

January 19, 2010

Meeting Notice:

- January meeting: Tuesday the 19th in the Main plant cafeteria at 5:00
- Library videos
- January Project: Lap Joints.
- Door Prizes!!



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

January meeting

The Collins Woodworkers Guild maintains a large library of books, tools and videos. It fills several cabinets in building 105 and may be moving to a larger space.

We have a dozens of videos from Frank Klausz, Norm Abrams, Richard Raffan, and lots of other prominent woodworkers.

We have the complete Marc Adams set. Eleven videos in all that cover a lot of subjects. We have everything from Bending wood to Safety and

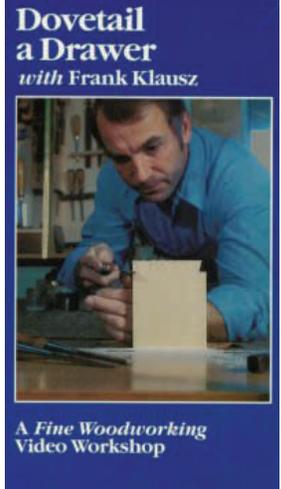


Furniture making.

Anybody that has been around for a while remembers Marc. He talked to us twice. It was a really interesting presentation. Marc makes a lot of furniture that prominently feature veneers and laminates. One of his children has a "Snow White" bed that looks like three of the dwarves beds side by side.

We have lots of others too. This month we are going to pull some of them out of the library and show them.

Library Videos

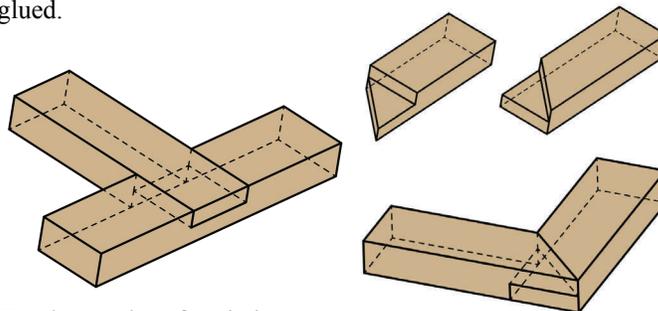


January Project

Lap Joints are really straight foreword, blue collar things. Nobody promotes them as the pinnacle of fine craftsmanship. But they are one of the most useful joints we have. Just two pieces of wood overlapped and glued.

common there.

For the most basic lap you just put glue on a piece of wood, lay another on top and put a clamp on it.



You have a lot of variations too. Look closely at the face-frames on your kitchen cabinets. Simple half laps or T laps are pretty

If you want to get a little more elaborate you can cut the lap as miter. You end up with a miter

Lap Joints

joint on top but it's really a lot more beefy than that.

You can make a lap joint where both strips cross. That's the traditional way to make mullions in a window or a glass door.

The Internet has a ton of information about all of the variations. Here is a link to one of the better sites. They have a bunch of free plans and patterns too. Great site.

www.craftsmanspace.com/knowledge/lap-woodworking-joints.html



Lap jointed mullions

November Meeting:

We finished our toy build during the November meeting. Well, we came close. John finished making some of the "Close the Box" game at home over the next couple of days.



Bryan and Wayne delivered the toys to the pediatrics units at St. Luke's and



Mercy hospitals. Three of the "adopt a family" groups took toys too.

This year we made airplanes, crayon trucks and "Close the box" games. We couldn't make the doll beds this time because the Consumer Products

Toy build

Safety people are playing with the rules regarding finishes and they really wouldn't look right unfinished.



Delivery to St Luke's Pediatrics Unit



Delivery of toys to Mercy Pediatrics

Upcoming projects:

February: Anything that includes glass.

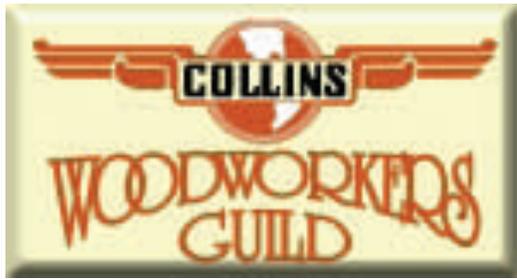
March: Inlay & Overlay.

April: Bridle joints.

May: Dowels

June: Unconventional finishes

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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- 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
- Open Houses
- Tours

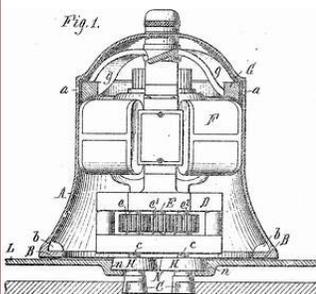
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Meeting Notice:

- **February meeting:** Tuesday the 16th in the Main plant cafeteria at 5:00
- **Router table fences**
- **February Project:** Anything Glazed.
- **Door Prizes!!**



Pneumatic



Pneumatic

Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

February meeting

No body really knows who first used a spinning blade to shape wood. It's been a long time. Holzapfel used the technique to make ornamental lathes long before the electric motor was invented.

Before that a router was a hand plane with an 'L' shaped blade. It was mainly used to clean out the grooves in stair runners to accept treads. It was also used to set in hinge mortises.

The modern router was invented by George Kelley in 1906. This thing weighed 60 pounds and ran on three phase power. Like the hand tool it could be used to clear out a groove but that's about where the similarity ends.

Today certainly we use a more refined machine. The router has become one of the most versa-

tile tools we have. Everything from a router base for a Dremel tool to a 3 1/2 horse behemoth that would make Tim the Tool Man Taylor grunt. If you have a really big air compressor you might want a pneumatic router.

It didn't take long for someone to mount a router under a table and use it for some of the tasks normally assigned to the shaper.



That spawned an entire industry making router tables, fences, dust collection, and lots of other accessories. This month we are going to talk about router

February Project

Have you ever handled glass? It can be a real pain.

There are professional glazers in town that will cut and install whatever you need. When we built the flag boxes we took a couple of the fronts to a glass shop and they cut all of the glass for us. Even then we broke several when we installed the little strips that hold it in.

A glazer doesn't use those strips if he has a choice. They generally use colored TRV adhesive.

It's about like calk that never really hardens. This stuff comes in colors that match the wood and there is no chance to break the glass while you tack in the strip.

Like working with wood, handling glass isn't all that difficult if you know what you are doing. There are techniques to learn and specialized tools. It's not a forgiving medium like wood. When you trim it a little too much you can't just glue on a strip. You are stuck too if you

Router Fences

fences.

Of course your fence can be as simple as a board and a couple of C-clamps. Or you might need a tall back to support a door panel when you are using a vertical panel raising bit. You can incorporate a bit guard, dust collection port, offset sides, stops, and anything else you think of.

The industry can provide most of the options that you need but sometimes you need something unique. It's not all that difficult to make a specialized fence or fixture. If you have something interesting please bring it in.



Anything That Includes Glass

cut it a little over sized. You can rip 1/8th inch from the side of a board if you need to but you can't do that with glass.

