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JUNE MEETING HIGHLIGHTS

Dick Trough was both our host and presenter this month at his expanded shop. I recall that the shop has been expanded twice and he says that is the limit. And what does a woodworker do with new space: fill it with tools.

Dick's presentation was two-fold: show and tell us about deep hollowing and demonstrate spiral pen turning. Deep hollowing is difficult without the proper accessories. There are many deep hollowing systems about including the Oneway laser system (\$529), Kelton (available from The Cutting Edge), plus specialized gouges. You don't have to have a special system to do hollow vessels, but it sure helps. Dick uses a system called the Hugh McKay HM1. It consists of a flat table bolted to the lathe rail, a special lathe tool with changeable cutters and a Trough installed laser guide that allows him to determine wall thickness. Unfortunately, the system is only available as a gift as it is no longer manufactured. Dick says that the firm made only 50 of them. At the price point (\$1,100) it was not what the market would bare. However, with the proper setup, this unit does the job. Dick showed a few wonderful red oak deep hollow vases.

Dick's second presentation was on small spiral turning. This technique also requires specialized accessories. Dick has three lathes: two Jet mini's and his big Nova. The Nova is used for deep hollowing and other things but the Jets are dedicated for pens and other smaller turnings. Must be nice to have dedicated lathes! Spiral turning is considered ornamental and in fact several systems exist including ones designed for routers (big stuff only). The system Dick uses is a Beall Tool Model A and is very much like a metal lathe in that it has a screw mechanism that provide precise movement of a small gouge across the piece when it is not turning. While the Model A is no long sold, Beall makes others from \$200 - \$230 and lots of other fine tools (www.bealltool.com).

The system consists of a series of gears on the outside drive head of the lathe driven by a screw mechanism mounted to the rails from the tail side by hand. The cutter is turned by a high-speed flexible drive unit (like a Dremel Flex-shaft) with a mounted carbide rotary cutter. Various cutters can be used for wide or narrow cuts. The system's gearing can also be reversed so that the spirals can be either right or left-handed. You can also run them one way and then the other to get a very fine diamond shaped cut. The process is actually boring, according to

Dick as you have to do twelve separate cut runs for a double spiral.

To prepare the blank, Dick said that you should leave the pen blank rather thick as you'll be scoring quite a bit of wood with the unit.

We had lots of show and tell this month. Mr. Thibodeaux brought a couple of engraved hammers. The engraving was on the handles. He had mounted the heads on a small piece of oak that allows them to act as a large paperweight. Eltee also brought a small scowl work item he designed using a new software program he recently purchased. Another item was an interesting folding carving knife with eight or so different knives. This one was for left-handed cavers and Mr. Eltee said that the lefty costs some \$30 more than the right-handed one.

Besides a wonderful 1930 Chevy pickup made of cherry, walnut and ebony, Pie Sonnier showed a percussion instrument he made from a plan. The wood was scrap from a pallet. The sticks had leather covered heads and had obviously gotten much use from his grand daughter. George Giltner's first turning was a beautiful goblet made of holly and walnut. Lee Frazier likes to make children's toys and showed a neat Unicorn of poplar.

Gary Rock showed off a few of his tree ornaments, a turned box of redbud and bloodwood plus a vase of box elder burl and a large vase of splated magnolia. Dick Hopes brought two scroll work pieces both having a duck theme – incredibly detailed work. Finally, Dick Trough showed off two of his early deep hollowing vases, both of red oak plus three of his spiral pens with a left, right and diamond spiral. Dick also recommended that turners use a Morse socket cleaning tool.



The final event of the day was a visit to Charlene & Chuck Middleton's new home. It is large, comfortable and inviting with lots of room and storage. Their shop is also coming along with the roof material going on shortly. They still have to pull electrical and finish the walls.

Coming Up ... Saturday, July 9, 9:00 a.m. at the Shop of Leonard & Theresa Wilfret. Using solar power in your shop & scrollwork design.

