

Meeting Notice:

January meeting: Tuesday the 20th at 5:00

Location: Main Plant Cafeteria

Subject: Drawer Slides

Project: Amana Lumber

Door Prizes!!

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

January Meeting

There are a lot of ways to make a drawer and at least as many ways to mount it. This month we are talking about mounting drawers with slides.

There are perfectly valid method that don't use slides at all. Just make the drawer fit the opening and use a shoe on the bottom of the drawer that rides on a support built into the dust panel.

That works great as long as you use dust panels, you are pretty good at making drawers and holes the same size and you don't load the drawer heavily, and you don't want to open the drawer a lot. While that works great in a jewelry box it's not very practical in a kitchen. Or a file cabinet.

In those cases you probably want a slide of some kind. And there are lots of options. Which of those options you choose depends

January Project

I think all of us picked up some lumber from Amana over the last year or so. They provided door prizes for our September meeting the last two years and we've has two group buys that amounted to a lot of lumber for a group of hobbyists like us.



Drawer Slides

on how you want the drawer to work.



Conventional side mount slides are easy. The drawer needs to be an inch narrower than the opening and a half inch shorter. You can see the slide when the drawer is open. They are the "Go to" standard for kitchens when you use full overlay drawers. Prices go from \$3 to \$25 depending on the length, weight limit and other options. Some less expensive slides look pretty rough, but even the best ones don't look great.

Which brings up under-mounted slides.

(Continued on page 3)

What you made with your Amana Wood

Amana had pretty much tapped out their forest for all the really valuable lumber. There is very little walnut and cherry left because the harvest was almost completely unmanaged until recently. While much of what remains is not especially valuable it is interesting. Sycamore, spalted maple, quarter sawn oaks.

It's time to show off some of those you have been working on. Steve made the shelf in the picture from a plan published in Woodsmith a few years ago. He changed the joinery to use pocket screws because he has the jig and is more comfortable using that than traditional mortise and tennons.

Amana Lumber projects (continued)



It's made from quarter sawn white oak. If you look closely in the background you can see that he's working on a second shelf.

Bryan built a bunk bed for his grandkids from the "Paint Grade" maple. This was maple that had failed the spalting process and sold very reasonably priced. Bry-

an wanted to paint it anyway so this worked out pretty well.

Some of the rest of the members have been working on these projects. Bring in something if it's small. If it's like Bryans, large or not available anymore, take a picture and bring that in. If you ran into problems let us know how it went.

November Meeting

Well, it's been a while. We last met in November and finished off the toy build. These are always enjoyable build sessions.



When we finished the build Ray delivered them to the pediatrics unit at St. Lukes and Mercy Hospitals.

Toy Build Wrap Up



Upcoming projects:

February: Red Woods

March: Offcuts. What to make from the scraps.

April: Mystery wood

May: Outdoor projects

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 goal of under mounted concealed slides is slides you can't see. There are two basic kinds: center mounted and edge mounted. Either way you get drawers that are as



wide as the opening but you lose a half inch of depth. Side mounted slides can carry more weight. Center mounted slides cost less.

Besides mounting options, weight limits, and length there are some features to think about. Some are self closing so when you get it past a certain point they pull themselves shut. Many slides have a soft closing feature to keep the

drawer from slamming closed. If you don't want drawer pulls some slides have a feature that opens the drawer slightly when you nudge it in while it's closed.

Of course these all add to the cost. There are plenty of cheap slides out there. Don't expect \$3 slides to last long, look good or carry much of a load. There is a reason that slides can cost more than \$100. It's best to know what you are getting.

Like anything else the reviews you read on line are very frequently written by the people promoting the product or the people promoting a competing product. Take all such reviews with a grain of salt (and maybe a couple of aspirin).

If you have a favorite or maybe several favorites. Please bring in what you use and let us know how it works. If you have tried something that didn't work we want to hear that too.

Library Move

Well the library there and usable again. This month we are going to keep the meeting a little short and head over the Rec Center to show everyone where the library is now located.

We still have a few problems. First anyone without a badge needs to get access via the Rec center and they are only open during their regular daytime hours. They do keep pretty good hours but if you need something in the evening or on some holidays you need to plan.

Membership Report

I am pleased to report that the Guild paid membership grew by five people this fiscal year. We had three members re-join after taking a year off, three brand new members, and one non-renewal. (What's up with that, Wayne T?)

Let's welcome the new guys next time you see them:

Perry Coffman, Wabtec employee

Paul Heyd, Collins employee

James Scheer, Collins employee

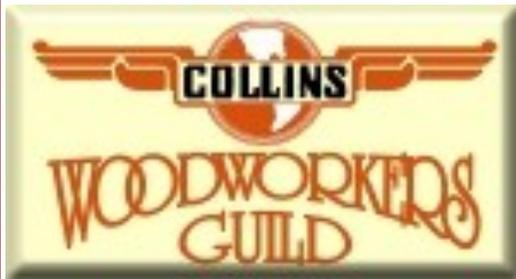
Ray Collins

Second, we seem to be losing things. People are removing things without checking them out and not returning them. The process we had with checking out on line and requesting the key didn't work for several reasons. The end result was that things have gone missing. We are rethinking the process.

If you have thoughts please speak up at the meeting Tuesday.

Jerry Roland

Total membership is now nineteen, not a very large number. How can you promote the club? Could you post a Knot News where you work? Mention the Guild to your bowling/cards/lunch buddies? The average age of our membership is somewhere between "old fart" and "antique" so let's build up our ranks while we are still warm and above ground.



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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:

February meeting: Tuesday the 17th at 5:00

Location: Main Plant Cafeteria

Subject: Dovetails with the Porter Cable Jig

Project: Red Woods



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Dovetails using the Porter Cable Jig

We use Dovetails for a lot of situations. You use them just about anywhere you have a right angle joint in the end of a board and you need a strong joint. Some people hesitate when they need them because they think the joint is complicated. They do require some practice but they aren't all that tough.

Lots of people make jigs to simplify the process. These all have advantages and disadvantages. This month we are going to look at the Porter Cable jig. This jig is similar to a lot of others. You can cut through and half blind

joints, sliding dovetails on wood between 1/4 and 1 1/8 thick. The width of the tails are fixed. You can also use it for box joints.

It's not as flexible as the Leigh that the club owns but it should be easier to use.



February Project

Valentines day is just passed and the color everywhere is red. While most of the lumber we come across runs from white to dark brown there are some reds in the pallet. Red Cedar is



common. Boxelder turns bright red when it spalts. Lots of exotics are red too.

This is an opportunity to break out those red choices and show us what you have made as long as it's red.

Red Woods

January Meeting

Last month we talked about drawer slides. We have lots to choose from at every price-point and dozens of brands. Obviously some work better than others and you get what you pay for.

After we discussed the pro's and cons of various lower cost drawer slides Jerry demonstrated the Blum soft closing, under drawer sliding units he is using in his new cabinets. A couple : they are rated at 100 lb load, more than the typical 75 lb Euro side units, they also are full extension opening,

not 3/4. Finally the cost is higher but Jerry located a source online, ahturf.com, that has very good prices. This company charges about \$20 a set, much lower than most others. They are impressive.