If you have ever built a cabinet with glass doors bring us a picture. How about a glazed picture frame? Bring anything glazed. No... Doughnuts don't count.



January Meeting:

Last month we went through some of the videos that we have accumulated. We have a lot of choices and they don't get a lot of use.



It looks like Ron Tonneson donated his collection of Wood, Woodsmith, Shop Notes magazines. He also donated several books and other publications to the library. That should make a nice addition to the collection.

The project for January was anything using a lap joint. There were several.



Upcoming projects:

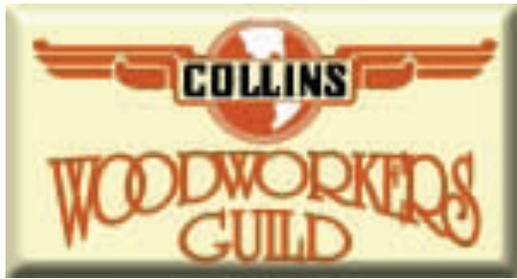
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Meeting Notice:

- **March meeting: Tuesday the 16th in the Main plant cafeteria at 5:00**
- **Dust Collection**
- **March Project: Inlay, Marquetry, and Intarsia.**
- **Door Prizes!!**



Bryan's new dust collector.



Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

March meeting

Dust is more than a mess on your shop floor. It can be slick on a concrete floor, it helps you lose tools and parts, and it's a health hazard.

Most dust exposure standards are set up assuming an occupational contact: all day every day. There really isn't a standard for occasional casual exposure. That doesn't mean that dust isn't a problem for us hobbyists, it just isn't quantified. The fine particles are the worst problem. They stay suspended in the air and we breathe them. A well designed collector will capture almost everything. When you empty a filter the dust is the consistency of flour.

Different machines have differ-

March Project

Marc Adams brought slides when he was here a few years ago. He made many pieces of furniture for his family that incorporated inlay to form cartoon characters. The man is talented.

Inlay has been around for thousands of years. It's a way to create geometric patterns and pictures on a wooden substrate using wood, stone, plastic or just about anything. There are lots of techniques and an endless choice of materials.

Intarsia uses overlaid materials. No veneer involved so it's popular with scroll saw people.

ent airflow requirements. A router may need 200 cfm while a big planer needs 800. The blower has to draw at least that much air through the machine, all the duct work and the filter. If the duct work is too small and friction loss goes up, too big and the air doesn't move fast enough.

Working out the details of the design isn't really all that difficult. You need air moving at something faster than 4000 feet/minute to keep the dust moving. Figure out what the biggest user of air is going to be, generally that will be your planer. Find distance to that machine taking into account elbows, "Ys" and duct work. Also look at the longest run in the shop and the

Dust Collection

requirements for that machine. Size the blower to deliver that volume of air with all of the losses taken into account. Most dust collector vendors will have typical losses for each part of the ductwork. They will also be able to give you an idea of how much air a typical machine will require.

There is no shortage of dust collection information on the internet. Some worthwhile but a lot that just promotes products of questionable benefit. Wood Magazine has a good article on their website: www.woodmagazine.com/woodworking-tips/techniques/dust-collection. Oneida has some useful information too: www.oneida-air.com/

Inlay, Marquetry and Intarsia

Either way projects can be as simple as a line or two to embellish an edge of really elaborate. Sometimes they are so traditional that you hardly notice. Most stringed instruments use a little string inlay or some pearl markers in the fret board. There is about no other way to make a wooden chess board.

Required tools can be as simple as a router and clamp or as complex as a vacuum bag veneering system. It all depends on how much you intend to do, how elaborate you want to get an how fast you want to do it.



So if you have done a little inlay, marquetry or intarsia bring it in and talk about it.

February Meeting:

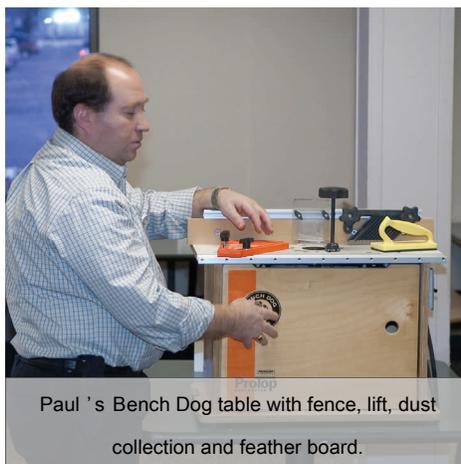
We have a lot of choices for router tables. The market is full of choices: you can buy a complete router table or you can buy parts and build one cafe-



Ray with parts to build a table.

teria style. We can make our own from scratch too. In February we looked at several of them.

Fundamentally router tables are pretty



Paul's Bench Dog table with fence, lift, dust collection and feather board.



Bryan with a fence based on the Incra jig.

Router Fences

simple. All they do is hold a router upside down so you can move the work rather than moving the tool. Of course in practice there is more to it



than that. You probably want fence, maybe dust collection and a way to adjust the height of the bit. You might want a starting pin.

Upcoming projects:

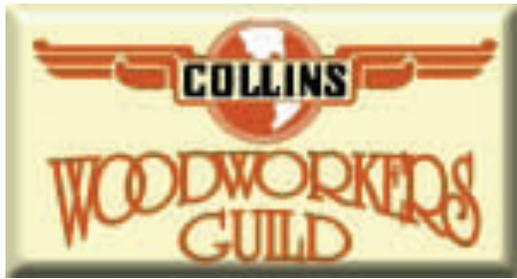
April: Projects for the garden

May: Dowels

June: Unconventional finishes

July: Bridle joints.

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Meeting Notice:

- April meeting: Tuesday the 20th in the Main plant cafeteria at 5:00
- Green Houses and cold frames
- April Project: Anything for the garden.
- Door Prizes!!



Cold Frame

Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

April meeting

It's finally Spring. This winter seemed to last a long time. Not that it was all that cold; it only got below zero a couple of times. Last year we had more snow. What we didn't have was a break from the cold. It snowed early and the snow stayed put for the whole winter.

The snow finally melted, even the piles in the parking lot. That's a sure sign of spring. The grass is green and needs to be mowed. The garden needs to be turned and it's time to see how the fruit trees came through.

Ray Collins is a serious gardener. Where most of us will put in a few tomatoes that we



Green Houses and Cold Frames

them to the garden he can move them to a cold frame. They don't freeze but they "harden off". That takes some of the shock from transplanting directly in the garden. There are lots of things that will grow all winter in a cold frame. Ever want

get from Frontier or Earl May Ray plants all of his own sets. He actually plants a lot of things that require ways to extend the season. One good approach is a heated green house. You get a lot of natural sunlight and it's warm enough that plants get an early start.

A few weeks before moving

fresh spinach salad in January? It's supposed to be possible around here.

Ray is going to talk to us about his green house, cold frame and other things related to gardening. I'm not sure about building a green house but I would like to know more about starting tomatoes.

