The York Woodworkers Association

Newsletter for October 7, 2019

Building Cove Molding

Greetings all and welcome to the October 2019 club newsletter. If you have suggestions for improvements, please email me at martinsolutionsrh@att.net
Or ron.martin52611@att.net

Message from the President: It's hard to believe November is here already. I hope you all can attend the November meeting held at John Leaks' shop. John will be talking about demilune table construction and inlay.

It's also time to sign up for our **Annual Christmas Dinner on November 22nd** at the York Fire Department. We will gather around 5 to 5:30 and eat at 6PM. Cost is $13/single and $26/couple. This will be our last gathering before our dinner, so plan to pay on Monday if you are planning to attend.

2020 dues are due and remain a bargain at $35/year.

A donation of $100 was made to Trinity United Methodist Church in memory of Dr. Bill King.

The November 2019 Meeting: Monday, November 4, 2019

We'll be at John Leake's Antique & Cabinet Shop – 1746 Highway 321 N (Filbert Highway), York, SC 29745. Phone: 803.684.5651. Subject Matter: "How to Build Demilune Tables and Dress Them in Inlays."

For our October 7, 2019 meeting, we had the distinct honor and privilege of having John Leake present a very informative "Building Cove Molding" demonstration. John has received international acclaim, recognition and prominence for his master craftmanship. As always, his presentation was well organized, filled will valuable information and contained detailed examples of the subject matter.

He started things off with a little history about the club. He said the club is approximately 35 years old and there were two people who started YWA. One was Ray Humphries who back then had what is now York Seafood (at that time it was known as Ray's Seafood) and the other was Dr. Bill King, Chiropractor. He isn't sure how those two got together but his guess is that Ray had a bad back and went to see Bill King a woodworker. Ray was interested in woodworking and his fish camp was closed on Monday nights and this resulted in what is still going on today – Monday night meetings. He informed us Dr. King just recently passed away. His wife and children are still living. He suggested

the club consider making a small donation to his church, just to let his wife and family know how much we appreciate him.

We have not seen John or Jay since their claim to fame with the White House and the Queen of England. He let Jay give us a run down on what took place.

 **About a year ago, Jay received a phone call from the White House and the caller said the White House was looking for some gifts they could give to visiting Heads of State, Dignitaries. What they envisioned was some type of decorative inlay box like one that was in a museum in Washington. They sent some pictures and wanted to know if John and Jay could create something like it. The orders would come in batches of maybe 5-10 at a time. Then came the government shut down which put everything on hold for several months. J & J made the decision to go ahead and make three of these boxes so they would be ready should the White House call them back.**

Jay got back in touch with the contact and inform her they had made three of the boxes anyway and thought they might like to look at them. He sent her some pictures and was blown away by them. She said her sentiment was if the folks at the White House could see, touch and feel them, they might be more apt to go for them. They sent them up there and a couple of more months went by. Then suddenly out of the blue she called, and they want them, and could you send two more. Jay responded, "Sure can". Then she told him they wanted five more on top of that.

To date they have sent a total of eight boxes to the White House and will start on five more tomorrow. See pictures of box below:

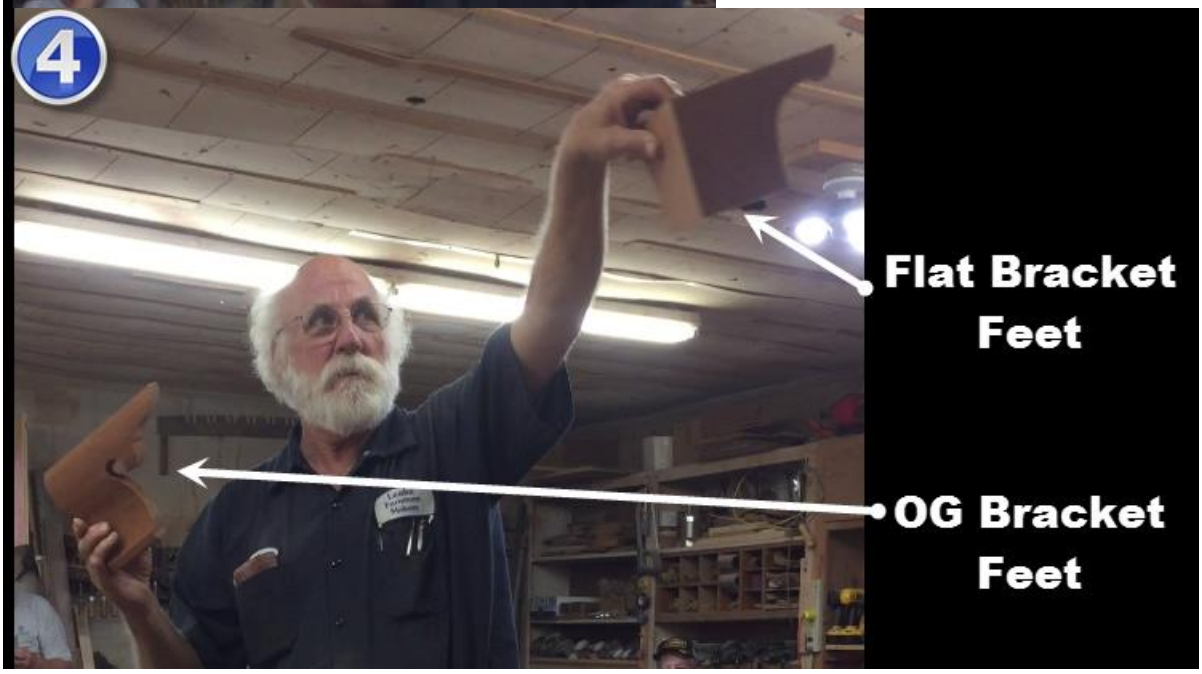
Then they were contacted by the White House saying they needed a different box (very small) the First Lady was going to give as a gift to the Queen of England to house a broch. They sent some wood that came from a tree cut down on the White House lawn. They also wanted an image of the White House (which they supplied) burned or lasered into the top. The image was of the White House before it was burned in the War of 1812. As can be expected from the Leake's, they pulled this project off the same way they do everything…shear perfection.

Congratulation guys! I am certain the entire club joins me in saying, "It about time Washington, the nation and the world recognize what we already knew; when it comes to woodworking craftsmanship, you guys rank right up there with the very best. We are so happy for you both!"

Now it was time to get down to the learning segment of the class which was "Building Cove Molding." John first pulled out a piece of cove molding he had made prior to the meeting. (See picture #1)

Cove Molding is usually the result of grouping and joining several different molding pieces into one final product. The part of the group picture #1 represents is shown in Picture #2.

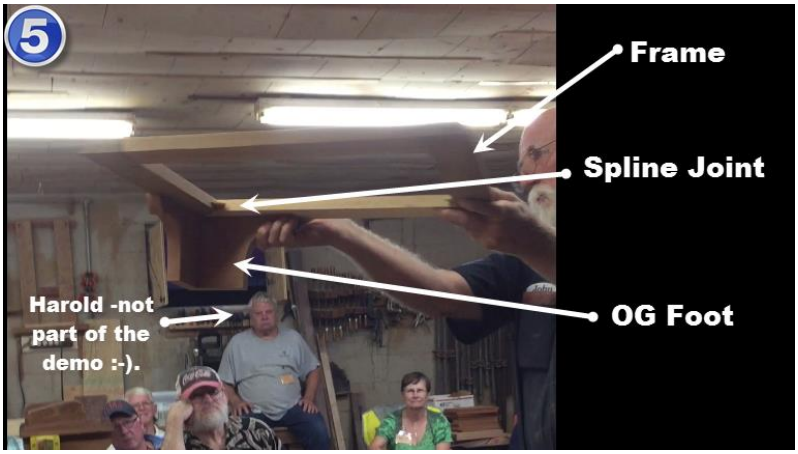
The backside of the molding above is shown in (Picture #3)