After the general meeting ended in cafeteria we made a trip to the rec center hallway to check out the new CWG library location. Members were enthused about the new location and looked forward to using it once we are able to install some shelves to better access the tools.



Amana Lumber projects (continued)

Members were in agreement as to building a couple large tray-like shelves in the bottom cabinet and a couple slide out pantry units in the top. Four pairs of 32" long, 200 lb rated, full extension ball bearing slides were ordered last week for the library shelf build. They are expected to arrive next week.

Blume makes a wide variety of pretty decent slides and they work well. There are a lot of other brands out there

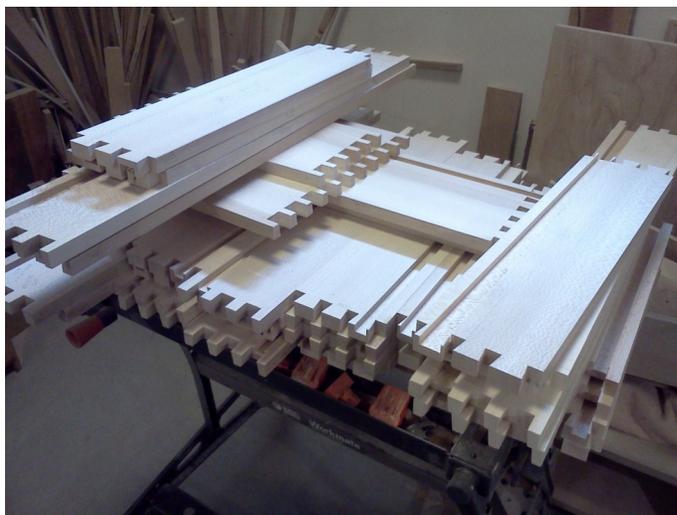


that also work and there is no shortage of cheaper alternatives.

The project in January was Projects that you built using the Amana lumber. There were several projects presented. Paul Heyd made a buffet table using spalted maple and walnut. He brought a door but has a picture of the completed project.



Steve brought this shelf. Jerry was making drawers out of the sycamore. Several more people had projects so it looks like the lumber is actually getting used.



Collins Clubs Update:

Funding Restored: RC clubs met Jan 27 to discuss new funding of clubs. Leadership in this area has changed and funding of RC clubs is back on. We should expect to be

funded for a match of member dues this year or about \$375 based on current 25 members.

Library Access: They also voted to

allow access to hallway that contains our new library location. The badge access should be removed by March first. Our retirees can get there via the Rec Center without a badge.

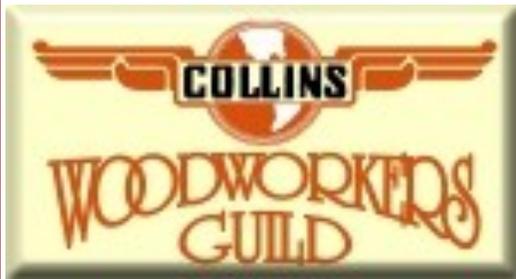
Upcoming projects:

March: Offcuts. What to make from the scraps.

May: Outdoor projects

April: Mystery wood

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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Location: Main Plant Cafeteria

Subject: Dovetails with the Leigh Jig

Project: Offcuts. What to make from the scraps.



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Dovetails using the Leigh Jig

Last time we talked about the Porter Cable dovetail jig. The club owns a Leigh dovetail jig that Jerry Roland used last year and he is going to show us how it works.

Traditionally dovetails were cut with the pins much narrower than the tails. The narrow side of the pin frequently came almost to a point. The pins often were closer together at the bottom of the joint and they generally started and ended with a wider pin.



The industrial revolution changed all that. Dovetail machines can bang out one side of a joint every two seconds. Some cut both



sides at the same time. Pins and tails are typically the same size and spaced every half inch.

By the turn of the century this was normal in mass

market furniture. When the electric router became popular industry created jigs that copied that version of the joint. Leigh created a jig that lets you set the spacing anywhere you want. Using the Leigh jig you can come close to the look of hand cut joints.

The added flexibility comes with some complexity. You have to think about what you are doing when you set up the jig. Jerry is going to take us through the process. Once it's set up using it is simple enough.

Hand Cut Dovetails

If we have time we will take a look at hand cutting dovetails. If you are only making a couple of drawers it's generally quicker to just hand cut them.

Somehow hand cut dovetails have been sur-

rounded by a mystique that makes no sense. If you can saw to a line you can make dovetails. They take no special tools. While you can drop a couple of hundred dollars on a saw a hacksaw will work. It just takes a saw, chisel and a pocket knife.

March Project

We all generate scraps, it's part of the process. Some of them are big enough to use in another project and most of us save them. So what do you do with yours?

Offcuts make great small projects. They are a good source of material for pens and other small turnings.

You usually don't have much of one species so you end up mixing. If you use contrast

Offcuts

right you can make something interesting.

Secondary woods on your next project is an



other choice. We generally make drawer sides, runners and glue blocks from secondary woods anyway because these aren't seen so why not make them out of offcuts?



February meeting

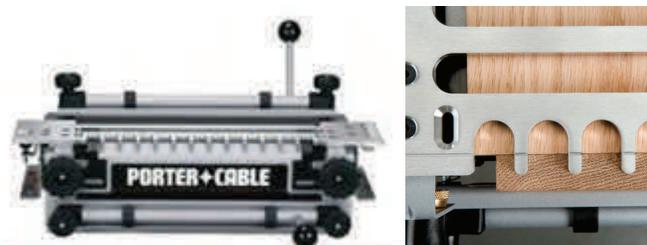
Last time we talked about using the Porter Cable Dovetail jig. Ray had spent some time using it and showed us what it can do.

There are a couple of different variations on the basic jig. The least expensive version is the 4211. It will let you cut half blind dovetails and that's about it.



The 4213 adds through dovetails and box joints using a different template. The 4216 includes a smaller template.

You can buy the 4211 and add the rest of the templates later but it's much more expensive than just getting the larger set. In all cases the joint is a fixed pitch so you will need to design the project around the capability of the jig. Normally it's not difficult but



you need to keep it in mind.

The Porter Cable jigs use two different bits, a dovetail bit for the

tails and a straight bit for the pins. It's easiest to use two routers and leave them set up until you finish the project. It can be done with one but you will spend time tearing down and setting back up.

Like any new tool the Porter Cable dovetail jig has a learning curve. Once you learn how to set it up it isn't difficult to use.



The project in February was anything from wood that is red and several



people brought projects.

Upcoming projects:

March: Offcuts. What to make from the scraps.