April Project

There are a lot of things besides green houses and cold frames that woodworkers do for the garden. Sometimes these projects can be functional to the point of crudeness but they don't have to be. Ever try to make a wooden tomato cage



look good? Mine didn't work all that well.

Potting benches can be very good looking and still be functional. We build fences and rose trellises intending to dress up an area.

Did you ever want to make a dibble? Ok, what's a dibble? It's the stick you use to make a



Anything for the Garden



hole for planting onions and other bulbs.

So whatever you made please bring it to the meeting. As long as it has something to do with gardening it counts.

March Meeting:

In March Bryan talked about his experiences installing dust collection. His first collector was designed around an impeller from a leaf blower. There are a surprising number of things that can go wrong with that approach. Using his final, best case design he couldn't move enough air.

For this new installation he uses a three HP impeller and cyclone type separator. The ductwork is all heavy walled tubing designed for the purpose. It has a cartridge filter. It's the kind of system that would make Tim 'The Tool Man' Taylor grunt.

Dust collection isn't just a matter of keeping the shop clean. Wood dust

burns explosively. If you want to try an interesting experiment just dump a can full of sawdust on a campfire. Fine dust in the presence of a pilot light can



Dust Collection

be a real disaster.

Wood dust is a health hazard too. The really dangerous stuff is the fine flour like powder that collects in the filter.

There are several good websites that can help you design a system and provide parts. The manufacturer that Bryan used is here: www.oneida-air.com. Wood Magazine has a lot of information too.



Miscellaneous:

Bathroom Cabinets: We received this request from Jason Schares, one of our software engineers:

I'm going to be remodeling my bath, and the vanity in there was a custom job to begin with, and I was wondering if anyone in the wood workers guild would be interested in a small side job, or know of anyone that I could contact.

Since the bathroom is a small size, the vanity is made of two cabinets, one 18" depth and the other is a 24" depth adult size cabinets.

Upcoming projects:

May: Dowels

June: Unconventional finishes

July: Bridle joints.

I'm not sure what Jason has in mind but kitchen and bathroom cabinets are typically pretty simple. Just plywood boxes, sometimes with face frames. They generally have overlaid doors and drawers.

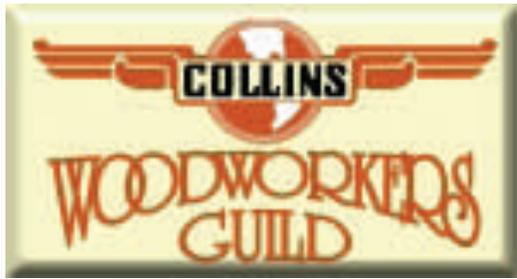
If you are interested give Jason a call.

Marion High School is finally selling off some of their equipment. Anyone who has been involved in the Christmas Toy Builds will Remember the two Uni-

saws. They replaced them a couple of years ago. They are for sale. So is that big planer that sat against the wall and some other things. The saws both need a little work on the fences but nothing major.

These all have 3 phase motors so if you don't have 3 phase power. (Trust me, you don't.) you are going to need different motors or else you need to buy or build a phase inverter.

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Meeting Notice:

- **May meeting: Tuesday the 18th in the Main plant cafeteria at 5:00**
- **Trophies and display cabinets**
- **May Project:**
- **Door Prizes!!**



Indian Creek display cases

Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

May meeting

Most of us go after it the hard way. We train, sweat, study strategy, and sweat some more. After the tournament we watch the guy that embarrassed us in the first round take home the spiffy looking hardware. Coaches call that a “learning experience”. A more seasoned athlete will use that experience as an tool to convince their wives that they need a new driver, racquet, shoes or bowling ball. At least they’ll try.

Take a good close look at that “hardware” though. There is a pretty good chance it’s mostly wooden. A couple of nicely oiled pieces of walnut with some brass doodads. And this one is starting to warp.

May Project

How many chairs have you needed to fix? Any of them more than once? Most of the time people blame the glue. Because hide glue was popular for the last several thousand years it was probably used to make the joint and generally gets blamed for it’s failure.

You can use a yellow glue, epoxy, urethane or whatever else you have. You can buy a lot of products that claim to solve the problem but if you use a dowel joint in that application it’s going to fail again. Hide glue isn’t the problem. You are fixing an end grain joint that has to stand

It’s actually reasonable to build a trophy and Paul Gibbs did it. He is going to tell us about it at our May meeting.

Next year when you work on your game using the new equipment that your wife ran out and got after your disastrous, first round loss you’re going to need a way to show off this prestigious award. That’s the point of the rest of the presentation.

A trophy case is a specialized display cabinet much like the cabinets that several of our members built for Indian Creek Nature Center.

The goal of any display cabinet is to protect it’s contents while letting people see those con-

Trophies and display

tents. It may be the trophy you are about to win but it can be anything else.

Several of our membership spent the winter replacing the cabinets that were damaged in the flood. Like any display case (or trophy case) they show the contents but keep people from messing with them. Another important feature is that the contents don’t need to be dusted.

Of course you can make cases to display other things. Golf balls, thimbles, Slide rules or whatever you want to display. In that case you might make an open case because those can be dusted. We will talk about that on Tuesday.

Dowels

a terrific amount of stress.

You will notice that the dowels stays with the seat rail and pull out of the legs and back every time. The long grain joint of the rail will work fine.

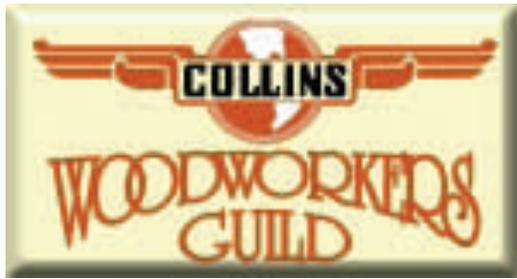
A far better choice that won’t break is a mortise and tennon. Floating tennons and lap joints will stand up too. Those don’t depend on using end grain joints.

Dowels have their uses. It’s a great way to line up boards in a table top. They don’t add any

strength but the top comes out flat.

Dowels make nice simple spindles. Think of all of the doll beds we made for Christmas. We used hundreds of them.





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Meeting Notice:

- **May meeting:** Tuesday the 15th in the Main plant cafeteria at 5:00
- **May Discussion:** Shop Safety
- **June Project:** Unconventional finishes
- **Door Prizes!!**



Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

June meeting

Shop Safety. We all know that we need to be careful in the shop. Almost every tool we have will trash human flesh faster than wood. Quick show of hands: Where is the guard for your table saw? Do you even know where it is? Almost everybody takes it off because it's a pain and doesn't put it back.

Of course maiming yourself on a table saw isn't the end of it. You can trip, stab, burn, poison, and blind yourself a lot of ways in the shop. You can also glue yourself to a drill press while you drill out a pen blank. The only way to be completely sure none of it happens is to stay out of the shop. That's not going to happen but you can improve your odds. We are going to talk



about that Tuesday.

Circular Saw Joinery. Most of us occasionally use a hand held circular saw. It's not exactly the bastion of accuracy. The surface that rides on the work is small and generally not very stiff. The cuts depend on eyeballing your layout line. You really wouldn't want to trust it for making joints but it's just fine for breaking down sheets of plywood.

