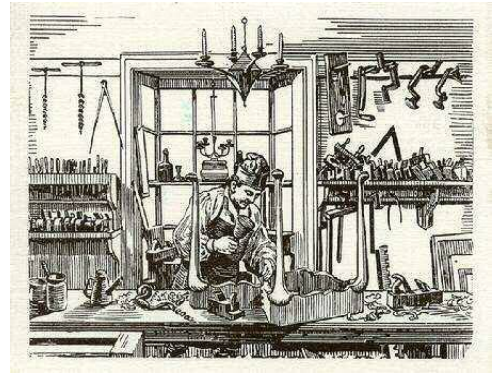


The York Woodworkers Association

Newsletter for January 7, 2019

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



Message from the Prez: I hope you all are enjoying our newsletters as much as I am. Jim did a great job on our January presentation of making hinges and their applications. I hope you all can plan on attending our February meeting which will be held in Sharon at my shop. I will be talking about turning a bowl from a log. I will have several examples for show as well. We will talk about wood selection, whether to use green or dry wood, tools of the trade, and briefly on how to sharpen your turning tools.

A presentation committee has been formed and we will be meeting within the next week or two to talk about future presentations and schedules. Hopefully we will have some great classes to fill the year. If you have any ideas about topics please let Ron Martin, Jim Thorpe, or me know.

The February 2019 Meeting: Monday, February 4, 2019

We'll be at Donnie Lee's shop – 5090 Lockhart Road, Sharon, SC 29742. Donnie will be presenting a program on bowl turning from a log.



For our January 2019 meeting Jim Thorpe presented a very informative presentation on making wooden hinges. As always, his presentation was well organized, filled with valuable information and contained pre-constructed examples of each of the hinges he presented. Below is his table of contents for the program:

WOODEN HINGES

A. COMMON FACTORS

- a. Careful Wood Preparation
- b. Proper Alignment
- c. Relief for movement

B. Box Hinges

- a. Simple pin through side of box
- b. Battens
 - i. Box Back with Lid Top / using a Box Joint
 - ii. Side of Box

C. Furniture

- a. Lid with side batten
- b. Box Joint for Movable Leg

D. Steps for making box joint hinge

- a. Cut the box joints
- b. Proper Alignment
- c. Relief for movement
 - i. Round Edges
 - ii. Relief on back side of joint (may need relief in adjoining structure)
- d. Install

E. How to make a box joint

- a. Carefully mark and cut with: hand saw, band saw, table saw, **or router**
- b. Use Jig
 - i. Wood stationary and move router
 - ii. Move wood position on saw table or router table
- c. Setting up jig for saw or router table
 - i. Width of cut, space and pin to be identical
 - ii. Important how wood is held on jig (perpendicular, square, downward pressure, best to clamp to jig fence)