April: Mystery wood

May: Outdoor projects

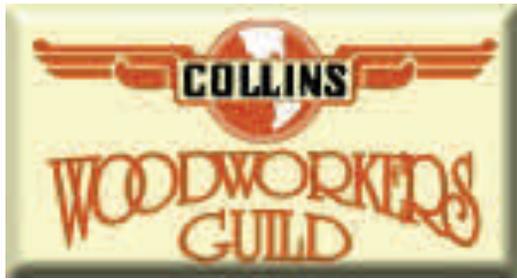
June: A "New Yankee Workshop" project.

July: Something that you look at.

August: A project form a picture.

September: A copy of something you have.

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Meeting Notice:

April meeting: Tuesday the 21st at 5:00

Location: Main Plant Cafeteria

Subject: Google Sketch Up

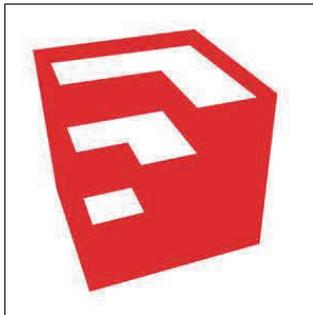
Project: Mystery woods.

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Google Sketch Up

Paul Heyd



Paul Heyd will lead the group on a discussion/overview of the free CAD program, SketchUp on April 21st. Once learned, SketchUp is a very valuable tool for use before going to the shop. Creating projects on SketchUp can be quick or very detailed. Once a project is designed and completed, a cut list can be generated very easily to bring to the shop to be used as plans for the actual

build. It proves to be a valuable tool for making decisions on a project or sharing with others that will be using the end product, as all the designs are created and shown in 3 dimensions. There are many advanced techniques that can be utilized with SketchUp, however Paul will just go over the basics of the tool, provide a few critical tips in using the tool, and go over a couple example pro-

April Project

Mystery wood



We all end up with odd pieces of wood that we can't identify. It seems to walk into the shop in it's own. Generally not in large pieces but just interesting enough to save. While the Forrest Products lab in Madison can identify it, do you really care what species it is? It's just different.



Eventually you do something with it and that's what we want to see this month. Odd woods like these generally end up in small projects and turnings. They make great pens. If you have enough to make anything large and you aren't sure about how they work and how they take finish to make anything large.

March Meeting: Dovetails using the Leigh Jig

Last couple of meetings were devoted to making dovetails. The club owns a Leigh jig and Jerry Roland showed us how it works in March. Joel also demonstrated cutting the same joint without a jig

The Leigh jig let's you vary the spacing and size of the pins and tails. Most jigs have the spacing fixed at one per inch and the pins are the same size as the tails. The fixed spacing seriously limits the size of the pieces you use. If you want to make a drawer that doesn't fit neatly into that limit you need to figure out something else.

Traditional hand cut dovetails are rarely evenly



spaced and pins are generally narrower than the tails. The Leigh jig gets around some of that.

This flexibility comes with complexity. The Leigh jig isn't difficult to set up once you understand how it works but it does take more time than jigs that are less flexible. They have a decent manual and there are videos available on the internet so the learning curve isn't too bad.

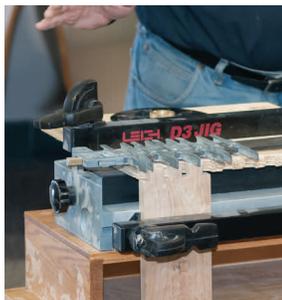
Jerry noted a couple of problems but nothing that amounts to a show stopper. First, the template

fingers ride on steel rails that are not all that rigid.



March Meeting: Dovetails using the Leigh Jig (Continued)

Until you load the work piece the template will flex. Second, the work piece is held square to the fixture by a little plastic piece that is way too small. It's best to use an actual square when you load the fixture.



These things aren't cheap either. The current model similar to the unit owned by the club is almost \$600. Add extra bits, and router guides, build a box to hold the accessories and support the fixture and you can spend some real money on this one. You have the advantage that the club has one you can just check out.

Hand Cut: Joel demonstrated cutting the joint by hand. If you only need a couple of drawers it's quicker than setting up any jig. You are also free to space the pins and tails any way you like.

A jig will allow you to make dozens of identical parts. Any side will fit any end once you are set up. Everything needs to be straight, square. The ends can be a different thickness than the ends but all of the sides need to be the same thickness and the ends need to be the same. When you cut them by hand none of that matters. You end up making each piece fit it's mating piece but nothing can interchange.



While there are some skills that are handed from master to student and honed by years of practice and frustration, this isn't one of them. While there are folks that promote it as such they are either trying to sell you something or they haven't tried it.

There are plenty of articles out there describing the process. What Joel demonstrated was the "Pins First" method. Here are a few links:

[http://www.finewoodworking.com/how-to/article/hand-cut-](http://www.finewoodworking.com/how-to/article/hand-cut-dovetails-accurate-and-fast.aspx)

[dovetails-accurate-and-fast.aspx](http://www.finewoodworking.com/how-to/article/hand-cut-dovetails-accurate-and-fast.aspx)

<http://woodtreks.com/how-to-hand-cut-precision-dovetails-%E2%80%94part-one-the-pins/75/>

<http://www.woodcraft.com/Articles/Articles.aspx?articleid=249>

Beware: some of these are mainly trying to sell tools; you probably already have what you need. The necessary tools are very common: a pocket knife, a couple of chisels and a saw. A hacksaw will work but it's slow. The Shark in the picture is about \$15 at Menards. If you have extra money and like really nice looking tools Woodcraft will let you spend \$250 on a saw with a plastic handle. If you want to spend even more Google "Two Lawyers saw works".



By using one piece to mark the mating piece you don't measure anything. The angles are whatever looks right. While it's possible to measure carefully and make all the angles exactly what somebody on the internet or magazine article thinks they should be it really doesn't make much difference. The joint is going to be plenty strong regardless and it needs to look right to you.

Upcoming projects:

May: Outdoor projects

have.

the month.

June: A "New Yankee Workshop" project.

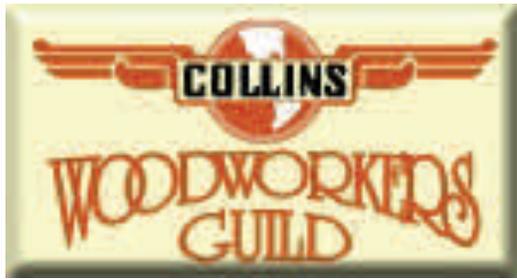
October: A repair.

July: Something that you look at.

August: A project form a picture.

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

September: A copy of something you



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Meeting Notice:

May meeting: Tuesday the 19th at 5:30

Location: Green Woods Saw Mill

Subject: Lumber Processing

Project: Outdoor projects



Green Wood Products
custom sawyers, hauling & drying

Mel Green
owner

2159 Hwy 965 N.E.
North Liberty
Iowa, 52317
319-310-3997 cell
319-665-6425 fax
melgreen1159@gmail.com

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Green Wood Products

Mel Green

Road Trip!!

A couple of months ago Mel Green stopped by one of our meetings to talk about his sawmill. When we asked about a tour he suggested that we come when the weather was nice and he would make up a batch of his chili. The time has come. Tuesday we are heading to his place near North Liberty and take a look.