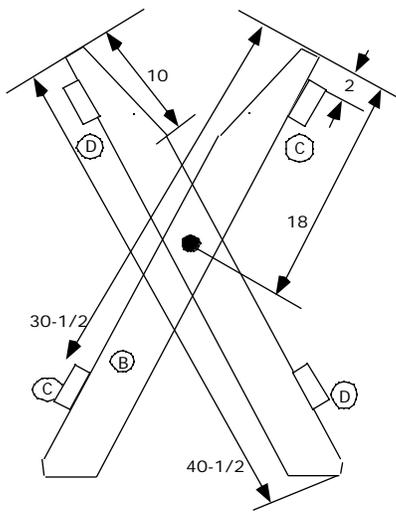
BUILDING A FLEXIBLE SAWBUCK

The thin manual that came with your chain saw likely suggested that you to build a sawbuck so you can safely crosscut through long limbs or logs. This simple variation of a sawhorse is typically constructed of 2 x 4s nailed together to form a pair of Xs. These are then joined by crosspieces to create a cradle that will support logs at working height and prevent the saw chain from binding.

When I saw the one that George Kuffel built, I decided that I wanted one to be able to safely cut up billets for bowl turning. The problem for me is that my backyard is fairly small and the sawbuck would not really go with my backyard setting and furniture. In fact, it was downright ugly.

So I took the idea a couple of steps further by designing mine so that it folds flat for off-season storage, has an additional V to support shorter pieces plus a movable support to be able to handle just about any size log I want. The key to this design is a 40" length of 1-1/4" closet pole. I used this as an axis (A) for the legs (B) to pivot on.

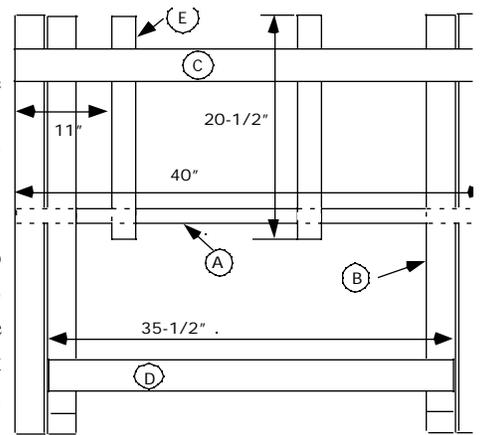
Construction is very straightforward. Cut the legs to length as shown in the diagram, and cut a 30° miter on the bottom end to provide flat footing for your sawbuck. I used my Delta sliding compound miter saw for this, but a radial arm saw would work as well, your table saw or



you could use a protractor and sliding T-bevel to mark this and make the cut with a circular saw. After cutting this angle, you flip the piece over and use the same setup to lop off the points so the ends would be less likely to break. I then cut a long taper on the upper ends of the legs as shown in the plan. This taper allows the larger logs to fit down into the cradle at a good working height. Next cut the long crosspieces (C), short crosspieces (D), and center supports (E) to length. Stack the legs and clamp them to the workbench to drill the axis hole. Measure from the top end to locate the hole center (18") and use a 1 1/4" spade bit. Drill through as many as you can; then use the one on top of the stack to locate the hole in the others. Do the same to drill the center supports (E), lining up the ends and clamping them in a stack under the first leg. I actually didn't have a spade bit of appropriate size so used a Forstner bit in my drill press, how-

ever, the result is the same.

You may need to enlarge the holes with a half-round bastard file so that they'll slip onto the axis. Don't make them too loose, just enough to fit the closet pole. Fit the two center supports onto the axis first; then add pairs of legs at each end. Position them so that about an inch of closet pole sticks out at either end. There's no need to pin the axis; a friction fit will do. The crosspieces will hold the unit together.



Lay the assembly on a flat surface such as your shop floor or driveway and position a long crosspiece (C) 2" from the ends. Screw this to the two outermost legs and one of the center supports. Attach a short crosspiece (D) near the bottom of the two inside legs. Test to be sure that the frame with the short crosspieces fit inside the frame with the long crosspieces. Now turn the unit over and screw on the remaining crosspieces. This time use a short one on top, attaching it to the inside legs and the unattached center support. Screw the long one to the outside legs near the bottom.

Unfold the assembly and stand it up so that the mitered ends of the legs sit flat on the floor. Cut two lengths of chain that fit tight between the lower cross pieces and attach them to the legs with washers and screws driven just above the bottom crosspieces. This will stop them in place when you set up to cut wood but still allow the sawbuck to fold flat so you can hang it out of the way on the garage wall during the months when you're not making firewood or billets for your turnings.