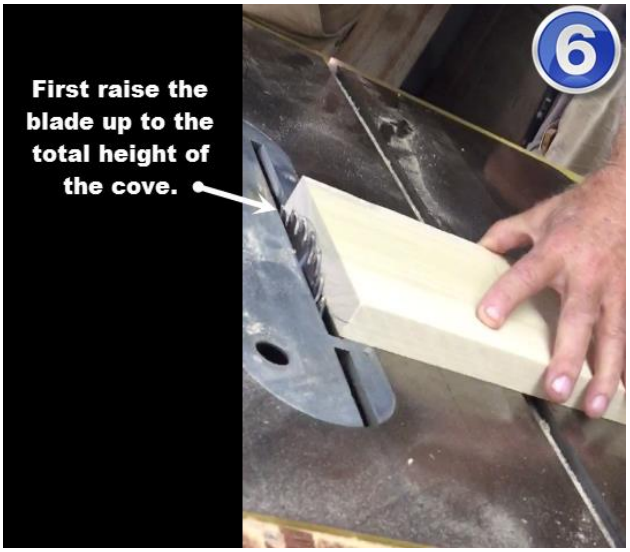


You do your cove molding on the table saw. Another example other than just molding is OG Bracket Feet. OG Bracket Foot and Flat Bracket Foot is shown above in (Picture #4). If you are going to make OG Feet, you are going to start with a long piece that will be long enough to make all four pieces {two legs} or if you use shorter piece you have to make certain everything is lined up and oriented the same way. When we make these kind of figures OG or Flat Bracket, John miters and splines the joint because a miter alone is not going to hold up for you. You are going to have to re-enforce it some way or the other. The spline is very useful with other things such as picture frames, boxes, etc. When doing Flat Bracket, they usually dovetail them. If they are going to dovetail the foot (it depends on the piece) traditionally the fine cabinet makers didn't want the dovetails to show so if your looking at the piece from the front, the dovetail would be on the side. Sometimes, they still do show them on the front as well (the Shakers like to see this). On the OG feet, they also put "glue blocks" in behind it for additional strength. They usually use a couple, but they do not touch each other (they leave a little space between). With the shrinking and swelling thing, if you have your glue blocks stuck together there isn't going to be any shrinking. One more aside about glue blocks, they don't need to be very long. You want to make them relatively short so when you bed them up in the corner they will bed up in there better (approx. 1 ½"). If you are cutting a long strip at a 45 then just take the piece left over and cut them up. Note: Before you cut them up into pieces take a hand plane and knock (run down the back corner of the strip) the corner off. This will help it to bed up much better in the corners. Just glue it up and rub it into the corners (it'll stick). No need to clamp. Their glue of choice is Titebond II (it grabs fast and is waterproof).

There are several things you are going to need when you start making you OG or Cove Molding and the first thing is a full-size pattern of what you are going to make. You are going to need this to draw the pattern on both ends. The stock John used was one inch and if you get good stock, you should be able to get 7/8" thickness out of 4/4 stock. If they are going to make cove molding like pictured in #1, they would use 8/4 stock.

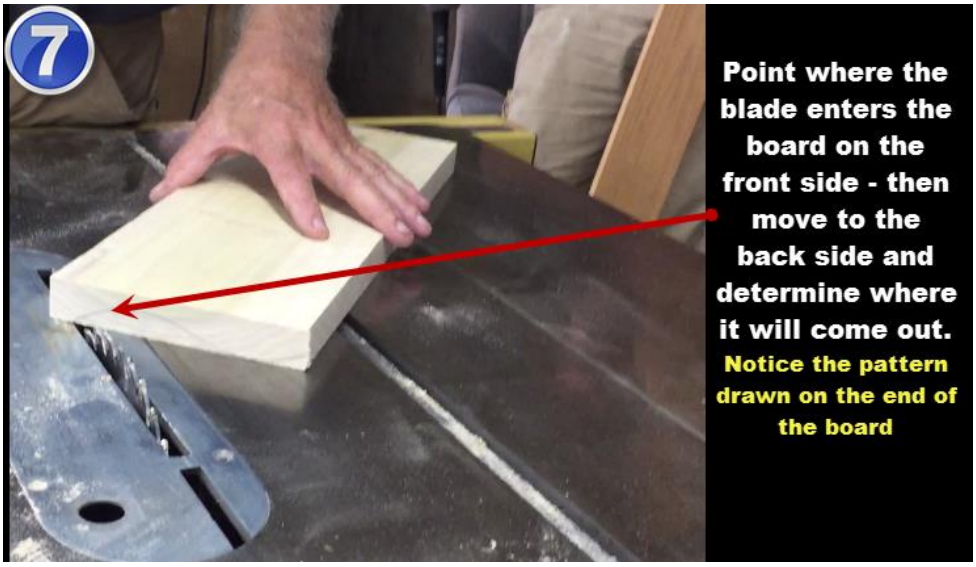
Many times, they will make a frame which the case will be mounted on and then the feet are attached to the bottom of the frame (Picture #5).





