

# **William's Woodworking Hobby**

By

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## **Bill's Woodworking Background**

Bill first took an interest in woodworking at Danville High School. He took a class in Drafting where he learned to read blueprints and to create them from scratch. He also took a beginner's class in woodworking. The only project he made in the class was a two board slanted book holder made of mahogany. During the summer breaks he worked part time at a cabinet makers' shop called Cabinet Classics on the west side of town. The owner, Clarence, taught him how to saw plywood and solid wood, how to assemble a cabinet, how to sand wood, and how to nail the parts together. Bill did not do any of the cabinet finishing, Clarence always did that.



(1973) Cabinet Classics Shop, Danville, IL



(1973) Clarence, Shop Owner

Bill and Sharon moved to Lynchburg Virginia after they got married and bought a five acre property in 1977 at the base of Long Mountain. Bill and some friends from work built a barn for Sharon's horses, had a well drilled, and then contracted for a new home to be built on the property. It was in the basement of this home where Bill bought his first table saw, a 10" Craftsman, and other essential woodworking tools. In this small woodshop Bill built some furniture for their new home and a couple of other cabinet projects which he sold for a small profit.

Bill and Sharon later moved to Springfield in 1987 and bought a home in the country which had 2-1/2 acres and a barn for Sharon's horses, a garden area, and some grape vines and fruit trees. The home had a basement and one very small room where Bill set up his Craftsman table saw, a planer, a jointer, and later a shaper. The major project he did at this home was to completely remove and replace the entire kitchen cabinets with cabinets which he designed, built, stained, and finished himself using cherry plywood and solid cherry wood. Bill and his son Philip installed the new cabinets as each were finished. As a present to himself for completing these cabinets, Bill bought some home entertainment equipment and built some cabinets to house this equipment along with the stereo equipment he had.

In 2004 Bill and Sharon eventually moved from their country home in Springfield to their current home in Deerfield subdivision on the west side of town. A new home was under construction there, and Bill and Sharon worked with the contractor to finish the home for them. The home had a big basement, one large enough for a sewing room for Sharon, a woodworking room for Bill, and a basement bedroom for their son Joshua. Over time, Bill equipped his woodworking shop with new equipment and specialty tools for building various projects.

Just before Bill retired in 2012, his mother, Betty, bought him a new state of the art SawStop table saw that had safety features built in to protect against a sawing accident between the blade and a finger. The SawStop table saw is the central most important piece of equipment in Bill's woodworking shop.





Bill still has the old Craftsman saw in his shop, but it isn't used for sawing wood anymore. Instead, it serves as a solid flat top table for gluing up wood pieces.

## Woodworking Projects

The pages below show pictures of the woodworking projects Bill has done over the years.