F. Examples and Samples

G. INCRA JIG (another very good and less expensive jig is the Rockler Router Table Box Joint Jig)

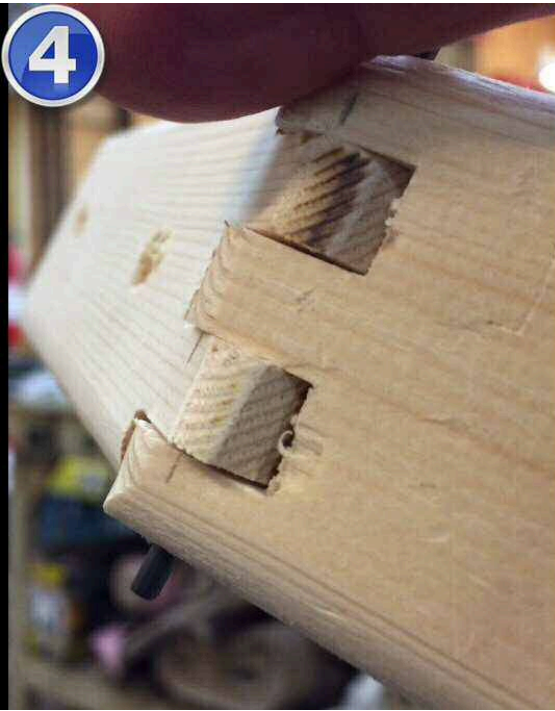
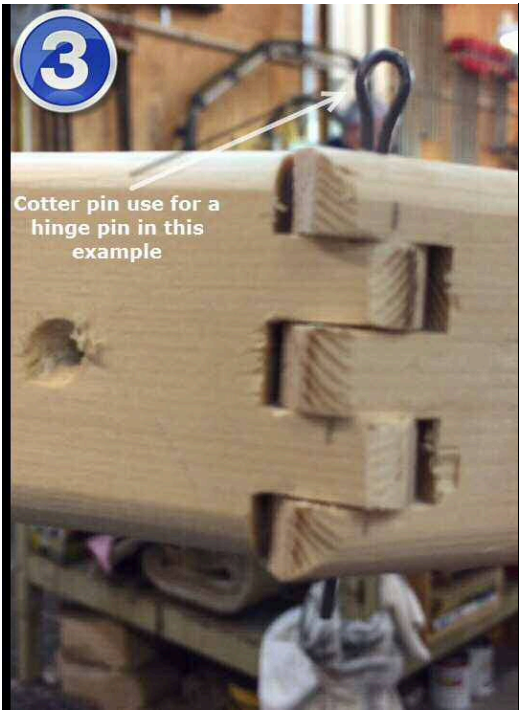
Jim started his presentation with a four-sided box joint box. He then proceeded to show us three different ways to put a lid on the box with wood hinges.



- 1) A simple hinge (**Picture #1**) is accomplished by relieving the front of the box the thickness of the lid (**#1**), rounding over the back side of the lid to enable you to open it (**#2**) and then use a spacer block (**#3**) = to the height of relief on the front of the box to hold the lid level and in position while you drill the holes through each side of the box and into the lid the diameter of either the brass hinge pin or dowel rod. You now have a simple wooden hinge that opens and closes (**Picture #2**).

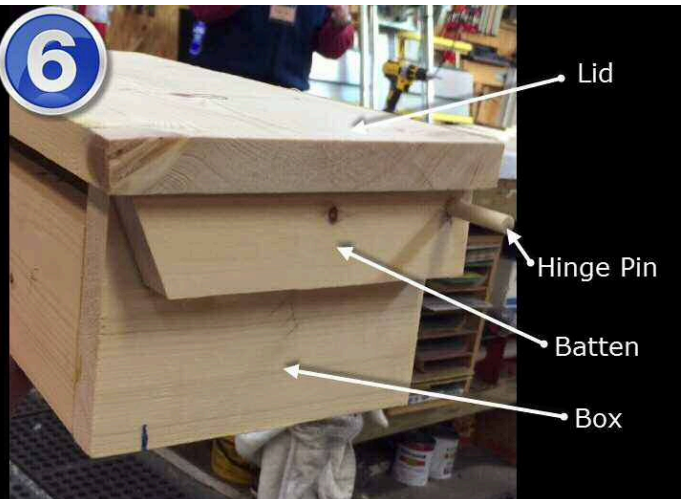


- 2) Another way to attach the lid is to make two complete box joint hinges (two parts for each hinge and both joining edges rounded). Jim said his method for doing this was to cut the slots and finger joints first, put wood pieces equal to the slot size (to prevent tear out) in each slot and then to perform the round over on the router table. If you are using your router table to make the box joints and you have a good box joint jig (with a good fence you can clamp your work to ensure it is perpendicular to the table and a square to ensure that position), I have found it easier to perform the round over first and then cut the box joints. Once you have the hinges made, you will need to drill the holes for the brass or other type of hinges. Jim said he found this part the most difficult as aligning the hole up exactly between the joints is essential. Incra makes a jig that totally eliminates this problem called "HingeCrafter". (Picture #3 & #4) below shows a completed hinge (held together with a cotter pin). You can use virtually anything for the hinge pin to include but not limited to: brass hinge pin, dowel rod, cotter pin, nail, etc.). One last note about the hinge pin – in order to ensure the pin does not work itself loose, when inserting the pin put just a drop of glue or adhesive on the very end not to exceed the finger width.