We have been to other mills. While Wieland's will run a million bd.ft of grade cut lumber in a year they can't cut one specific log for an individual and they don't do custom work.

Then you want to make something from the oak tree that grew in your folks front yard, Mel can do it. Want that quarter sawn? No problem. Want a couple of thick planks to turn the legs? Sure. Consecutive boards so you can book match? Air dried walnut so you save the vivid colors? That is what a small mill can do. Mel can cut to grade too but that would be pointless. You can buy grade cut lumber anywhere.

May Project

We all occasionally make something that we use outdoors. It's generally not our finest work because it get's beaten badly and won't likely last for decades. It does have to look good and survive in a challenging environment. Choosing wood, joinery and finishes need to consider the temperature extremes, moisture and sunlight.



Outdoor projects require maintenance

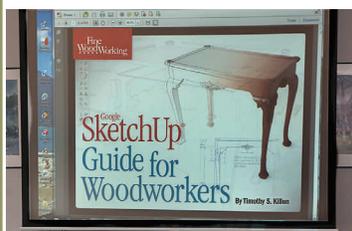
Outdoor projects

No matter how carefully chosen, these things require maintenance. Even the best finishes need refreshed, decayed pieces remade and insect damage repaired.

We want to see what you have made. This may require pictures; porch swings and picnic tables are too big to bring in.

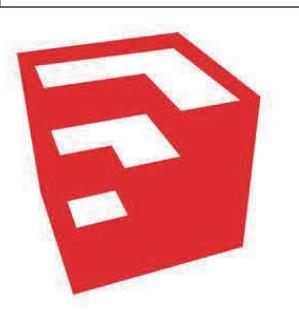
April Meeting: Google Sketch Up

Paul Heyd introduced us to Google Sketch up last month. Unless you build strictly from published plans you need some way to draw



up what you are thinking of building. Most of us start with a pencil and paper sketch and play with it for a while.

Once we firm up the general size and rough design we move on to something more like shop drawings. That's when CAD software becomes useful. We can make a scaled



April Meeting: Google Sketch Up

drawing with as much detail as you like. Scales can change easily, parts can move, joinery details can be resolved. You can work to as much detail as you think is useful. Even after you have a drawing you can go back to work out a detail that you may not have considered during your initial design.

Google Sketch Up is a free CAD package that you can download. There is a professional version that if you use it for a business you can buy but for us hobbyists it's free. There is a large body of work that can be downloaded for free and can be used for baseline designs for our own projects. You can modify it as much as you need for your own taste.

There is a learning curve associated with any new tech-



Up
Paul

we
use
ing



nique and Sketch
is no different.
is willing to lead
some sessions so
we can learn how to
it. A separate mail-
has gone out

Coping Saws

Did everybody get a cheap coping saw when they were a kid? A lot of us did. It's pretty much the normal way to make curved cuts and clean out dovetails. Like any tool using a cheap one will be frustrating. I was fighting that at the March meeting.

So what makes a decent coping saw? From my perspective there are four things that matter. You need to use a good blade, you have to put tension on it, the handle needs to be sound and you need a way to keep both ends pointing the same direction.

I've been using a Disston #15 for years with Olsen blades. They work fine but generally have too much set. They are much better than you can get at Menards. For most things the 18 TPI skip tooth blades are about

right. If you are working with anything really thick you may want to go with fewer teeth. Pegas makes better blades but you have to get them on line. Even so they are \$10/dozen and \$50/gross.

A cheap frame may not put enough tension on the blade. You generally



cut on the pull stroke but you need to keep the top of the blade straight. If you are fighting over set blades a weak frame is a problem.

This weekend I won a Knew Concepts Titanium coping saw and it's definitely the top of the line. It's rigid enough to cut on the push stroke, has solid blade positioning features, and a quick release blade lever.

It takes standard 5" scroll saw blades, is it's a little shorter than a conventional coping saw. There are lots of choices when it comes to blades, tooth pitch, tooth patterns, metal cutting, whatever you want and most of them aren't over set like coping saw blades.

This is a huge step up. I probably wouldn't have put out the money these

Upcoming projects:

June: A "New Yankee Workshop" project.

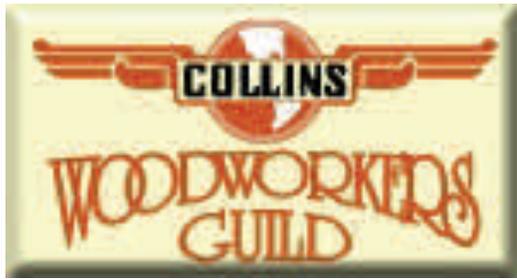
July: Something that you look at.

August: A project form a picture.

September: A copy of something you have.

October: A repair.

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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	Ray Collins	

Meeting Notice:

June meeting: Tuesday the 16th at 5:00

Location: Main Plant Cafeteria

Subject: Log Furniture

Project: Outdoor projects

Door Prizes!!



Outdoor projects require maintenance



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Rustic Log Furniture

Ray Collins

This month we decided to go with an outdoor woodworking theme. We didn't get to the project last month and Ray has been looking at making outdoor furniture using small whole logs. He will discuss basic debarking of logs, log tenon joints for furniture, or perhaps just making an interesting stick for walking or hunting mushrooms.

His approach to debarking some smaller logs uses a draw knife. He also ordered a 1" log tenon cutter to demonstrate how to use one. He can show us how it works.

If you have ever built anything using small logs bring it. Any log projects, debarking tools, methods, etc. would be welcome.

Ray hasn't done much of this kind of wood-

June Project

Well with the road trip last month we didn't get to the project. This one lends itself to the subject this time so we are going to give it another shot. Bring in whatever you didn't show in May.

We all occasionally make something that we use outdoors. It's generally not our finest work because it get's beaten badly and won't likely last for decades. It does have to look good and survive in a challenging environment. Choosing wood, joinery and finishes

May Meeting: Green Wood Sawmill Road Trip

Last month we met at Green Wood Sawmill. Mel Green showed us his sawmill and fed us his chili. Mel's chili is very good. Much of his lumber is interesting but you need to use it in the right project.

Mel has a small band mill and is focused on producing lumber from trees that a lot of mills won't touch. Many of his logs are small-

working but is trying to learn more as he has a lot of basic material to work with in the wooded areas around his house.

This furniture style presents some interesting challenges. For one thing nothing is straight, flat or square. You are using wood straight from the tree so it has to be a cut to fit proposition.



You can use any joinery method you like from dovetails to pocket holes but the traditional joint uses a round tenon. It's

(Continued on page 2)

Outdoor projects

need to consider the temperature extremes, moisture and sunlight.

No matter how carefully chosen, these things require maintenance. Even the best finishes need refreshed, decayed pieces remade and insect damage repaired.

We want to see what you have made. This may require pictures; porch swings and picnic tables are too big to bring in.