There are times though where

it's not a bad option for cutting joints. If you want to cut a lap joint in a fence post it's only a little more effort than using a handsaw and the shoulders will



probably be closer to square.

You might want to reserve the techniques for outdoor projects where rough work is expected. Use that approach for building decks and fences rather than a jewelry box.

June Project

We're used to finishing with Polyurethane, various oils, and if you have a sprayer you can use lacquer. Sometimes though we pick something that isn't usually thought of as a finish for wood.

Salad bowls and cutting boards need



something that won't poison the user. They sell finishes that are certified as edible but olive oil probably works better because you can add a coat whenever you want.

Shoe Polish is just a tinted wax that is waterproof. Sound like something desirable in a finish for wood? It works fine and dries in a few minutes.

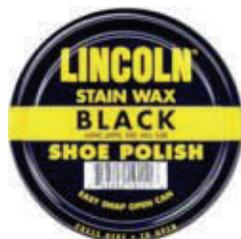
Ever want to match stain for a repair but have no idea what

Unconventional Finishes



was used in the first place? Try conventional linseed oil and artist oil colors. You may not want to mix up a gallon that way but a half a cup will cover a small table top.

So if you have ever used anything unusual to finish bring it.



May Meeting:

Last month Paul Gibbs talked to us about making trophies. He made this trophy for most of the same reasons that we make anything else: Cost, Personal investment, and because his daughter volunteered him.

This trophy is made from walnut. These are small showy projects so you may want to pick materials that are exotic, figured, or in some way meaningful. In this case the trophy was presented to Paul's daughter's soccer team so he topped it with a miniature soccer ball. You have a lot of choices if you want to build one. You can use almost anything that is related to the event. Golf balls, fishing reed, or a rubber chicken may all be good choices depending on the event. You can also buy conventional brass figures and trim pieces.

You can use any construction technique you like. In this case Paul used Miller Dowels. He

could have used butt joints with glue blocks, drywall screws with plugged holes, or anything else.

A trophy is usually displayed indoors and probably inside a display



Community Events:

ACME Tool: Last week several of our members got to take a look at products that are under development by Delta, DeWalt and Porter Cable. Of course they signed us to nondisclosure agreements so I really can't tell you anything about it. Let's just say that they are coming out with several new tools that are big improve-

Upcoming projects:

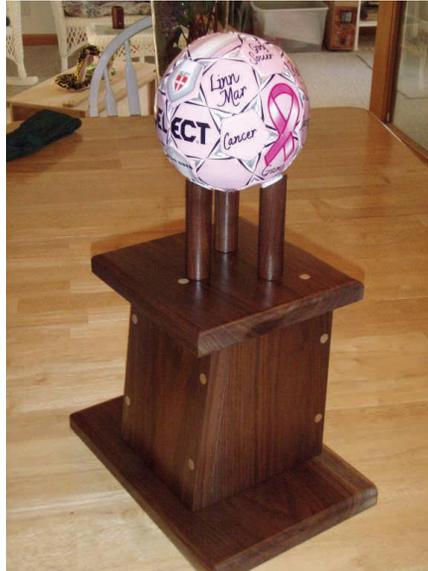
July: Food Contact.

August: Bridle joints.

September: Biscuit Joints.

October: Oil Finish.

Trophies and display cases



case. It doesn't see much handling so you have flexibility in what you use for finishing materials. Pick something that shows off the wood.



We also saw slides of the Indian Creek Nature Center from Dave Huovenin. Dave has been leading a group of our members in the effort to help Indian Creek recover from the flood two years ago. They have completed and installed a large number of display cases.



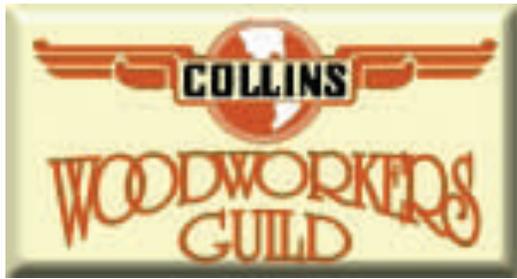
ments over what's out there now.

Amana Woodfest is going to be August 27–29th. We might think about setting up a booth to let people know we are here. We could also get together with the other woodworking club, the carvers and the turning organization to let

people know what's happening in the area.

You also might want to have your own booth to display and sell whatever you are making. More information is here: www.amanaartsguild.com/woodfest_form.pdf

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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Meeting Notice:

- **July meeting: Tuesday the 20th at the Indian Creek Nature Center 5:00**
- **July meeting: Picnic**
- **June Project: Food Contact**
- **Door Prizes!!**



Carpenter Ant

Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

July meeting

This month we get a chance to take a look at what several of our members have been up to. Dave Huovenin has been leading the charge to build many display cabinets for the Indian Creek Nature Center. Because of their efforts the center has offered to host our annual pic-

nic.

Indian Creek is also holding a jazz concert Tuesday after the picnic featuring the Iowa Vanguard Jazz Collective and we are invited to see it for free.

Ants

Nothing goes with a picnic quite like ants. Innocuous little insects but they are annoying because they always show up. We have thousands of different known species and only a couple of them are harmful at all.

attack wood.

They only do that when the wood is wet and punky. As long as you are working with dry wood and that hasn't rotted you are fine.

Of course as woodworkers we think of carpenter ants. The local variety are the big black ones that show up whenever wood is damaged. The good news: Carpenter ants are carnivores; they don't eat wood. The bad news: They cut channels through wood to create tunnels and they eat things that

Besides ants we have termites and powderpost beetles, around here. Those both can cause more problems than ants. Termites of course leave little mud tunnels. If you need to see their work hang around Main Plant a little while. The battle continues. Powderpost beetles leave little piles of dust this time of

Picnic

Indian Creek is providing the meat, buns, etc. You can bring anything else that goes with a picnic.

So bring your favorite potato salad, desert, or whatever you thing works at a picnic. We'll see you there.

year. They love ash and hickory before it dries. They will even attack walnut sapwood. The holes you see and the dust happen when the mature beetle leaves the wood. But of course the next thing they do is lay more eggs and their progeny will damage the wood further.



Powderpost Beetle

July Project

Ever make something that has to touch food? Not counting the dining room floor. These don't tend to be elaborate projects. We're talking cutting boards and kitchen spoons. If you like to turn projects you could make salad bowls. Maybe carve out a dough trencher.

roasted meat on oleander sticks. You are pretty safe if you stick with the woods you know. Cherry, white oak, maple, beech, and walnut are all popular.

Adhesives are always a concern but the actual exposure area is really small. You need something that will stand being wet occasionally.

Food Contact

You can buy "salad bowl" finish but a lot of people either use no finish at all or hit their cutting board with a little olive oil after they wash it. Bring anything you made intending to use with food.



June Meeting:

Last month we watched a couple of videos about shop safety and one on joinery using a handheld circular saw.