\* (1981) Cherry Night Stands for Bill and Sharon



\* (1982) Doll House Display Cabinet for Virginia Friend Kay Hamilton



\* (1982) Stereo Cabinet for Virginia Music Enthusiast



\* (1982) Cherry Hutch for Bill and Sharon



\* (2003) Country Lake Road Home – Kitchen Cabinet Replacement



Center Island & Stovetop North Side View.JPG



Center Island Corner View.JPG



Center Island South Side View.JPG



Door Closeup.JPG



Drawer Signature.JPG



East Wall #1.JPG



East Wall #2.JPG



East Wall Sink & Dishwasher.JPG



North East Corner.JPG



North Side Above Refrigerator.JPG



West Wall #1.JPG



West Wall #2.JPG



West Wall #3.JPG



West Wall Stove & Microwave.JPG

\* (2010) Intarsia Happy Cat Picture



Two were made, one for Betty Waggoner and one for Sharon Waggoner

\* (2010) Cutting Table for Sharon



\* (2010) Curved Bookshelf for Sharon



\* (2011) Master Bedroom Furniture for Joshua and Kristina



IMG\_2734.JPG



IMG\_2737.JPG



IMG\_2742.JPG



IMG\_2743.JPG



IMG\_2745.JPG



IMG\_2746.JPG

Six Drawer Dresser



IMG\_2527.JPG



IMG\_2712.JPG



IMG\_2713.JPG



IMG\_2714.JPG



IMG\_2719.JPG



IMG\_2722.JPG

### Five Drawer Hutch



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IMG\_2537.JPG



IMG\_2538.JPG



IMG\_2701.JPG



IMG\_2703.JPG



IMG\_2705.JPG

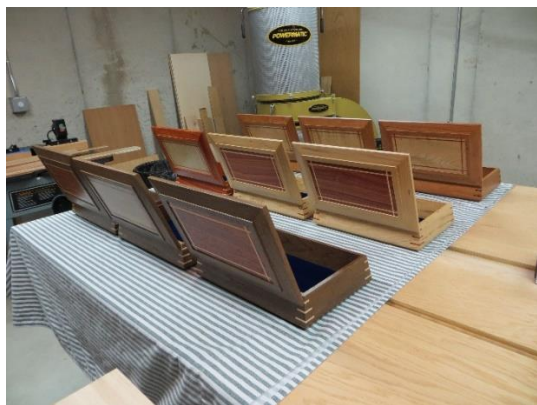
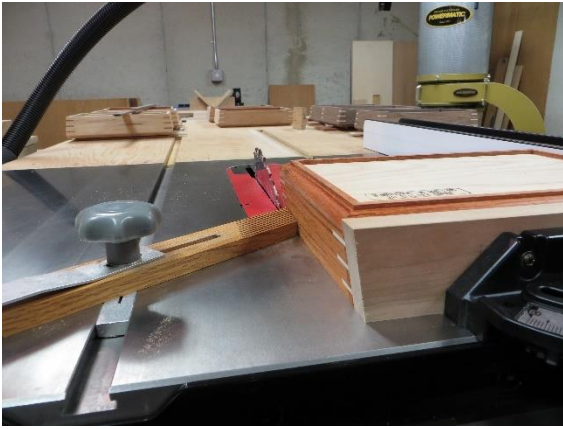
## Two Drawer Night Stands

\* (2012) Ironing Table and Storage Cabinet for Sharon



- Eight drawers, with 22" full extension zinc slides with steel ball bearings, 100 lb. capacity per drawer. Each drawer is approx. 19"W x 21"D x 5-1/2"H inside dimensions, with 8" x 21" drawer face and single metal drawer pull
- Three shelf storage area on left side; pegboard hanging storage on right side
- 3/4" cabinet grade veneer plywood casing with 1/2" Baltic birch plywood back.
- 1/2" Baltic birch plywood drawers with 1/4" Baltic birch plywood bottoms. Drawer face of melamine is attached to drawer with screws
- Six 3-Inch 150-Pound Swivel Double Lock Grey Rubber Wheels support the cabinet, which add 4-1/4" height to cabinet
- Removable ironing board top made of 3/4" birch plywood covered with batting and cloth (Sharon does this), not shown in picture, approx. 24"W x 58"L

\* (2013) Christmas Keepsake Boxes Gifts for Family Women



Nine "Contoured Keepsake Boxes were made



Four "Curved Lid" Keepsake Boxes were made

\* (2013) Money Tree for Jack Waggoner



IMG\_1324.JPG



IMG\_1327.JPG



IMG\_1329.JPG



IMG\_1330.JPG



IMG\_1334.JPG



IMG\_1356.JPG

Coins are place in two slots on top of tree and fall through the pathways and into the root section below the tree. Remove the bottom to get to the money inside.

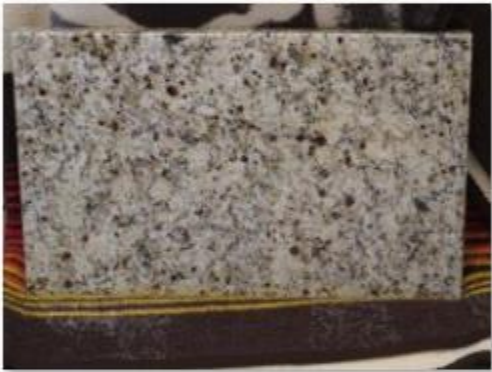
\* (2013) Bathroom Vanity Cabinet for Bill