Green Wood Products
 custom sawyers hauling & drying

Mel Green
 owner

2159 Hwy 965 N.E.
 North Liberty
 Iowa, 52317
 319-310-3897 cell
 319-665-6425 fax
 melgreen1159@gmail.com

er trees that branched close to the ground. Some times they contain metal. This gives us lumber that includes things that professional graders count as defects.

Green Wood Sawmill Trip

Most of us understand that these defects can also provide character that we look for. A commercial shop won't



have time to take advantage of these things but as hobbyists we just might.

The real question becomes what constitutes character and what sends a an

otherwise attractive board to the firewood pile? There are a couple of things the think about. Does the board include the heartwood. If so it will almost certainly crack and will never stay flat. You can cut out the heartwood but what is left when you do? Second is whether you have reaction



wood. Look at whether the growth rings are closer together on one side of the



board than the other. If so the tree grew under stress and will never stay flat or take a finish that looks right. Best to make that board into firewood.

The other considerations are aesthetic. Do you want the natural edges and cracks, can you stabilize the crotch pieces? If the piece fits your design buy it otherwise keep looking.

Rustic Log Furniture

generally cut using a tool that works like a big pencil sharpener. You can make the same joint with a lathe but you have to go slowly because the wood isn't necessarily straight. There is another method using a table saw by hand but that sounds like a good way to get hurt.

The corresponding hole is cut using a spade bit got the smaller sizes or a

Forstner bit. The open end of the hole generally includes a taper that matches the tenon. That is cut with a countersink that has the same taper as the tenon cutter.

Traditionally these projects have no bark. That's because the bark tends to separate from the log when the cambium layer dries out. Almost all species do that so the first step is to debark the log. Like any other process there is more than one way to do it and everybody has a favorite. Ray is going to use a drawknife. Other options include chainsaw attachments and discs that mount on angle grinders. Some of these sound like ways to get hurt too.



You will have the challenge of holding round material that isn't necessarily straight too. Fortunately that problem has an easy solution. Every hardware store has a pipe vise.

Upcoming projects:

July: A "New Yankee Workshop" project.

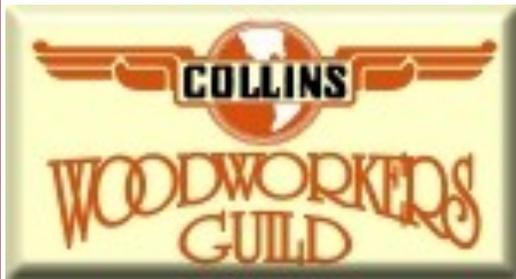
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	Ray Collins	

Meeting Notice:

July meeting: Tuesday the 21st at 5:00

Location: South Troy Park in Robins

Subject: Picnic!

Project: A "New Yankee Workshop" Project

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Annual Picnic!

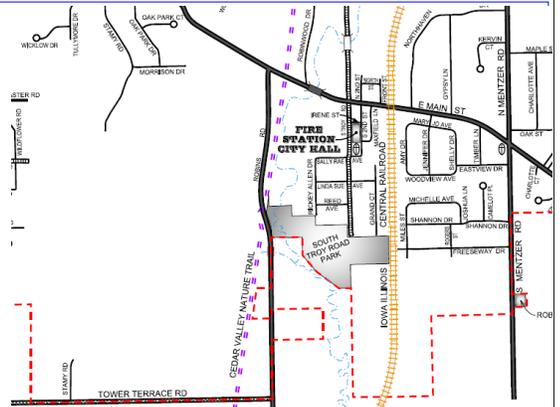
Here's the important part. This will be our annual picnic and it will be held at **South Troy Park in Robins**. Check the map.

You can see the shelter from the parking lot on the northeast side of park. From Robins Main Street, South Troy Road is the first street going south, east of the Nature Trail / bridge over creek. There is a small park sign on the light pole at the junction of Robins Main St. and South Troy Road

We needed to move it this year because the RAGBRI folks have the park reserved for the entire week.

The club will provide food and soft drinks but you're welcome to bring along a side dish or dessert. You are also welcome to bring along your family or significant other.

Ray Collins



If you have not already done so, please let Jerry know how many people you are planning to bring.

If the weather is bad check your e-mail for updated plans.

July Project

The New Yankee Workshop was a fixture on PBS for 21 years. It introduced thousands of people to woodworking. Even though the show was canceled several years ago it's still popular on You-tube and the books are still around.

It also inspired several other woodworking shows. Without Norm there could be no Roy. Kind of a Yin & Yang thing except with facial hair.

A "New Yankee Workshop" project

Many of us made projects that were featured in the show. Others built projects that were inspired by something on the show even if it wasn't exactly as Norm made it.



This month we want to see them. If you have something you make based on one of Norms shows this is the time to bring it out.

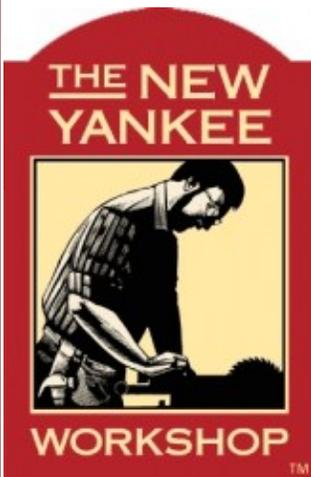
June Meeting:

Last time Ray talked about building rustic log furniture.

John's pictures from meeting are all there is. I received the tenon cutter only a few days ahead of meeting and do not have any projects constructed with it yet. I did thoroughly test it out on a good number of logs before bringing it in for

meeting.

We discussed ways to protect outdoor projects from the weather. If a clear finish is desired spar varnish works best but still needs refinished every couple years. No members in attendance had found an outdoor varnish that works as well as desired. UV. moisture and temperature changes



Library Status

As most of you know, our Library has moved from the Building 105 South entrance to a space between the Rec Center and Building 153.



Several of us have been working on organizing the tools and books and we are closer to the end than the beginning. Here are

June Meeting:

outdoors are really tough on surface finishes of any type. I think oil based enamel and deck stains are a little more long lasting than the clear finishes. Paul Heyd mentioned that he finds that sealing the part of an outdoor touching the ground is key to keeping rot from setting in quickly. He uses a pickup bed coating on the bottom of outdoor wood projects and it works well to protect against wet ground.

Ray brought in some walking stick candidates to demonstrate cleaning off the bark with a draw knife. It's very quick and easy with live wood, not so fast with a stick that is deadwood and has dried. Still, the edge of a putty knife was also shown to work well to clean off the bark. It minimizes any cuts into the surface of the sap wood also. I find that it's much easier to clean up the bark and make a walking stick than it is to actually find a properly shaped stick in

two photos of the shelves and storage we've added.

We have two, 4 drawer cabinets that house all the books and videos. These cabinets allow the books to be stored in numerical order and should make locating a particular book much easier. All our books have numbers assigned and you can find those in the Library index on our homepage.

We have two, 2 drawer files cabinets for magazine storage and Wood, WoodSmith and ShopNotes are stored there. Wood and ShopNotes are not indexed in the club homepage but you can search for subject and issue numbers online.