There are a lot of ways to hurt yourself in the shop. Most of them are pretty obvious as long as you are always paying attention. All of the blades we use will cut flesh easier than it will cut wood. When you use power tools things go wrong much faster than you can react. A kick-back on a table saw can feed your hands into a blade if you are behind the blade.

Other problems are subtle; noise can destroy your hearing slowly. How often have you come out of the shop with your ears ringing? You can't hear as well now as you did when you walked into the shop that day.

Wood burns; you heard it hear first. Sawdust burns even easier. Keeping sawdust and shavings cleaned up goes a long way to solving that problem but that requires discipline and maybe a good dust collector. If you want to try an interesting experiment try dumping a can of sawdust on your next camp fire. It goes up like gasoline. Your water heater's pilot light can set off the dust flying in the area.

Then there are ways to poison, blind, and choke

Community Events:

Amana Woodfest is going to be August 27–29th. We might think about setting up a booth to let people know we are here. We could also get together with the other woodworking club, the carvers and the turning organization to let people know what's happening in the area.

Upcoming projects:

August: Bridle joints.

September: Biscuit Joints.

October: Oil Finish.

November: Construction lumber; SPF

yourself. You can be stabbed, sliced, electrocuted, and maimed in ways too grim for description in this tome. Don't do it. Develop good judgment and use it. Use the guards when it makes sense and don't use them when it doesn't. There are times when you need to work outside and times when you need to buy safety equipment.

We've chosen a dangerous hobby.



The second video we watched was from Wood Magazine about using the hand held circular saw for joinery. They showed us how to make lap joints, cross laps and miters. It still seems easier to use other techniques but it is possible. They were building a pergola so it was wet con-

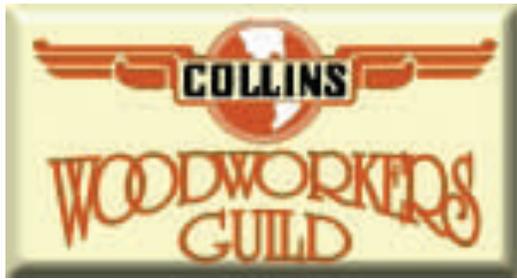
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We need ideas for new projects. Here is an opportunity to show off something that you have made. Suggest it as a project of the month.

Shop Safety video

struction lumber and used outside. It probably doesn't make sense for precise cabinetry and furniture. It's definitely easier to use a sliding compound miter saw, a router or even a back saw but it's nice to know you can do it with a circular saw if that's what's handy.





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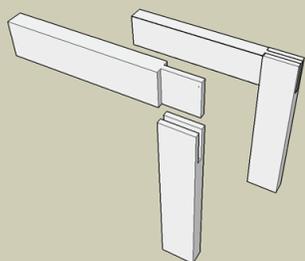
- **August meeting: Tuesday the 17th at the ACME Tool, 5:00**
- **August Project: Bridle joints**
- **Door Prizes!!**



Greatest tool made



Cordless screwdriver



Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

August meeting

Ever see a screwdriver with a cord? I have a whole drawer full of screwdrivers in my tool box and none have cords. Straight, Phillips, hex, spline, Rogers, a couple with interchangeable tips, even a few straight bits that fit a brace. I also have a really nice Milwaukee with a bad battery. None of them ever had a cord.

The tool industry has brought us an endless array of "cordless" tools over the last thirty years. Some are simply redesigned versions of conventional powered tools with batteries. Some never existed before.

This month Acme has arranged to have the Milwaukee representative come talk with us about them.

"Cordless" tools used Nickel Cadmium batteries when they were introduced and lots of them still do. Nickel Metal Hy-

dride batteries are smaller and lighter but they run hot, don't like cold weather and don't recharge all that often before they go bad. The newest common technology is Lithium Ion. These don't weigh as much as Ni-cad batteries, they're smaller and recharge at least as often. They can be just about any shape. Take a look at your cell phone; the battery pack is flat and square.



Milwaukee has been making power tools for a very long time. They tend to focus on

Battery Powered Tools

professional grade power tools for tradesmen rather than lower end, homeowner tools.

The Sawzall is one of the greatest inventions of all time, and now they have a cordless version. How else would you replace a door frame or cut the exhaust system out of a Mustang?

Looks like they make a cordless flashlight too!!



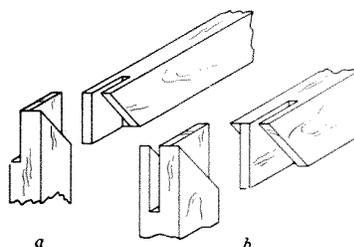
Cordless flashlight

August Project

The bridle joint is a humble thing. You use it because you get a lot of glue area. It's not quite as strong as a mortise and tenon but has twice the glue surface as a lap joint.

It's easy to make; just a slot cut in one piece and a matching tongue in the other. Nothing requiring advanced techniques and specialized tools, they are pretty simple.

Like most other things in woodworking everybody has a favorite way to make it and there are lots of variations. You can have a mitered version, add pins and



Bridle Joints

splines, angled and lots of others. They are popular for attaching legs to curved chair and table aprons. They are pretty common in post and beam architecture. You see them a lot in old barn joinery.

If you have ever used this gem bring it to the meeting or show us a picture.

July Meeting:

In July we met at the Indian Creek Nature Center for our annual picnic. The Nature Center hosted our picnic to show off several cabinets and displays that our members have been building for them.

Dave Huovenin did a terrific amount of work on the cabinets. Just to make sure that no good deed would go unpunished we let him and his wife Cindy prepare the meat for the picnic too. This is a strange organization.

We all ate well.

The Project for July was anything that is made for food contact. Then only entry was a bowl turned from walnut. Who



made it? Please speak up. You did a nice job.

It's clear that John Cox needs to start coming to these meetings again. That picture is all that was taken and that was with a

Picnic

phone. Besides the poor optics and shaky hand you can see the lack of composition and poor lighting.

Following the picnic several members stayed for the concert by the Iowa Vanguard Jazz Collective. The music was great and everyone who stayed enjoyed it.

Community Events:

We have a lot of woodworking activity in the area. Here is a rundown:

Amara Woodfest is going to be August 27–29th. Information is here:
www.amanaartsguild.com/woodfest_form.pdf

The “Other” woodworking club, **The Corridor Woodcrafters**, is having their next meet-

Upcoming projects:

September: Biscuit Joints.

October: Oil Finish.

November: Construction lumber; SPF

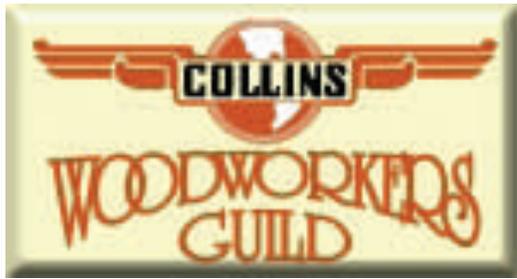
ing on September 2nd at 6:30. This time they are meeting in Squaw Creek park to talk about tree identification. They generally meet in John Schwartzkopf's shop in the Cherry Building on 10th Ave and 3rd St SE.