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IMG\_0551.JPG



IMG\_0606.JPG



IMG\_0608.JPG



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IMG\_0612.JPG

Cherry cabinet with fixed shelves and a granite top

\* (2013) Red Alder Bookcase for Sharon



IMG\_0217.JPG



IMG\_0227.JPG



IMG\_0230.JPG



IMG\_0231.JPG



IMG\_0232.JPG



WD\_D766.JPG

\* (2013) Bonsai Stand



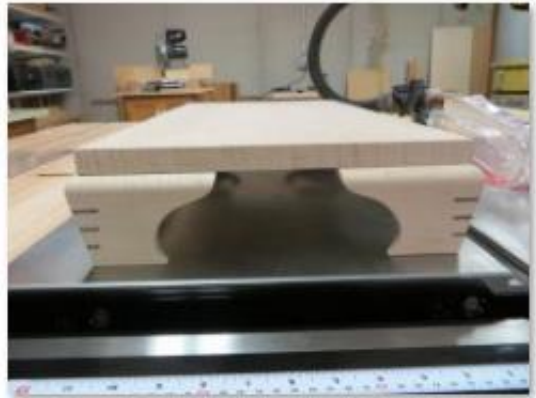
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Curly Maple Bonsai Stand

## **End Grain Cutting Boards**

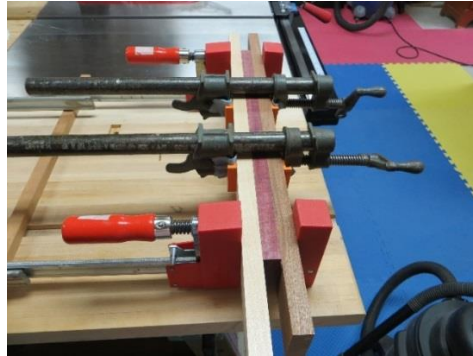
I did a lot of research on cutting board designs. I found a man in Russia who made cutting boards for a living. He posted videos how he made them. These videos helped me come up with the designs I thought I could do with the tools I had. I built a dozen or more of them, and gave some of them to Sharon, some to my parents, and others to family members and friends.

All cutting boards start out by deciding upon the design you want to put in the board. You then have to decide which woods the board will be made of. You must always use a hardwood with small, tight, pores, like maple, walnut, cherry, and other exotic woods. Never use a large pore wood like oak, as it will trap food and entice mold to grow in them. End grain cutting boards are the best type because they won't show knife cutting marks as much as face grain boards do.

You must figure out how you are going to put the wood together to form the design you want. You begin by cutting hardwoods into small strips about 1" thick and then gluing them together and planing them to form a flat board on both sides. The flat boards are then cut into strips about 1-3" wide depending on the thickness of the cutting board you are building. These strips are then glued together again, this time with the end grain facing up. How you stack up the strips will form the design of the cutting board. After the boards are glued together, planed or sanded flat, sanded, a router is used to put a curved edge on all corners, and an area on two opposing sides are routed out to form a place for hands to pick up the board. I attached rubber feet on the bottom to keep them from sliding when in use on some of the boards. The cutting board designs I made using these techniques are shown on the following pages.

### 3D Cutting Boards

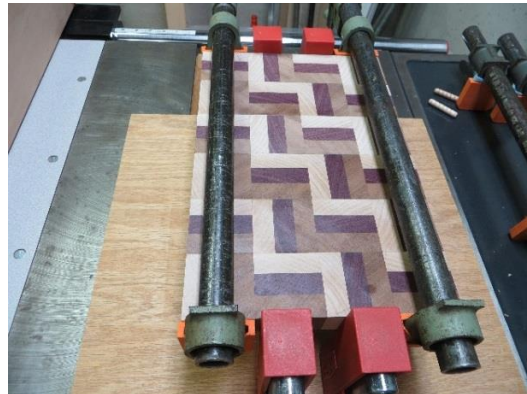
To do this you need three different colored woods. I picked a purple wood, called purple heart, a white maple wood, and a tan cherry wood. I planed them all the same thickness, about  $\frac{3}{4}$ " to 1" thick, and glued them together on their face sides with the wood colors in specific places.