Tools are stored in three pull-out shelves. Most of the larger tools are stored in the two horizontal pull-out shelves or in the upper cabinet. The smaller tools are stored in a vertical pull-out shelf mounted on the left side of the upper cabinet. Other tools like the Leigh dovetail jig sits on the lower right base of the upper cabinet. Fu-

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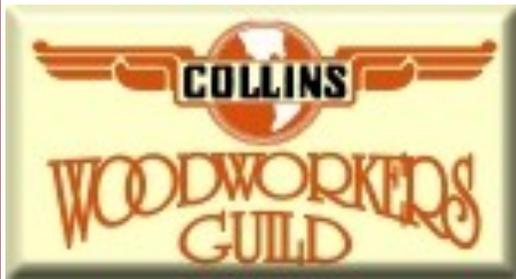
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Rustic Log Furniture

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Meeting Notice:

July meeting: Tuesday the 18th at 5:00

Location: Main Plant Cafeteria

Subject: Knock Down Furniture

Project: Something that you look at.

Door Prizes!!



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Knock Down Furniture

Every parent that has kids in college knows the drill: Kid calls and needs to be out of (or into) the dorm, fraternity, apartment in two weeks. No, Don't really have time to set it up, finals, paper due, working right up to the last minute — Can you call U-haul? And maybe run down a bunch of boxes.

You expect these calls; it's part of being a parent. The other thing you have to expect is that there will be more stuff than last time. Junk is a gas: it expands to fill the available space. And it doesn't get lighter or smaller.

That's why we make furniture that comes apart: sometimes you have to move it. Ikea has made a large fortune exploiting that concept.

This month we are going to be talking about knock down furniture. If you have made anything that comes apart (by design) please bring

it, or maybe a picture of it.

This is nothing new. People have always moved around and some their stuff generally comes with them.

Beds need to come apart just to get through a door. There are only a couple of ways that work very well, traditionally a "bed bolt". Connection is supported by dowels or tenons. The bolt just holds the joint tight.

Tables and benches frequently come apart. That's one of the important features of trestle designs.

Ray is bringing a selection of hardware designed for knock down projects. Again, If you have use something that makes knock down projects work please bring it.

August Project

Sometimes we get focused on the practical aspect of a project. What does it need to hold? How long can it be and fit in the space? How should the support work? But have you ever made something that is mostly just to look at?

Carvers and turners do that all the time. Sure you can turn a bowl to hold apples but mainly the bowl is for decoration. The apples will be fine setting on the table without the bowl.



Something you look at

But...

Ever make a clock? That counts. How about a picture frame? A mirror? How about a display case? A trophy? All of these thing are



designed to be looked at, or at least hold something you are looking at. Bring it in or take a picture of it.

Knock Down furniture without hardware

Woodworking and quilting tend to run in families. In mine both run at least five generations that I know of and probably more than that. My grandmother would have a quilt frame set up in the end of her dining room for months at a time while she worked on a project. The women in the family would surround it while the men were essentially banished. Kids could stay if we behaved.

Coffee was required. Grandma made cake or something else good. Conversation was about the banished adult males. Some-

times you could just about smell the vitriol over the coffee and cake.

The problem with quilt frames is that they are big and stay in place for weeks. Grandma's was essentially a pair of tall skinny sawhorses with rails to stretch the quilt. When my mother wanted one I made it with trestle ends and a solid spreader in the center held in place by a mortice and tenon. By knocking out two wedges the whole thing comes apart.

People have been using wedged tenons for centuries. Trestle tables and benches are generally made that way.

Construction is simple: Start by cutting a through mortice and tenon joint. Make the tenon long enough to hold the wedge.



Mark the point where the tenon comes through and cut a second mortice. This one needs to be slightly wider at the top than the bottom.

The exact taper isn't all that critical. If it's too steep the wedge will work loose. If it's too flat you need to beat on the wedge to get it loose. A lot of advice out there says ten degrees but that sounds like too much. These are more like half that and it works fine.

The internet has several article that tell how to do this. Take that advice with as many grains of salt sound right. Like anything else; much of the "advice" on the internet isn't all that useful.

This one is better than most: <http://www.woodworkersjournal.com/hand-tool-techniques-tusk-tenons/>



July Meeting:

The meeting in July was our annual picnic. The venue had to move to Robbins because RAGBRI was coming through Hiawatha the next night.

Everybody managed to find the park in Robbins.

It was as nice a day as we have

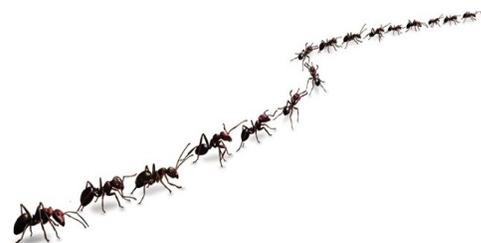


had all summer. The food from BBQ This was good and plentiful along with a lot of good deserts etc. provided by members.

The Robbins Troy park pavilion was clean and quiet. The only problem that occurred was with some electronic navigation systems that were way off on their directions to the park. Some

Annual Picnic!

GPS systems have problems in very rural areas. Is the south side of Robins all that rural?



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.

Upcoming projects:

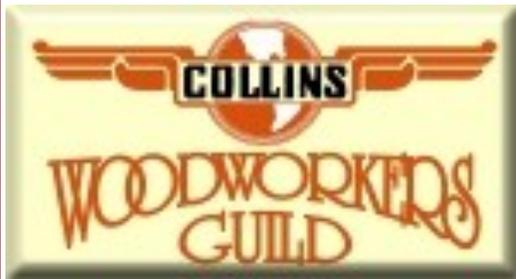
September: A project form a picture.

October: A copy of something you have.

November: A repair.

January: End Grain.

February: A frame.



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	Ray Collins	

Meeting Notice:

September meeting: Tuesday the 15th at 5:00

Location: Main Plant Cafeteria

Subject: Membership meeting and Officer election

Project: A project form a picture.



Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Membership Meeting

Ok, This is the big one. This month we will elect our officers, bring in food and have the good door prizes. You have lots of reasons to be there.

This election comes as the US begins the national election cycle. We are all pretty much sick of it already and it's just getting started. So far we have a choice: bitter and whiny on one side, bombastic and obnoxious on the other with delusions and neediness across the board.

Ours is a bit different than that: we need officers so we railroad them. In the process we eat

and chat about our latest projects. It's a far more civilized process.

We actually do need officers. If you want to consider one of the spots please speak up. None of the offices requires much time and you have plenty of support from the rest of the organization.

Papa John's is catering this one. They did it last year and it worked out pretty well. They are bringing in pizza again. The club is supplying drinks, plates and table service so all you need to bring is an appetite.

Ray has been busy running down door prizes.



Sawmill.

First there is going to be all the hardware he showed last month. Then a couple of members picked up an assortment of stuff from Acme Tool and finally we have some lumber from the Amana

September Project

"Can you make one kind of like that?" It's a simple question that usually comes with a few other qualifications: It needs to fit here. It should probably match that. What kind of wood is that?