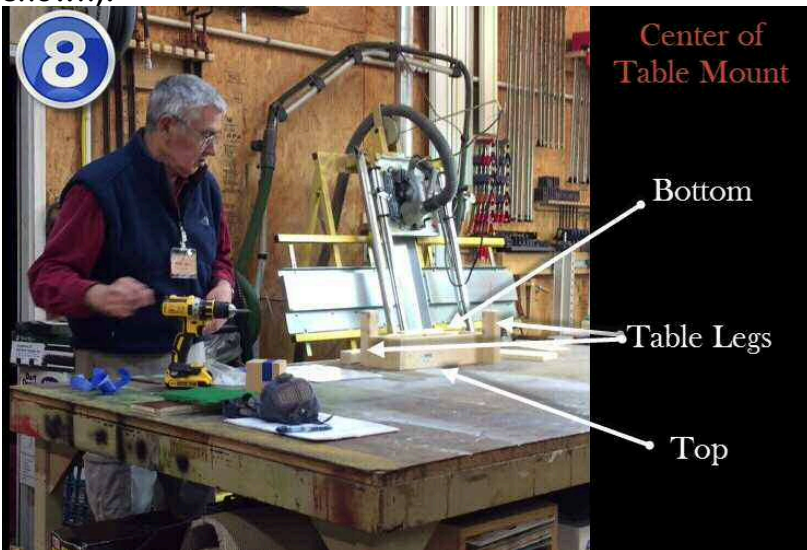
In Jim's case his process was drilling the hole first and then doing the relief. Another option was to do the relief first and then drilling the holes. No matter which method you use, marking or drilling the holes prior to doing the relief is not only easier but also ensures greater accuracy. A very important point Jim made was when doing the round over (or relief) with a router bit you never want to take your bit all the way to the top. You want to leave the full thickness of the piece, otherwise it would be hard for it to look right and function properly. i.e. There would be less chance of having a gap. Now you could vary that and relieve the back of the box as well and have the lid fit down in the box and accomplish the same thing.

- 3) The third type of hinge Jim discussed (and this is far from a complete list of all of the possibilities) was having the two side and front of the top overhang slightly and then placing the box on top of the underside of the lid. Having the overhang on three sides and lining the back up flush with the top. Applying battens to the two sides [Batten: sawed strip of wood; a strip of wood put over a seam between boards as a fastening or covering]. You want to be sure and line up the battens so that you can drill the hole.

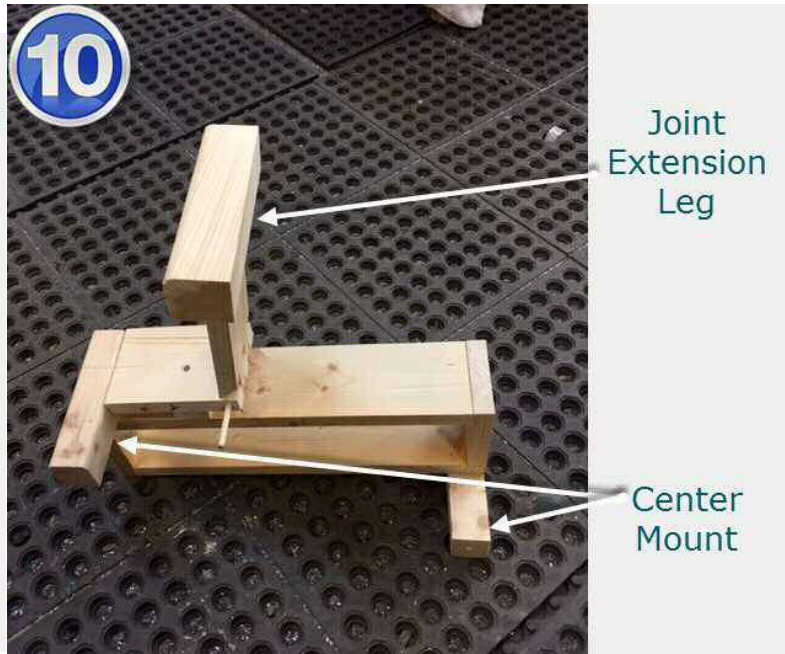
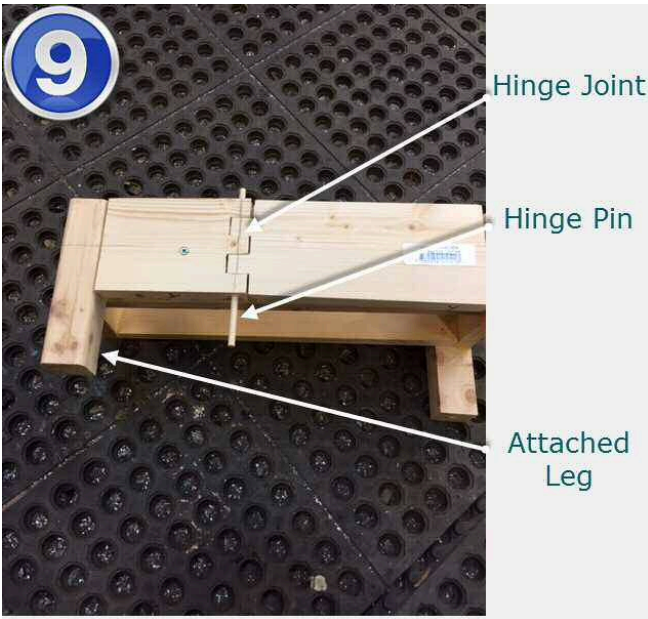