I cut these glued board into short, 3-6" lengths forming rectangular cubes. Rotating the cubes forms the 3-D pattern. The cubes were then cut again to the thickness desired for the cutting board.



These are then glued together with the end grain facing up, using as many as it takes to give you the length of board you want to end up with.



You end up with an unfinished cutting board. Round the edges on all sides and corners, and cut out the hand holds on two ends. Finish the board with a food grade mineral oil. Repeat oiling until the wood stops taking it in.



I made one larger and thicker 3-D cutting board using thicker wood cut in thicker pieces.

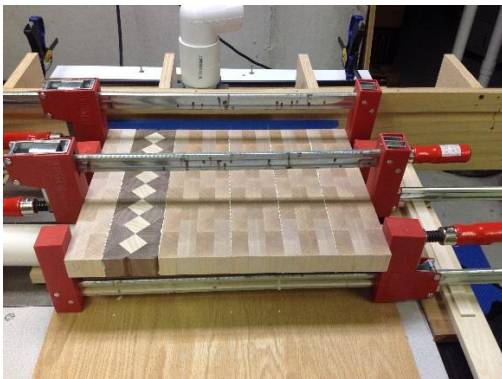
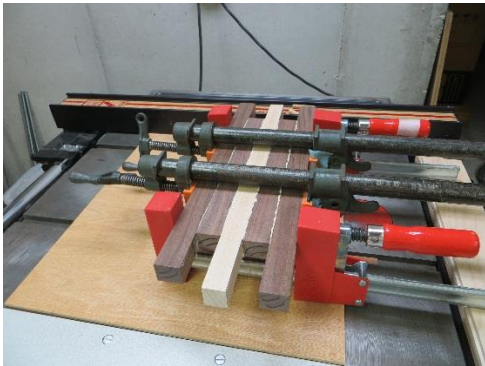


## Checker Boards on Ends



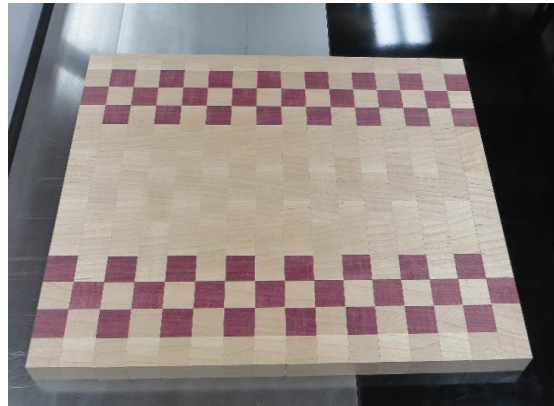
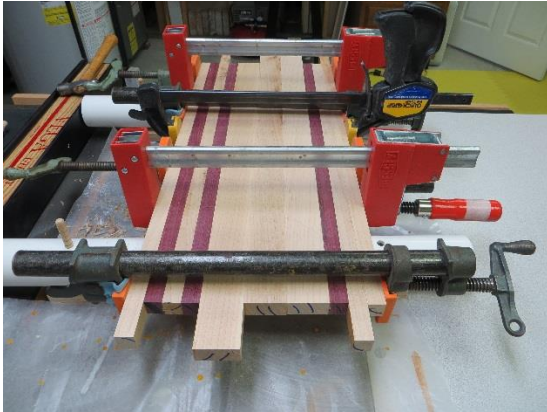
Made with Maple, Cherry, and Walnut