The **Cedar Valley Woodcarvers** are meeting on the second Tuesday of the month. The next one is on September 14th at 7:00 PM. They

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.

meet at the American Legion Post 298, 625 31st Street in Marion. More information here:
<http://cedarvalleywoodcarvers.com/>

We have an active **Woodturning** group in the area. If anyone has information on the group please speak up and it can be included here.



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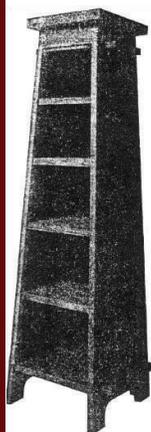
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Meeting Notice:

- **August meeting: Tuesday the 21st in the Main Plant Cafeteria, 5:00**
- **Election of officers.**
- **September Project:**
- **Door Prizes!!**



The Magazine PEDESTAL

shown herewith has been about the best selling piece of furniture we have made. It is artistic, serviceable, and withal very beautiful. The pedestal is of oak, hand-made and is 5 feet 3 inches in height. The price is \$200.00. The old carpenter has just finished half a dozen, three being in light brown and three in weathered oak. If these are all sold when your order comes, we can make you one in about ten days.



ADDRESS
THE ROYCROFTERS
EAST AURORA New York

1906 Add



Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

September meeting

Seems elections are always brutal. All the whining, the half truths and bald faced lies. You almost wonder why sane people would want those jobs and maybe they don't.

Program

You would think the publishers would talk with each other. Two of them published the Roycroft Magazine Pedestal this month. A quick search shows that just about all of them have published this same project with only small variations.

Roycroft was a community of craftsmen in New York. They were part of the Craftsmen movement that included woodworkers, blacksmiths copper-smiths, painters, sculptors, and just about any other manual trade. Their leader, Elbert Hubbard was an accomplished sales man. Much that is published about him is disputed. He was thrown out of college and sev-

September Project

The Wood magazine version of the Roycroft pedestal replaces the dado joints that hold the shelves with biscuit joints in an effort to simplify the design. I really doubt that locating a whole bunch angled biscuits accurately in the middle of a board is easier than running that same board through a saw but I didn't have to sell the idea to the editors.

Our elections are a little lower key events. We have pizza and door prizes. We try to railroad fresh officers, sometimes we pressgang the incumbents one more year.

eral business he operated failed. He promoted a movement with a spectrum of quirky social, political, and religious practices. Hubbard and his wife died on the Lusitania.

The basic approach to woodworking and other crafts was that designs should be simple and straight forward. Joinery should be obvious, visible and substantial. Nothing was hidden. The projects could be made by any competent craftsman. Local materials were nearly always used.

Other Craftsman style manufacturers were competing. Gustav

Officer Election

We are always looking for fresh blood so if you are willing to serve as an officer let someone know. We promise not to say rude things about you.

Mortise & Tennon

Stickly started several companies, published a magazine and designed buildings. Frank Lloyd Wright designed Craftsman furniture. The style was popular in parts of Europe, starting in the mid 1800's and dying earlier.

The movement lasted about 25 years in the US and then fashion changed. Art Nouvaeu and Art Deco styles were also popular at the same time and survived through the depression. A few Craftsman manufacturers survived. Some of Stickley's factories are still in business.

(Continued on page 2)

Biscuit Joints

We need to see how you used these. We'll have to trust you, biscuits are hidden in use. If you have used biscuits bring it to the meeting Tuesday and tell us about it.



August Meeting:

Acme Tool hosted our August meeting. They invited the Milwaukee Tool representative to tell us about their cordless tools.

The technology has developed over the last several years moving from nickel cadmium to lithium-ion technology. Lithium-ion batteries are smaller and lighter than Ni-cad's. They require a more complicated charging system that is generally incorporated into the battery pack.



Milwaukee has settled on 12 and 18 Volt packs with a whole line of tools for each. The real power hogs use the higher voltage and some tools have both versions.

Milwaukee has introduced dozens of new tools recently. They have a camera with the lens on a long neck that can be snaked into a wall or down a spark plug hole. They have an electric grease gun, a couple of versions of a fork style current meter, several general purpose digital voltmeters. These are in addition to their

Battery Operated Tools



traditional line of corded and cordless drills, saws, and grinders. If you want a sawzall now you need to decide whether you want the corded, 12V or 18V cordless.

(Continued from page 1)

A Craftsman revival started in the US in the early 1970's and out lived the original movement.

The pedestal as originally designed is pretty straight forward. The top and bottom shelves tie the structure together with exposed, wedged mortise and tennon joints. The shelves are dadoed into the sides.

The only complicating factor is the 3 degree slope.

The dados are no big deal. Just tip the dado head in the table saw. The mortises aren't difficult either but you have to think about what you are doing. We are going to demonstrate that at the meeting. Like



anything else there are a lot of ways to make them. Most of the approaches to eh joint are based on making fixtures. In this case both the mortise and the tennon shoulders need to be angled. While this might sound complicated it's easier that accurately locating rows of angled biscuits in the middle of a board.

<http://www.finewoodworking.com/pdf/Bookcase.pdf>

<http://www.popularwoodworking.com/features/fea10.pdf>

Community Events:

We have a lot of woodworking activity in the area. Here is a rundown:

The "Other" woodworking club, **The Corridor Woodcrafters**, is having their next meeting on October 7th at the Amana Furniture shop. They generally meet in John Schwartzkopf's shop in the Cherry Building on 10th

Ave and 3rd St SE.

The **Cedar Valley Woodcarvers** are meeting on the second Tuesday of the month. The next one is on October 12th at 7:00 PM. They meet at the American Legion Post 298, 625 31st Street in Marion. More information here: <http://cedarvalleywoodcarvers.com/>

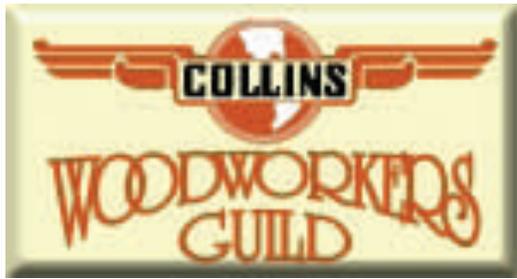
The **Corridor Woodturners** meet the second Thursday of the month at 6:30 PM. They are looking for a permanent meeting place. If you are interested contact Lance Zook at Collins or e-mail at l.a.zook@mchsi.com

Upcoming projects:

October: Oil Finish.

November: Construction lumber; SPF

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- Toys-For-Tots and other Programs to help our Community
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KNOT KNEWS
Is published monthly by the Collins
Woodworkers Guild

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President:	Bryan Wesner	cwg-president@rockwellcollinsclubs.com
Vice-President:	Wayne Hanson	cwg-vp@rockwellcollinsclubs.com
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	Lee Johnson	

Meeting Notice:

- **August meeting: Tuesday the 19th in the Main Plant Cafeteria, 5:00**
- **Ray's Apple Press**
- **October Project: An Oil Finish**
- **Door Prizes!!**



Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

October meeting

Wood isn't the only thing that grows on trees. Orchards produce all kinds of things that we like but like anything else related to gardening: when it's harvest time you get more product than you can handle. Generally you can preserve some of your haul or you can palm it off on neighbors and coworkers. A little misjudgment at planting time and people will avoid eye contact later in the year when you have an arm load of zucchini.