A picture is a good start. Most of us would at least sketch up a drawing roughly to scale and work out the jointery. Some of us just work on the fly with little more than an idea and some need full scale drawings of each piece with dimensions.

Your approach also depends on what you are trying to build. When you make a Maloof style rocker it's an eyeball job all the way. There really is no way to define all those free form curves on paper. Sam didn't work that



A Project From a Picture

way when he made the original. On the other hand if you are making cabinets for your kitchen you need a reasonable drawing or things aren't going to fit.

There is quite a bit of information about scaling drawings from pictures. Designing from a picture even if you get the scale can be a challenge. You still need to work out the jointery and structure like you would any new design. Sometimes things don't look right when you change the scale. You give it the shot you have: you build with methods you are comfortable using. You use finishes that work for you. You make it work the way you like it. After all it's your design — even if it came from a picture.

August Meeting

Last month Ray brought in hardware that can be used to make knock down furniture. Most of us have used some of it but some is new.

Hanger bolts are common in general construction: just a woodscrew on one end and a bolt on the other.



You can get them at any lumber yard. You should probably predrill the hole for the screw end but other than that they are pretty simple. You see these promoted for use in end grain but the screw doesn't hold any better in end grain than any other screw.

T-nuts are also available at well stocked lumber yards and hardware stores. You can drive them into a hole big enough to clear the barrel but you



can countersink the large end too.



Ray had some Barrel nuts, also called Cross Dowels. These re-

quire two very precisely located holes, one for the nut and another at right angles for the bolt. If either hole is off position even a little this won't work. Use a drill press and be careful.



The "Tite Joint" fastener is a little more exotic. You can use it for large table tops and when you put together sections of counter tops. You need some precision for this one to work because four different holes need to be located exactly right. This thing takes a special jig but other than that it's pretty simple. It tightens with a pin in the holes of the upper part.

The "Hilo" screw isn't really for knock down furniture. It's just a screw that works in particle board. Conventional screws strip out of MDF and particle board easily. A pilot hole helps but normal screws don't work all that well in these materials. This one still requires a pilot hole but it does hold better than a conventional drywall screw.



Cap nuts and connector bolts are used when you want to fasten pieces without the bolt head or threads sticking out. Ikea uses thousands of these. They come in a lot of sizes and finish colors. They come apart with an Allan wrench.

You use threaded inserts where you want to use a bolt in wood. The tapered one at the top can be used in end grain and in engineered materials like particle board. Drill a pilot hole large enough for the barrel. The threads are aggressive and tapered so it won't strip out.



Or just skip the specialized hardware

Specialized hardware can let you make things come apart easily for shipping or moving college students. But people have been making knock down furniture for centuries and there are easy ways to do many of these things with conventional hardware. Or no hardware at all.

Last month I talked about using wedged tenons. Those are easy but not at all the only choice.

Barrel nuts are fussy and you need to be precise. You can skip most of the problems by drilling the same hole barrel nuts use. Flatten one side with a chisel to make a D shaped hole, then just use a regular hex nut.

So how do you put screws in end grain? Drill the "Pilot hole" a couple of sizes too big then fill the hole with epoxy. Once that cures drill a hole in the epoxy that is a size smaller than the screw and tap it with a

conventional metal tap that matches the screw. That's going to be stronger than you think and if you strip the threads it's easy to fix.

Even if you use the specialized hardware Ray had you can help yourself in particle board by drilling the right size pilot hole and using epoxy to "lubricate" the fastener. Don't mess around or you will stick the fastener almost where you need it -but not quite- and it won't come out.

Upcoming projects

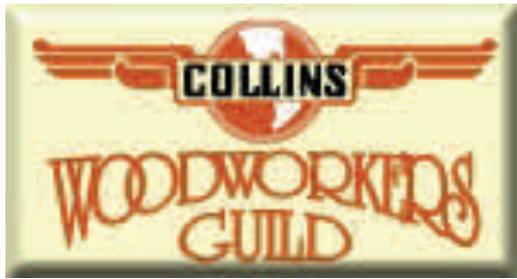
October: A copy of something you have.

November: A repair.

January: End Grain.

February: A set of something.

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:

October meeting: Tuesday the 20th at 5:00

Location: Main Plant Cafeteria

Subject: Sharpening

Project: A copy of something you have.

Door Prizes!!

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Sharpening

Perry Coffman

At the conceptual level sharpening is pretty simple. You just need two flat sides meeting at an acute angle. The closer that intersection is to a straight edge the better. In the actual world it's of courses more complicated than that. Real edges aren't perfect angles. Flat is a relative thing. "Perfect" at the microscopic level doesn't exist.

There are a lot of ways to sharpen a tool and just how sharp it needs to be depends on how you intend to use it. There is no standard of perfection for "sharp", nor is there a "correct" way to do it. There are a lot of methods that

work and the tool just needs to be sharp enough to cut what material you are using. Some methods are easier than others and some give you a sharper edge. Others are useful on an edge that isn't necessarily straight across.

Perry is going to talk about how he does it and you are encouraged to bring in your own tool (maybe a chisel?) to see what can be done.

You might also want to talk about how you sharpen.

October Project

"How about if you make another one like that and set it over there?" Great idea. Would have been easier to make two in the first place but that was 25 years ago; and you have moved twice since then. And you have no idea where the drawings went — if there ever were any.

We all have these projects. You accumulate more books and need shelves for them. Or want a second lamp for a second corner of a room. Or you need another tool box.

A copy of something you have

Whatever you have made that you already had one of — we want to see. It could be piece of furniture, a tool or a toy. It could be part of a matched set or another thing with a similar function. If you think it counts bring it in.



Chisels

Chisels are pretty simple tools. Just a steel blade set in a handle. How many variations could there be on that design? Been around since the stone age, right?

Turns out that there are a lot of variations even if you ignore the versions that don't cut wood. We have everything from big (Long & Strong) lathe skews to carving tools. There are other variations that we are less likely to have. Slicks used by timber framers can have blades 4" wide and have handles that can be 2' long.

blades can be flat, tapered, oval, or round. They can be made form high speed steel, carbon steel, stainless and carbide.

Turning skew chisels are sharpened with a bevel on both sides and are frequently sharpened using a grinder. A lot of people don't bother to lap the edge much at all.



Skews and scrapers used on the lathe can be anywhere from 20" to maybe 6" long and the

Mortice chisels are made for rough treatment. Mortices when they are cut by hand require heavy

Chisels

blows from a large mallet. That's not to say that these are crude tools; the better ones have a carbon steel edge forge welded to a soft iron back and are sharpened to a fine edge. The bevel is flat when compared to a bench chisel.

The handles frequently have iron hoops to keep them from splitting out. Even then you end up replacing the handles often. These are the heaviest of the conventional "Bench Chisels"

Registered chisels are lighter than mortice chisels but heavier than paring chisels. They are often driven with a mallet so they have thick tapered blades with a rectangular cross section. Handles usually have a hoop to prevent splitting.