## Diamond Edge



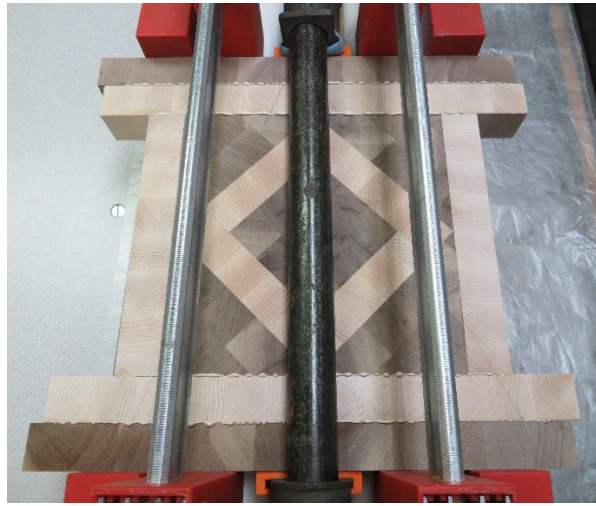
Made with Maple and Walnut

## Purpleheart Checkered



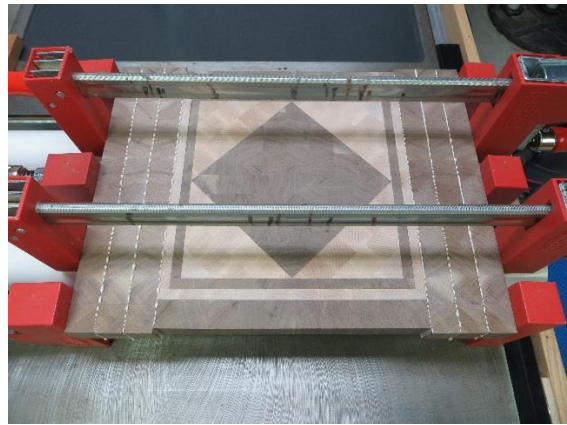
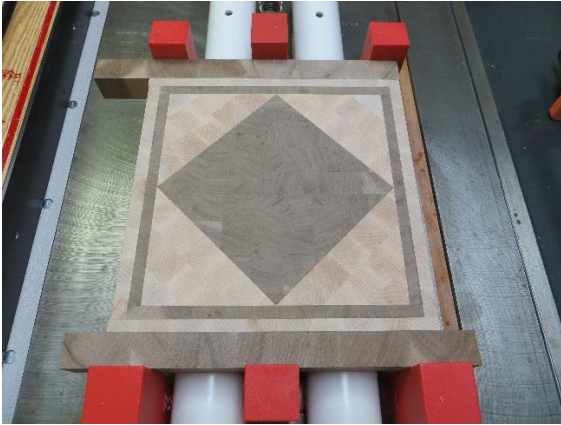
Made with Purpleheart and Maple