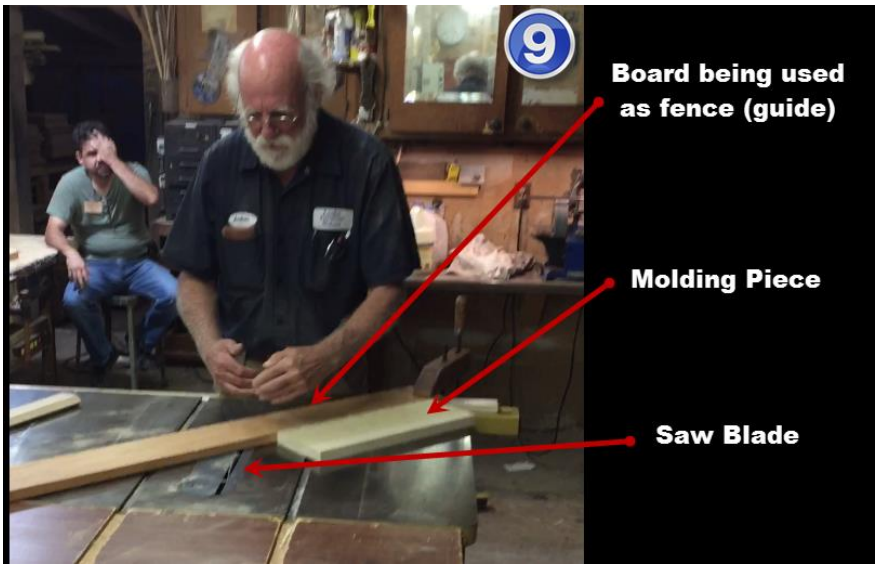
John and Jay like the frame deal because it gives the piece a little more pop and appeal. Getting back to the molding. You are going to be running your piece across the saw blade at an angle where you gradually take the cove grove out a little at a time. Do not attempt to remove the whole thing in one pass. Some people use two dado blades to accomplish this. You use the two outside blades. The dado blade affords more stiffness; and a dado blade is usually only eight inches whereas the saw blade is ten inches (so you are going to have more flexing going on with the saw blade).

The only part he is dealing with is the cove portion. He has the pattern drawn on the end of the board and what he does first is raise the blade up to the total height of the cove (Picture #6 above). Then you measure the height of the blade (in this example it was 9/16th. (Picture #7 below) gives a better view showing the blade and the pattern drawn on the end of the board. Then what you do is figure out the angle through trial and error the board need to pass over the blade.



Each time you make a different molding, save yourself a piece to use as a pattern for future ones. As John puts it, "There is no need to re-invent the wheel!" Also, write the angle you used on the back of the pattern so you will already know what it is the next time you make another. Remember, crown molding usually consists of two or three or more pieces joined together. On pieces you use a router bit(s) to create the pattern, write that on the back of the pattern piece.