They are generally thought of as timber framing tools so a lot of manufacturers don't handle them. They are fairly common on auctions and in antique shops and new registered chisels can be

ordered on line.

They are handy when you need a full size chisel you can beat on.

Bevel edged bench chisels are the "Go To" chisel for almost all bench work. They



are paring tools and are generally pushed rather than driven into a cut.

They are never used with a metal hammer. At most light taps from a wooden mallet can be used.

Blades are light and have beveled sides so they can work into tight places. Their blades are usually hardened for the first inch or two but not beyond that so they give

a little at the handle. They are easy to break.

Just about all manufacturers make these and quality goes from really good to really poor. Because these are used by hand for

long periods look for wooden handles. Some popular brands have switched to plastic in the last few years (I'm talking to you Marples). That causes blisters if you use them for a while. Whoever made that decision should have to spend all eternity using them.

Butt Chisels are the blunt instrument of woodworking. They are carpenters tools and made to be abused. They always have plastic handles and sometimes strike buttons so you drive them with a claw hammer. Blades are frequently stainless and not very hard. They don't take much of an edge but they don't have to.



They are usually cheap, Menards sells them. They are fine for beating into sheetrock, OSB and treated wood. They are not great precision tools like normal bench tools but you would never ask your better tools to do the work these do.

September Meeting:

Last month we held our membership meeting with officer elections, food and all the good door prizes. There were enough door prizes so that everyone that attended went home with something. The officer



arrangements had one change; Bryan Wesner is now the Vice President. Ray is still president,



Jerry is treasurer, Paul is maintaining the library and Joel is writing this scholarly rag.

Door prizes came from Acme and the Amana Sawmill. Amana was pretty generous. If

September Meeting:

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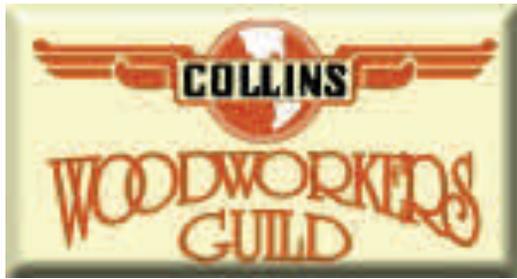
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Membership meeting

you have the chance you should support them.



Membership meeting



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Meeting Notice:

November meeting: Tuesday the 17th at 5:00

Location: Main Plant Cafeteria

Subject: Toy Build

Project: A repair

Door Prizes!!

Knot News

COLLINS WOODWORKERS GUILD NEWSLETTER

Toy Build

This time we are completing the toy build. Several of our members have been working on toys in the Marion High School and there is some left to be done. This time we are wrapping it all up.

All the toys also need to get the CWG brand applied at the meeting. The iron has been repaired and has a slightly more powerful heater so maybe it will go a little quicker this year.



We have plenty of work left to. Wayne has crayon trucks to assemble. Floyd has about 10 shut the box games to put together. Ray has all the final sanding to do on the doll beds. Ron will also have final work to do on the planes.



November Project

We all end up fixing things. Sometimes things we have made need work but more often we pick up (or inherit) something that is interesting but has been neglected. We want to hear about it.

You need to exercise judgement with antique furniture. It's easy to destroy something valuable with an ill-conceived repair. If you come across a Frank Lloyd Wright chair, and you might; he built and furnished several buildings in the area, it's best to leave it alone.

Chairs

This month we are talking about repairs. Few things take more abuse than chairs and we all end up fixing them. People don't sit nicely in one place, they turn, lean and stand on chairs. Kids will tip them back on the rear legs to reach behind.

Chairs (and all furniture) have limits to the loads they will support. While most chairs will easily support a 180 pound person it may have problem with the girlfriend on his lap at the same time.

Besides the normal abuse chairs take they break because they were poorly designed in the first place.

A Repair

Consider why it needs repaired. Can you prevent it from breaking again? The leg on this bookcase broke



when it was moved without taking out the books. The best solution is to shorten the leg and replace the missing part with an offcut. And unload it next time.

Mass market chairs for the last century almost universally use dowel joints to attach the seat frame to the legs. The leg side of that joint is all end-grain and will eventually fail. The failure is frequently blamed on the glue but the real fault lies in the poor choice of joint. You will never see a mortise and tennon fail there.

This was a nice chair from Thomasville that has been in the family for almost 90 years. It's part of a set of six. They have all been repaired twice before with good quality adhesives, new dowels



Chairs

and freshly drilled holes. That solution is good for about ten years and then the chair starts to wobble. This time around I'm using a floating tennon. The matching slot is cut on the router table.

Most joints don't fail at the same time. You can just fix the broken ones but it's going to come back for the rest at some point. It's best to take the whole thing apart and get them all at



once. A rubber mallet goes a long way here. Several companies make spreader clamps. Hide glue will dissolve in vinegar but it takes time and is messy.

Sometimes the problem isn't the joints. Broken parts frequently need to be fixed or replaced. Most of that is well within the capability of everyone in this group.

The rear legs are generally the parts that take the most abuse. They break when people lean back on the chair. If you need to replace one make sure that the grain

runs all the way from the middle back to the floor. The back legs take all the stress and short grained pieces or defects (knots mainly) in the wrong place will cause it to break.

Finishing a repaired or new part comes with challenges too. You can tint stains or even create your own colors so they match the existing parts with artists oil paints and linseed oil. Obviously experiment on a scrap first.

October Meeting: Sharpening

You hurt yourself more with dull tools than when they are properly sharpened. You lean on a tool more when it's dull and it slips, cutting a gash into what ever is handy. Most likely your just finished cabinet side or bits of flesh that are in the way. Perry demonstrated the "Scary Sharp" method. Maybe Scary Dull would be a better use of the language.

Scary Sharp is based on sharpening with



progressively finer grits of abrasive paper. Perry mounts them on a flat plate. The ad-



vantage is that it's quick and inexpensive. The disadvantage is that you have to replace the paper frequently.

There is a lot of information about the method on the internet. There was also an article in Fine

Woodworking (March, 2008. Issue 198). <http://www.finewoodworking.com/how-to/video/sharpening-the-scary-sharp-method.aspx>

He also discussed other methods including diamond stones.

Wayne demonstrated the "Work



Perry Coffman



Sharp" system. Work Sharp is the electrical equivalent of Scary Sharp. It uses paper abrasives stuck to a clear plate.

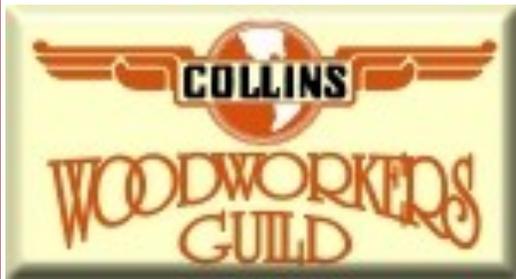
We will be holding a Hands On session with several sharpening methods so you can try them out. All of the methods have advantages and problems. It's best to try out as many as you like and you will come away with some of your tools sharpened.

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