# Walnut and Maple Large Diamond #1



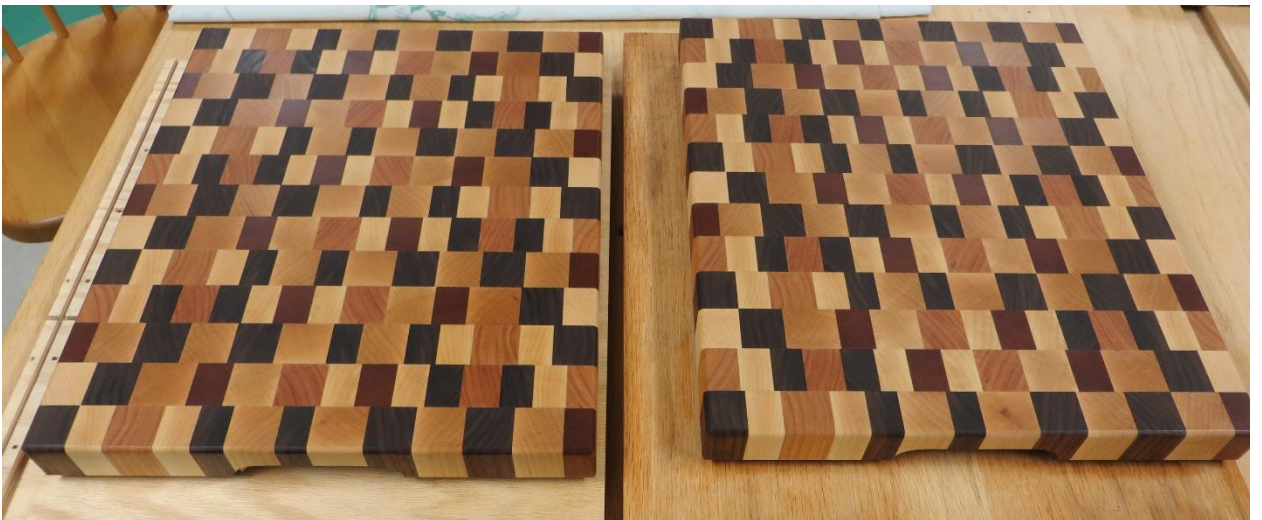
Made with Maple and Walnut

## Walnut and Maple Large Diamond #2

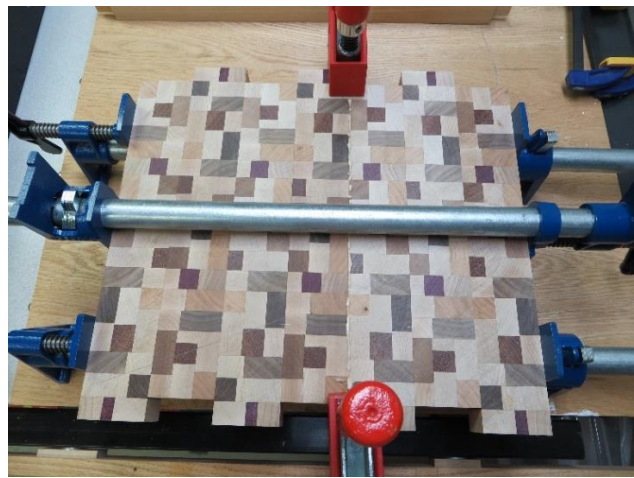
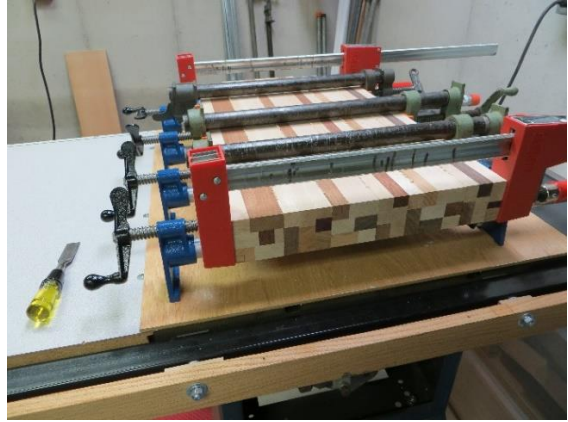


Made with Maple and Walnut

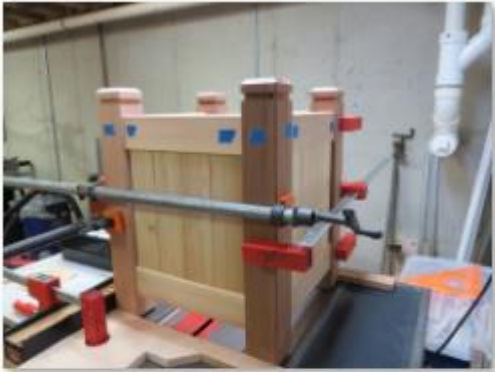
## Mixed Checkered



# Mixed Checkered Cubes



\* (2014) Planter Box for Kay Closter



IMG\_1387.JPG



IMG\_1389.JPG



IMG\_1392.JPG



IMG\_1393.JPG



WD\_0001.jpeg



WD\_0002.jpeg

Made from cedar

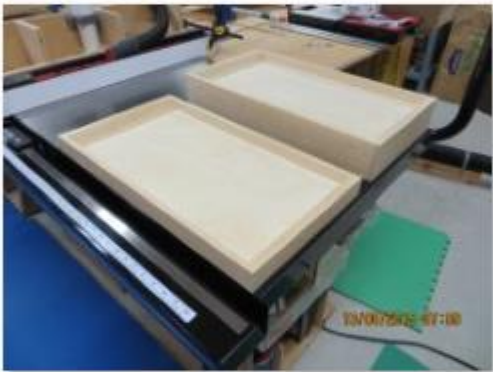
\* (2015) Kitchen Cabinet Pullout Trays for Sharon