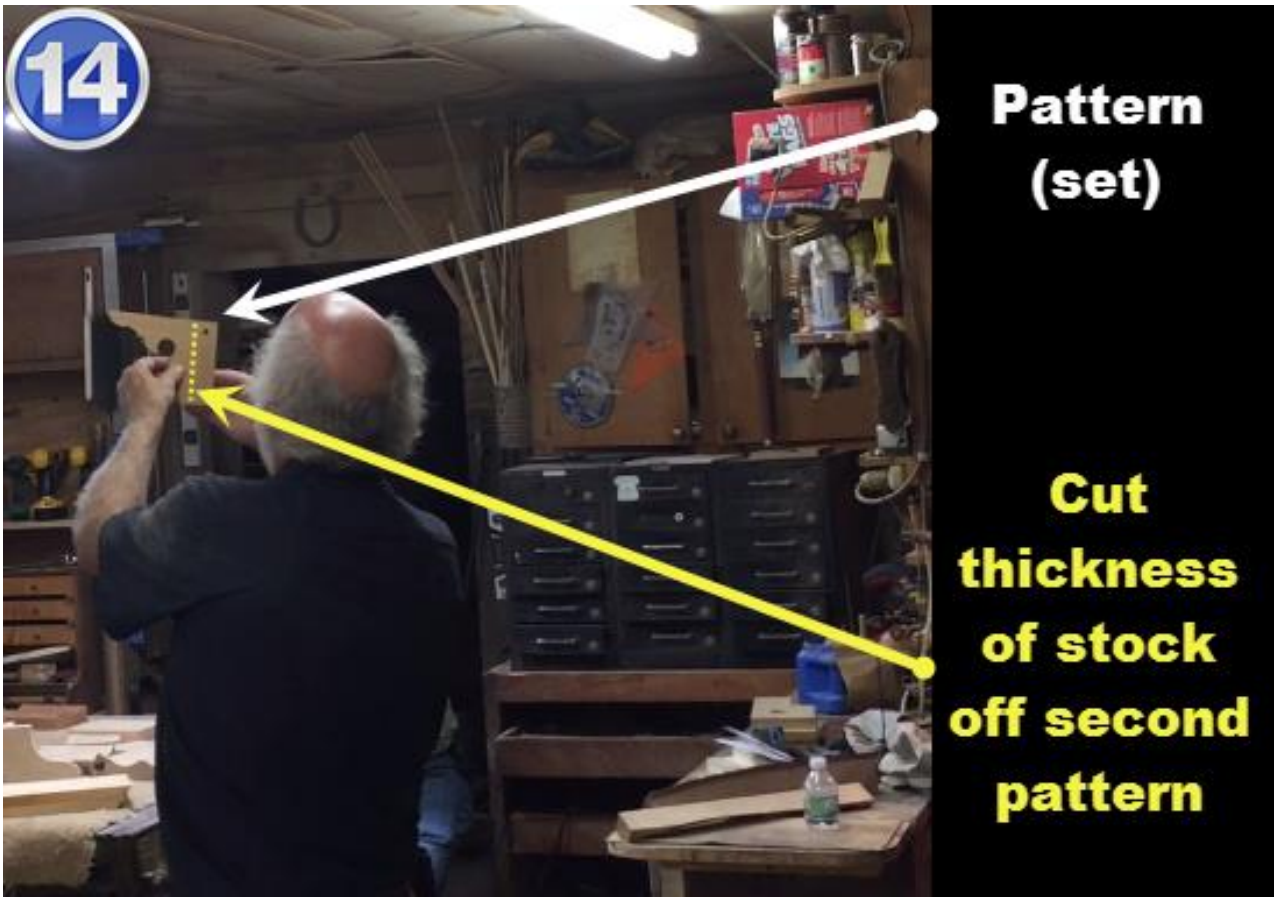
John and Jay then took a long board with a true straight edge and laid it across the top of the tabletop at the exact angle needed for the cut and clamped it to the table. (Picture #8 & #9)). Notice Scott in the background of #9. He can't believe what he's seeing ☺!!!



When he pushes the board across the blade at an angle, he wants the front edge of the blade (edge closets to him) is going to enter the wood and where the back edge of the blade (edge furthest from him) is going to come out of the back of the board. (Pictures #10 & #11) Therefore, it is so important to have the pattern drawn on both ends of the board and the blade raised to the height of the cove. Just like any special operation you make around your shop; you want to make sure you have a set up piece. If you need 6' of molding, you are going to want to have about a 7' piece of wood. Since you could have some play in a board this long, you might want to make it in two pieces (i.e. two 40" pieces). Once everything is set, you want to lower your blade back down and take out a small part of the cove at a time gradually raising it with each successive pass. Lastly you want to mark the board indicating face up and an arrow indicating the fence side of the board. For your last pass, go very slow and you will get a much smoother finish which will require less sanding. When making OG feet you don't want to sand the cove until after you have mitered and joined the pieces into the foot. This results in far less sanding.

Once mitered and the feet are ready to assemble, they join them together like a box (Picture #12) so they can clamp them up. If you look in the museums, Williamsburg Chests, Bonnet Top Chest on Chest, etc. they will almost always have OG feet. OG is a very high-end foot. No matter what, if you just want to dial your piece up a bit or try something you've never done, this is a good way to do it.

