecials.com>

Upcoming projects:

November: Projects fit for a feast. Anything food related.

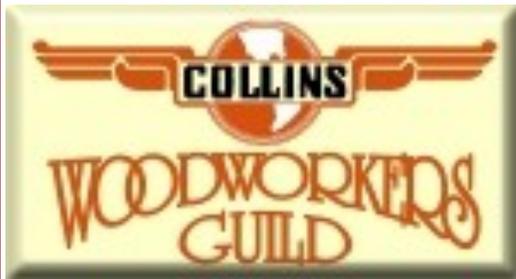
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Meeting Notice:

- **November meeting: Tuesday the 20th at 5:00.**
- **Main Plant Cafeteria.**
- **Toy Build Wrap Up.**
- **November Project: Anything food related.**
- **Door Prizes!!**

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Toy Build Wrap Up

Several of us have been busy; the toys are almost done, and it's time to wrap it up. We spent two evenings in the Industrial Technology shop in Marion High School and really accomplished a lot. Several members got a head start in their own shops so there was much less to do this time.

This year we stuck with the same set of toys that we have been making for the last several years. There are airplanes, crayon trucks, and the "close the box" games.



A whole squadron



We will use the session Tuesday to attach wheels, brand the club logo, and whatever still needs to be done. If we have a good turnout it won't take long.

November Project:

Projects fit for a feast. Anything food related.

The meeting this month is a couple of days from the big food day of the year. It's probably too late to make anything but the simplest project this time around. You have plenty of time before Christmas though.

It's pretty much just fish cooked on a shingle. Plane a piece of cedar to about a half inch and soak it over night in water. Heat it on the grill and add the fish when it's hot. Toss the cedar

How about a wooden spoon. Not at all complicated unless you want to get elaborate.

Watch it when you make things to use with food. Most local wood is pretty safe but there are exceptions that can kill you. Wood finishes can be a problem too. While the film may not be a problem the dryers are generally metallic poisons. That's especially true with oils. Specialized finishes are available but mineral oil works pretty well and every drug store sells it. It's also easy to recoat when it gets beat up.

This month we are talking about projects that are related to food. It can be anything from a cedar plank for cooking fish to a dining room table and chair set.



Wood is a really traditional material for serving food. The real problem is that it doesn't last all that long. It's still the first choice for cutting boards and serving dry fruit. Lacquerware is a common folk art in Asia and still very popular.

when you are done and no clean up. There are actually places that sell boards just for the purpose.

We have some turners in the group that make bowls. Ever put an apple in that bowl? If so bring it in.

Ever grill fish on a cedar plank?



Wooden lacquerware bowl, China, third century BC. Still functional



October Meeting

Last month we set up the toy build. The general consensus was that we should build the same set of toys that has been popular in the past. Some of the members were anticipating the build and got a run-



Toy Build Planning Session



ning start. We are stuck with the same finishing rules that came into force a few years ago so no finish on things that are intended for small children. We are

probably ok with the "close the box" game because it's really intended for older kids, they aren't likely to chew it, and it's a game and not a toy.

The Girl Scouts Woodworking Badge

At the last meeting we briefly talked about an upcoming project helping a local Girl Scout troop. They had contacted Steve to see if we could help them earn their Woodworking badge. The session with the girls was last Monday.

The requirements were reasonable and intended to get the kids familiar with using common tools they would encounter throughout their lives. We needed to drive some nails and screws, saw something, operate a level and complete a project. There are no real specific requirements for the project so I designed a simple wall shelf they hang in their rooms when they were done.

With some help from Bryan I made a dozen shelf kits. There are five parts (Check the picture if you are curious) in each kit. We expected eleven kids so we had one spare set of parts.

I cut all the joints and left the two narrow



back pieces an inch too long.

We started assembly by nailing the shelf in place with four finish nails. Then the girls marked the length of the back pieces and sawed them to length with a miter box and a back saw.

We needed to drill pilot holes for the screws that held the back pieces on. Drilling wasn't one of the requirements so I brought both a cordless drill and an egg beater style. If the girl wanted to drill the holes I let her otherwise I took care of it. Most of them wanted to try it themselves.

We installed the screws and the shelf was done. Most of the kids wanted to use the cordless drill to do it.

The final requirement was to show how to use a level so we checked every surface in the place and found a door that actually was out of plumb.

If you get a chance to do projects I recommend doing it. This was a great bunch of kids and I hope they all had fun. I certainly



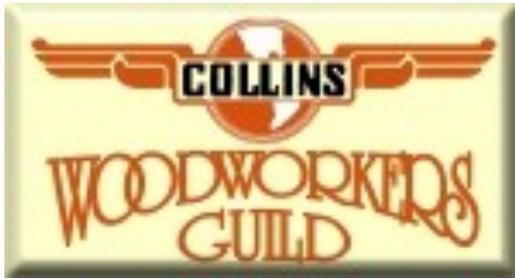
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