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IMG\_2521.JPG



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\* (2015) Kitchen Pantry Upgrade for Sharon



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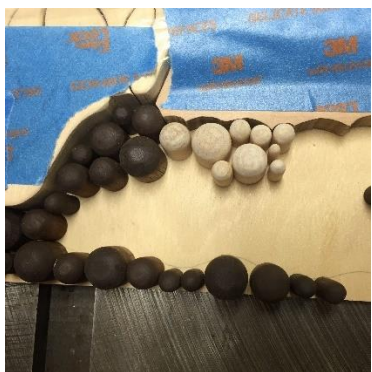
\* (2015) Thread Cabinet for Sharon



\* (2015) Oak Bookcase for Bill and Sharon



\* (2015) Intarsia Fish Picture



\* (2013) Bonsai Stand



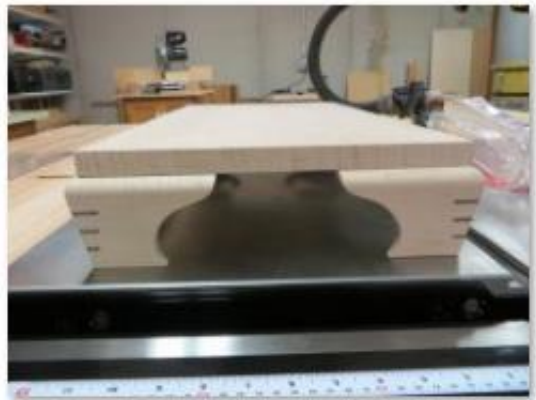
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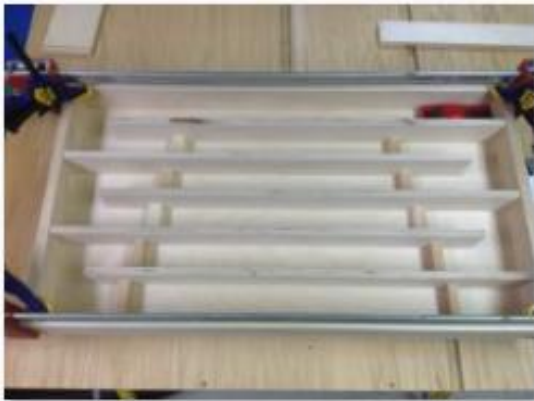
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Curly Maple Bonsai Stand

\* (2016) Matchbox Car Shadow Box for Eli



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IMG\_5434.JPG



IMG\_5435.JPG



On Christmas Day 2016.JPG



On the wall.jpg



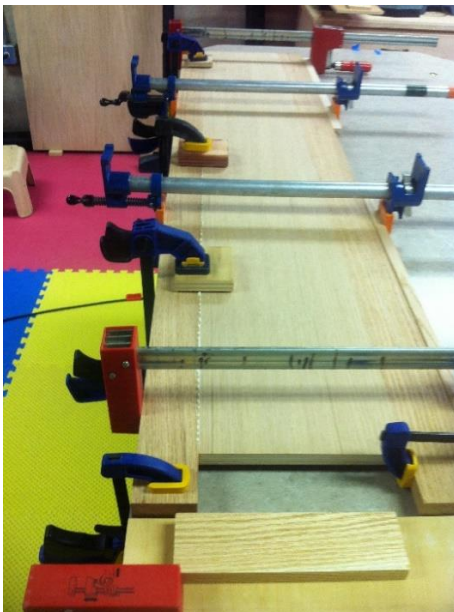
### \* (2016) Baking Center Hutch for Bill and Sharon

Our home has a small kitchen. Sharon is a baker who has lots of Corning baking dishes, pie pans, cake pans, cookbooks, and so forth. These were spread out all over the kitchen, wherever space could be found. I located an open corner in the eating area in the kitchen where there was room for a dedicated hutch to hold all her baking related items.