In his next demonstration, Jim showed us how a wooden hinge can be used in furniture applications. Below (Picture #8) is a box for the center mounting of a table top (note: only 2 of 4 legs shown):



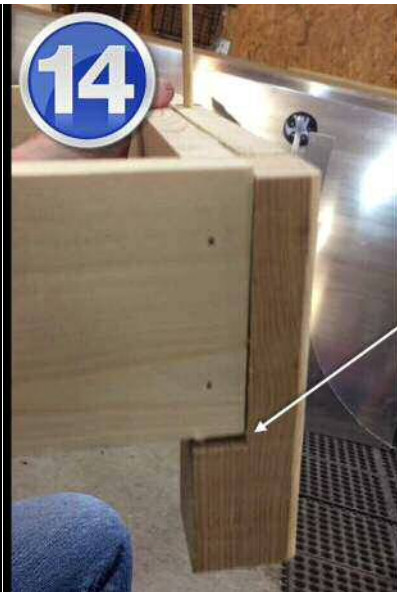
The legs are fastened to the center piece of the table. We start out with a joint drill the hole and then give the joint some relief. One technique for relieving is and one of the benefits for relieving the back is when you see it from the outside it appears pretty much flat (Picture #9). Additional angles (Pictures #10-12).



Observe the distinct relief in the joint (Picture #13).



Relief in the Hinge Joint



Leg cut out to allow entire wooden hinge to lay flat against the table base





If you are cutting your box joint on a table saw, Jim highly recommended the Freud Box Joint Cutter Set. He found this far easier vs. setting up a dado blade. One arrangement gives you 3/8" cuts and another gives you 1/4" cuts. Following this demonstration, Jim showed and explained several commercial jigs for making box joints. He also showed us a homemade jig cut at an angle for making compound box joints. Another excellent jig for cutting box joints is the Rockler Box Joint Jig (it is very accurate and not that expensive). The Incra jig is also exceptional but more on the high end side price wise.

I'm certain I speak for everyone in attendance at the January 7, 2019 meeting in saying, "Thanks Jim for all of your time, hard work and for sharing your expertise in wooden hinge construction". Likewise, in thanking Jimmy Matthews for sharing his shop to enable us a place to meet, grow and learn.

FROM THE EDITOR: This concludes the January 7, 2019 newsletter on Wooden Hinges. I hope I have done you all and Jim justice. Working with and learning from each and everyone of you not only has been a pleasure and educational but proves a lifetime belief of mine... we are in fact: **"BETTER TOGETHER!"**

Note: To view pictures with greater clarity, increase the zoom % (View in the ribbon bar)

Happy Woodworking,

Ron Martin

Newsletter Editor

Greatness is not standing above our fellows and ordering them around - it is standing with them and helping them be all they can be!