Iowa has a great climate for apples. Red Delicious were first produced in Peru Iowa in the mid 1800's when Stark Nurseries bought the rights to sell it commercially. It's been a great

September Project

Oil finishes are a cinch. You don't need a lot of equipment and the process of applying the finish is easy. Most of the time you just spread the oil on with a rag, wait a little while and buff it out. Repeat that process several times and you are done.

Oils are not grain filling finishes. Your finished project will still feel like wood. They almost don't build at all. That can be either desirable or not. If you are looking for a glass smooth finish this isn't it. On the other hand if you need a finish for that tool handle oils won't cause blisters.

Oils also don't offer much pro-

tection from moisture. That's success but there are thousands of other cultivars that grow here.

Ray Collins has a large garden and an orchard. Apples are one of the last things harvested in the season. While you can do a lot with apples Ray wants to make some into apple cider. Until this year he has been taking his apples to another grower to be pressed. This summer he bought parts and has started building his own press.

Apple presses are pretty simple devices. You need something to grind the apples into a tub, something to apply pressure, and something to catch the resulting juice. There are plenty of

plans around and presses to use as models. Presses have been built around piano stool bolts and bottle jacks. Grinders can be simple or complex and plenty of vendors provide the parts.

The thing they can't supply is the time to build the press. Ray now has it finished and ran eight gallons of apple cider over the weekend.

They are easy to repair if the finish does get wet or wears through. Just rub out the damaged surface with steel wool and put on a couple more coats. No stripping or sanding needed. When you have problems matching a stain color or you want something that you just can't buy take Linseed oil and mix what you want with artists oils. They use linseed oil for a

An Apple Press

plans around and presses to use as models. Presses have been built around piano stool bolts and bottle jacks. Grinders can be simple or complex and plenty of vendors provide the parts.

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Oil Finish

Linseed oil has been around for centuries it's not expensive but tends to darken with age. Tung oil costs more but doesn't darken as much. Mineral oil is acceptable for food contact and is cheap.

Lots of finishes that are called oils are really thin varnishes. They apply just like oils but build a protective layer. Watco, Waterlox, and anything called "Danish oil" aren't oils. They fill the grain slowly. That's not a problem if that's the finish you are after.

So if you have used oils on a project bring it in.

September Meeting:

September was a busy meeting. We elected officers, demonstrated making mortise and tennon joints, ate spaghetti and drew for a bunch of door prizes. This meeting is well attended every year. Partly because we have food and good door prizes and in part because there is a risk of being elected if you aren't present to decline the nomination. The project was anything using biscuit joints.



We elected our existing leadership for another year. Bryan will remain president,

September

Last month we talked briefly about Mortise and Tennon joinery. These joints are popular because they work and aren't difficult to make. You can buy specialized tools to make them easier.

One traditional approach is to cut the tennon with a back saw and miter box. That works well unless you need to make a lot

Community Events:

We have a lot of woodworking activity in the area. Here is a rundown:

The Corridor Woodcrafters next meeting is in November. I don't have details about that meeting yet. They generally meet in John Schwartzkopf's shop in the Cherry Building

Upcoming projects:

November: Construction lumber; SPF

January: A simple project.

Wayne the VP and Ray is treasurer again. Besides the elected positions we have Paul as librarian and Joel still writing this newsletter.



We brought in spaghetti from Zio John's. Their catering for events like this is always good and they have great garlic bread.

This time we had a bunch of door prizes. Bryan Wesner won the Milwaukee Impact driver bits, Paul Gibbs won the Magnetic

Officer Election

push stick. Justin Betz took home a \$75 gift card to ACME tool. Bill Barvenek got the noise canceling ear muffs. Wayne Tweeton won a \$50 ACME gift card. Wayne Hanson got the shop apron, Steve Geurts now has a straight edge clamp. Dave Huovenin and John Cox each got \$25 gift cards to ACME, and Larry Lacey won the centering rule.



Mortise & Tennon Joints



of them. Mortises can be cut with a heavy chisel. That isn't all that hard but you can clean out most of the waist with a drill and shape up the sides with a chisel.

You can buy a hollow chisel mortise machine or an attachment for a drill press. If you need to cut a bunch that's a nice way to go.

on 10th Ave and 3rd St SE.

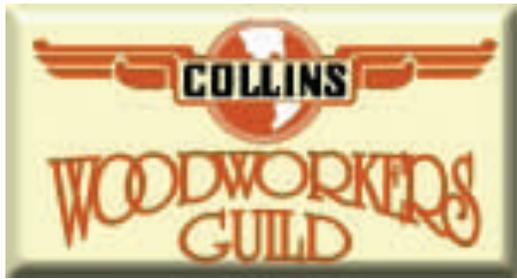
The **Cedar Valley Woodcarvers** are meeting on the second Tuesday of the month. The next one is on November 9th at 7:00 PM. They meet at the American Legion Post 298, 625 31st Street in Marion. More information here:

<http://cedarvalleywoodcarvers.com/>

The **Corridor Wood Turners** meet the second Thursday of the month at 6:30 PM. They are looking for a permanent meeting place. If you are interested contact Lance Zook at Collins or e-mail at l.a.zook@mchsi.com

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 you



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Meeting Notice:

- **November meeting: Tuesday the 16th in the Main Plant Cafeteria, 5:00**
- **Toy Build.**
- **November Project: Anything made from softwoods.**
- **Door Prizes!!**



They trust us with Power Tools?



Spruce top, Cello 38, David Wiebe

Knot News

COLLINS WOODDOEKERS GUILD NEWSLETTER

November meeting

It's that time of year again; we're building toys. Marion High School has been good enough to let us use their Industrial Technology shop again. We started last Tuesday and got a lot done. The second session is Monday the 15th and we will finish up at the meeting Tues-



November Project

Ok, pop quiz: What distinguishes a softwood from a hardwood? Here's a hint: It has nothing to do with the relative hardness of the wood.

Give up? It's the shape of the trees leaf. Softwoods have needles and hardwoods have flat leaves. Balsa is a hardwood and yellow pine is a softwood.

Woodworkers are accused at times of snobbishly avoiding softwoods. Of course there are reasons that we typically use hardwoods. You can get it dried enough to be stable. Construction lumber is "Kiln dried" to about 30% moisture content. Hardwoods are typically between 6 and 10%.

day. The Consumer Product Safety rules have changed again this year. Considering the paranoia it's kind of surprising that anyone ever grows up at all. The principal problems that we deal with are the same even with the changes. We can't finish anything. Raw wood is fine. No exposed metal parts. The rules are less stringent when a child is unlikely to chew on a toy. We can finish the "Close the box" game and paint numbers on the flippers.