So I built a hutch made of oak, with shelves on the upper end, a drawer on ball bearing slides in the middle, and more shelves on the bottom end. The shelves were made of oak melamine that would resist repeated in and out usage of the pans and such. The sides were made of thick solid oak frame rails with an oak plywood insert.



The sides were clamped and glued together, with the help of my young two year old grandson Eli to tighten up the clamps.



Dados were cut into the sides for shelf support. Dados on the front were cut for face frame attachment. Braces for the hutch top were added to the top support. A test fit was done to confirm assembly of the hutch carcass.



Top End

View from the back of the hutch

Bottom End



Bottom End

View from the front of the hutch

Top End

Dados were cut to hold the top and bottom shelf support and the front face frame rails. Shelf pin holes were drilled in the sides and center braces to support the removable shelves, and wood drawer support braces were attached to the sides. Side horizontal trim pieces were made from solid oak, planed and routed to match side rails, and glued. The sides were then stained and finished.



Drawer support and cabinet top and bottom shelves were attached to the sides. Ball bearing drawer slides were attached, and the one side of the hutch carcass was assembled and glued.



The second side of the hutch carcass was then assembled and glued.



The hutch solid oak top was glued together. Melamine shelves were cut to fit and were installed using shelf pins. The desired height of the drawer pull handle was determined. Then the drawer was assembled, stained, and attached to the ball bearing slides. The top was stained and attached to the hutch.



The top door frames and the bottom doors were made from solid oak and glued.



Adjustments were made to the doors to fit the door openings with a flush fit and a nickel's clearance all around.



Bill designed a unique magnetic door latch to secure the doors to the hutch. Rare earth magnet bullets drilled in an adjustment block that was attached on the cabinet top. Metal facing catches were installed on the door frames to line up with the magnets. Minute door adjustments were possible by moving the magnet support block back or forward as needed. The latches were quiet and secure.



The top door frames were taken to a local stained glass shop and fitted with glass, and brought back home to be assembled to the hutch. Sharon picked out the stained glass for the doors.



Sharon wasted no time filling the cabinet up with her baking items.





(2016) Betty and Jerry Waggoner

Thanks go out to Eli Waggoner, my woodworking partner during this project. I hope he grows up with a love of woodworking like his father and grandfather have.



\* (2017) Outside Planter Box for Sharon



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IMG\_0889.JPG



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\* (2018) Car Garage for Eli



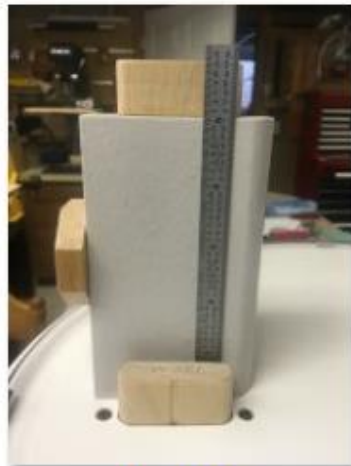
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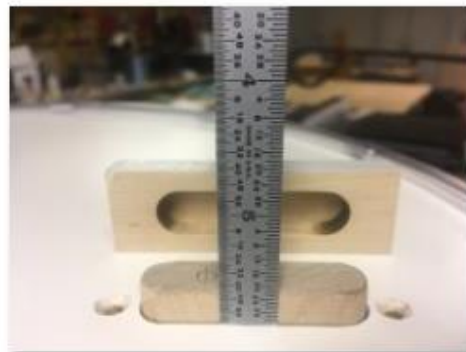
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IMG\_7227.JPG



IMG\_7503.JPG



IMG\_7522.JPG



IMG\_7529.JPG



IMG\_7537.JPG



IMG\_7539.JPG



IMG\_7543.JPG

\* (2020) Bird's Nest for Eli and Isaak



IMG\_2507.jpg



IMG\_2510.jpg



IMG\_2511.jpg



IMG\_2730.jpg



IMG\_2737.jpg



IMG\_2738.jpg