One last little bit of information, if you are making OG feet, you do not want to draw your pattern on the front side of the stock (Picture #13), but rather have a full-size pattern (set {2}). See Picture #14. Then you make a second pattern and cut off what would amount to the thickness of your stock and then you draw the pattern on the inside of the leg. (Picture #15) Know your stock will ride smoothly on the table when cutting out the design on the bandsaw.



If you are making cove molding, you might want to put on a cabinet. You can mount it to the top anyway you like but don't forget about wood movement. You can glue it to the cabinet on the front but for the sides only glue a couple of small spots (depending on the length). Of course, you would glue up the miter joints. They also use headless pins. Finally, you can reinforce it with your handy-dandy glue blocks (along the front only – not the sides). Crown molding is not intended to be a handle – you shouldn't be picking the furniture up by the molding.

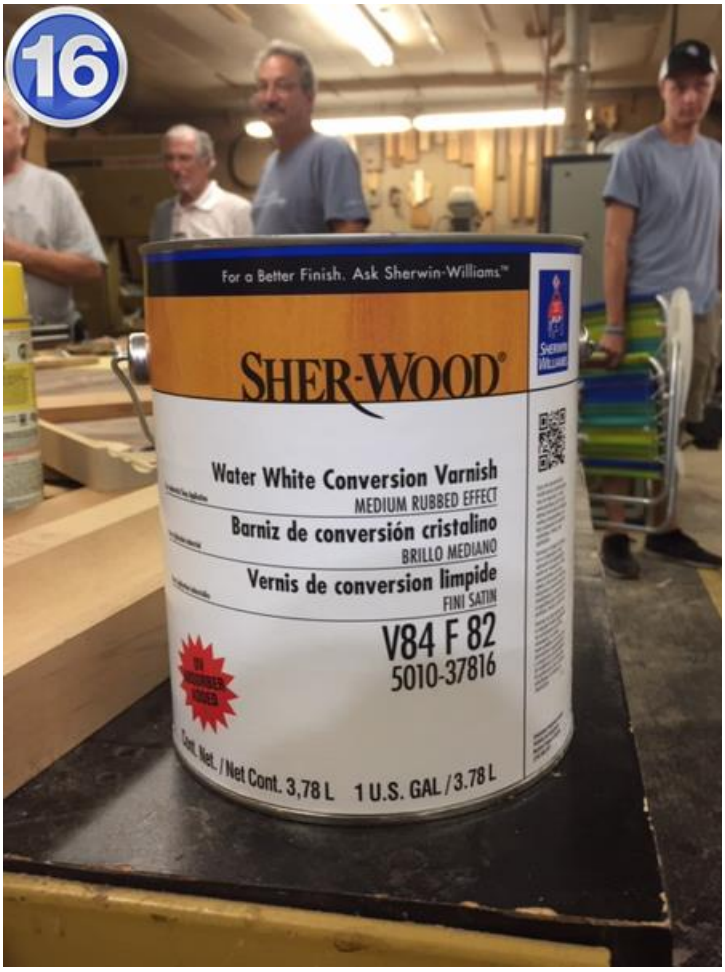
John then opened the floor for questions.

1. One member asked, "For the really large pieces of molding, how do you miter that?" (See picture #2) John's answer: "Very carefully!" Then he said probably what they did what mount the molding on in stages (mitering each stage as they went). There were eight different layers or stages in this piece of molding. He did add that when you are making crown molding, try to factor in a very small piece to be the bottom piece because it will be more flexible and therefore a lot easier to bed up against the molding and the cabinet.

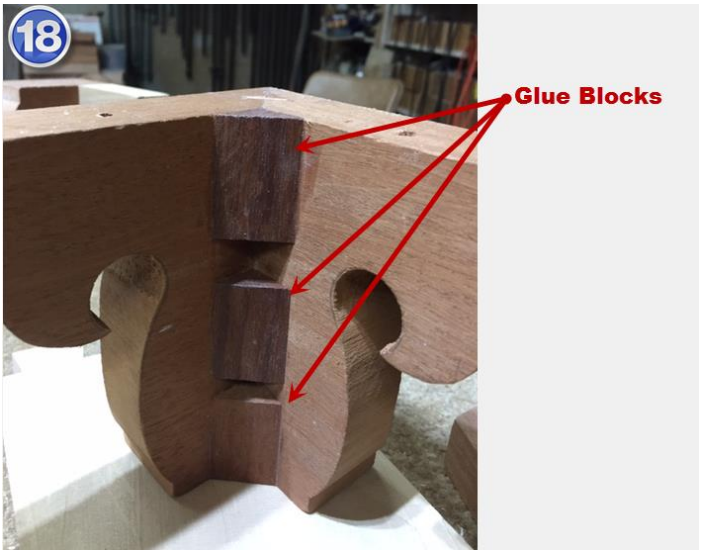
John's shop tips:

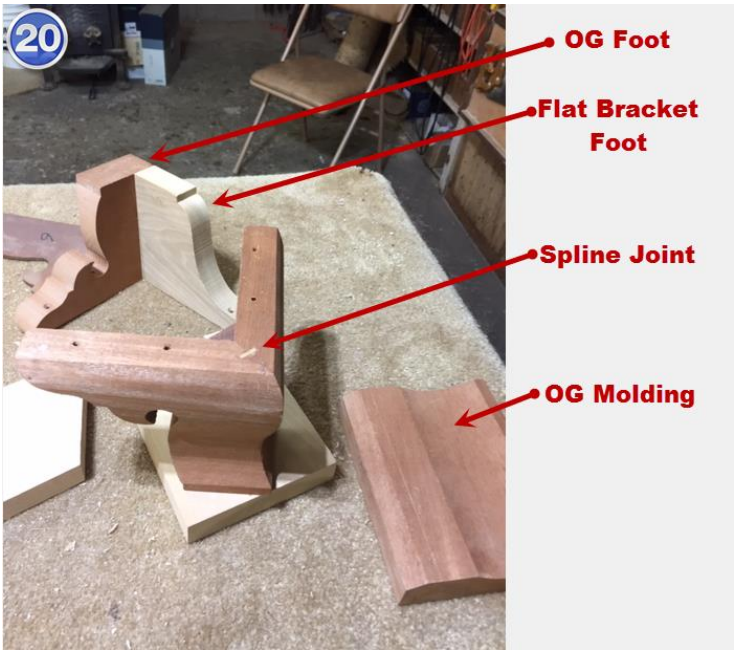
1. For Cleaning Router Bits, Saw Blades, etc. Easy Off Oven Cleaner. Spray it on you bit and let it soak 15-30 minutes then take a blush and clean them up. They will cut so much better.
2. They keep nice square sacrificial blocks handy for elevating work up closer to the drill bill vs. moving the headstock around. They bring the stock closer to the bit instead of the bit to the stock.
3. Get a circular rolling razor blade – it's great for cutting felt and lots of other things. They got theirs from Walmart.
4. To lubricate router bit bearings: 3-in-1 oil
5. Use Marvel Mystery Oil to lubricate your air guns. It's also great to put a couple of drops in with every auto oil change.
6. They also use Sherwin-William Conversion Varnish. This is an industrial varnish that you can buy by the gallon and you must put a catalyst in it. See (Picture #16). It dries and handles like Lacquer. In a few minutes you can touch it. An hour later you can sand it and put another coat

on it, but you pretty much must spray it because it dries fast. You use about 1 oz. of activator per gallon of varnish. They thin it down with Xylene at least 30-40%. For the first coat sometime, they thin it down to 50%. They usually use 3 coats. You can also get this varnish tinted. It is waterproof. Keep in mind it is very hard on the lungs and eyes even while it's curing. Use a respirator and try to protect your eyes. Finally, you cannot put it on top on Linseed Oil and you cannot use it to refinish.



Finally, below are four more close-up pictures (Pictures #18 – 21) showing the OG Feet:





Building Cove Molding Demonstration

FROM THE EDITOR: This concludes the October 7, 2019 newsletter on "Building Cove Molding." I hope I have done you all, John and Jay justice. Thanks, John for a very educational, informative and exceptional meeting. It felt good this month to be able to get this newsletter out to you prior to November's meeting. I'm doing the best I can. I try to make this as good a newsletter as possible however it does take tremendous amounts of time to create, document and supply this much detail. It is my honor to be able provide this service to such a wonderful and skilled bunch of folks. Thanks for your support and encouragement as we work with and learn from each other.

Happy Woodworking,
Ron Martin
Newsletter Editor
"BETTER TOGETHER"
Greatness is not standing above our fellows and ordering them around - it is standing with them and helping them be all they can be!