Besides the game we are making the same airplanes and crayon trucks that we made last

Toy build



year. They were pretty popular. We may have some members making toys independently too.

If you would like to participate you can show up at the shop in Marion High School and come to the meeting on Tuesday.

Softwoods

prominent grain.

If you use SPF let it dry. A couple of years indoors is enough to bring it below 10%. Be careful staining it because it will blotch. Otherwise it works just fine.

So if you have something you have made from softwoods bring it in.



Lodgepole Pine, Old Faithful Inn

September Meeting:

Ray Collins Cider Press

I have three mature apple trees and a couple more small ones. I pressed cider at a farm near Kalona when I had a bumper crop in 2008. Nothing matches the taste of fresh cider.

The press they used was quite simple so why not build my own? My 2009 crop was very light so that year passed with no progress. My wife gave me the apple grinder for Christmas 2009 as a "suggestion" to get going on the construction for 2010.

Happy Valley Ranch makes the grinder. They also supply complete presses in several sizes and will also sell the hardware without the wood.

I considered purchasing the hardware kit but thought I would first check with a metal working friend, Keith Diefenderfer to see if he was interested in a summer project. Fortunately it sounded like a lot of fun to Keith so we began to plan how the press would be built.



There are many ways to press cider and the Internet can overload you with information on how to build a cider press, etc. After checking out a number of web sites, YouTube videos, etc. I kept coming back to the classic design that uses an Acme screw to press the apples within a slatted wooden tub. It's the kind I used when pressing a few years back in Kalona. I also thought this design would look great in white

Upcoming projects:

January: A simple project.

February: Oak.



oak.

The dimensions of all the press components are determined by the size of the wooden press basket. After checking out a number of ads and articles on-line, I decided to make the baskets 13" in diameter and also 13" tall. For this size basket, the manufactured presses use Acme screws with 1" to 1.25" diameter. I purchased a 3 foot long 1 1/8" diameter Acme screw rod and a couple Acme nuts from Enco.

The metal rings that hold the basket slats together are formed from 1" and 1/8" mild flat steel. The slats measure 1 wide by 3/4" thick and are spaced at 1 1/4". This leaves 1/8" between each slat for the juice to flow out. We punch marked the steel before rolling it into a circle with a ring roller. The ends were TIG welded to complete the circle.

There are 32 individual slats in each basket. I constructed a semi-circle of wood to hold the steel ring steady on the drill press while drilling



Officer Election

holes for the retaining screws. I thought that this allowed me to always drill at the punch point but after completing the holes I noted some were higher or lower than others. The punch marks were not deep enough to keep me from drilling nearby if not very careful. This basket was more custom fit than preferred. I marked and center punched the screw hole position in each wood slat to line up with the holes in the ring and eventually ended up with a complete custom fitted press basket of white oak.

The basket dimensions and slat spacing were all as desired so we rolled another set of steel rings and I began work on the second basket. The dimensions for the steel press beam were also firmed up so Keith could complete the metal work while I worked on the second basket. I added a backstop to the wood semicircle support that was used to support the metal ring while drilling the holes. Once clamped in the proper position the holes are always drilled at the proper height on the ring by holding it firm against the stop. The X dimension is now the



only one I need to worry about to hit the punch mark. The resulting ring hole pattern on these rings was much more uniform. I then made a simple right angle jig for the drill press to hold

March: Small furniture projects.

April: Architectural woodworking

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.

the slats while they were being drilled. Jam the slat into the jig corner, drill, reverse ends repeat. The second basket was then assembled in about half the time of the first with much less custom fitting and sanding. I borrowed a set of alphabet metal punches from Keith and marked all the slats and rings as they were disassembled for painting the metal and finishing the wood.

The columns are made of laminated white oak. I started with 7/8" boards and glued up three layers for all the columns. An additional 3/8" layer was added to the front press columns so they would be wider than 3". This was done to make sure the 3" wide steel plates did not stick out beyond the column. A mortise was made completely through the lower sections of the press columns for supporting the cross piece that must stay together under all the pressure from the Acme press. The individual column pieces were all cut about 1/8" larger than needed so that the entire completed column could be squared up on the joiner and dimensioned to the final size during this operation.

I cut two 11.5" circles from 5/8" thick hard maple and glued them together to make a 1 1/4" thick press plate. The pressed juice should also be able to run out the bottom of the baskets so a pair of waffle plates were constructed from hickory by making dado channels half way through the board spaced every inch. The same spaced channels are made on the bottom of the board at a right angle to those on the top. There's a hole for the juice to flow where the channels intersect and a channel to allow it to move toward the juice outlet.

The bottom tray that holds the waffle plates and collects the juice is constructed of glued up 3/4" thick ash. The sides are 2" wide and a 1/4" dado around the base and Miller dowels were used to hold the sides in alignment for gluing.

A 1/2" deep dado in the column makes a ledge to support the entire cross member under the press and a 7/8" thick tenon goes all the way through the column. The steel press crossbar flange is recessed 1/4" into the column. The column dados were made by clamping a board across two miter gauges placed in the table saw miter slots. The column was then clamped against the board and pushed across the dado blade in the table saw.

Four 3/8" bolts connect each side of the steel press bar flange through the column to a matching plate on the outside of the column. Having a matching plate on each side of the 3" thick column leaves no room for hole drilling errors. I experimented on the drill press and a 3/8" spade bit gave the straightest holes and did not burn as it went through white oak boards that I drilled through sideways. I set up supports to keep the columns flat on the drill press table and punch marked the hole centers. Drilling went

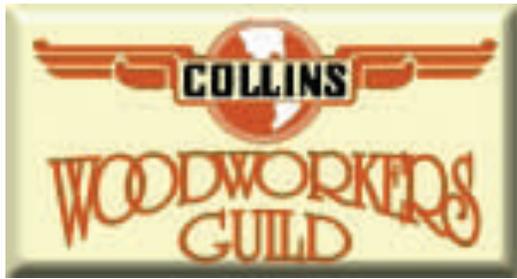


quickly with the spade bit and, I am pleased to say, straight. No filing was required to line up the plates on either side of the column and these bolt holes are tight around the bolts.

The dados were sized to be tight and nothing would assemble until some chisel work and sanding was done to allow remove the interference and perhaps give a little clearance in places.

All the pieces that come in contact with the pressed juice are finished with three coats of the "Salad Bowl" finish that Rockler/Acme sells. It's a bit expensive but is food safe, penetrates well on the first coat and then builds to a nice hard and glossy finish with additional coats. Parts of the press that do not contact the juice are finished with polyurethane varnish.

The dual basket system allows one person to press while another one grinds the next batch of fruit. Our experience thus far indicates that grinding is faster than pressing. Washing and removing bad parts of apples/pears etc. to prepare to grind takes more time than grinding or pressing. Clean up of all the containers etc. takes additional time also but the taste of fresh apple cider is worth the time. There is no other way to get fresh apple cider. It is not sold by any store or orchard here without being pasteurized first. I can definitely taste the difference.



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