Once built I realized that I wanted some options. A sliding center support would give me the flexibility to handle very short logs. I made this center support just like the other two but simply did not screw it into the upper crosspiece. Thus it can slide along the dowel. In fact, you could add more than one of these as desired. See a larger and printable set of plans and photos of my sawbuck in the Projects section of the Gallery on the LCWWC website. *Barry Humphus*

Cut list:

- 1 each (A) 1-1/4" x 40" diameter, axis dowel
- 4 each (B) 2" x 4" x 40-1/4", legs
- 2 each (C) 2" x 4" x 38-3/4" long crosspiece
- 2 each (D) 2" x 4" x 35-1/2" short crosspiece
- 2 each (or more) (E) 2" x 4" x 20-1/2" center support

LCWW MEMEBERS ATTEND GCWA

LCWW Members Bubba Cheramie, Gary Rock and Dick Trough recently attended a meeting of the Gulf Coast Woodturners Association in Pasadena, TX. The GCWA has its meetings on the third Saturday each month on a rotating basis much like we have. The GCWA specializes in turning only and all the members are turners at some skill level.

There were about 50 people in attendance and they had some Show & Tell items plus some interesting turning jigs. They also have awards given to the best (1st through 3rd & honorable mention) items each month. Each winner describes in detail how they made the piece. The meetings are long as they also have break-out sessions for turning classes. But the presentation this month was from Bill Berry who did ours in May. Visit their web site at www.gulfcoastwoodturners.org.
Bubba Cheramie.

INTRODUCTION TO SOLAR POWER

Smart people learn from their mistakes and wise people learn from the mistakes of others. I believe in that cliché. Theresa and I want to thank the many people in the LCWW who provide us with some serious handholding. You have prevented us from making mistakes in our woodworking projects.

There is no one to help us install solar electricity in Louisiana. If you want to install solar energy in your home, you are on your own. The closest solar installer is Meridian Energy Systems (www.meridiansolar.com) in Austin, Texas. I designed my own solar system and I made many expensive mistakes. I am still learning and making mistakes. However, I have a better idea on how to design my next solar home, thanks to SEI.

I recently attended a one-week Solar Energy International (SEI) workshop on photovoltaics design and installation (www.solarenergy.org). We had two very knowledgeable instructors. One of the instructors was Scott Ely from Earthsense (www.earthsense.com). Another student and I were the only two students who had working solar systems.

The SEI workshop was full of revelations. The most startling was that off-grid solar electricity comprises only a small part of solar business. Interconnecting a PV system with the utility grid commands the lion's share of the solar business. Large companies are more likely to embrace cheaper power options more swiftly than homeowners. General Electric, PB Solar, Mitsubishi and Nanosolar are focusing on installing solar cells on the rooftops of large commercial buildings. These are not low voltage systems. Commercial solar applications are typically from 400 volts to 600 volts.

"The most important factor in deciding to install a grid-tied solar system is whether your state or area has net metering. Net metering means the utility will trade electricity with you, giving you credit for any excess power your renewable energy system produces for the grid. When your grid-tied system is producing more than you use, the excess power automatically flows back to the grid, literally spinning back your meter, that is so important that you probably don't want to consider a residential grid-tied system in a location that doesn't

offer it, unless you aren't concerned with saving money."

Peak performance for solar is during the hot months of summer. All that is needed is a westward oriented roof to catch the afternoon's sunrays. The city of Austin is giving a \$5/watt rebate on solar electricity, up to \$15,000. Additionally, Austin will even pay for a solar feasibility study for residents of Austin.

Go to www.dsireusa.org to learn more about net metering policies in Louisiana. You will find that Louisiana does not have any net metering laws.

I assume that the Austin power company sees the hand-writing on the wall. The world is running out of oil. Of course, we have been hearing that line since my father was a geologist in the 1930s. It is unbelievable, but logical. \$50 per barrel is no longer the next major upside target for oil. It is now emerging as a floor for a barrel of oil. Motorists like myself are in the classic "buy-the-dip" mode. It is great when gas goes below \$2/gallon; however, a temporary dip means very little in the long run. We have been coasting along for decades with fossil fuels, now we are paying dearly.

Large solar cell wholesalers are struggling to ensure supply of solar cell modules. BP Solar says it is 70 megawatts short, the equivalent of about \$250 million in revenue. Meridian Energy Systems in Austin told me that they are waiting three months for large solar panels. Additionally, the cost of solar panels has increased substantially. Meridian's cost is almost identical to last year's retail prices.

The conventional wisdom is that solar electricity is too expensive and years away from widespread use. That may be changing. Two Silicon Valley solar cell start-ups, Nanosolar and Miasolé, are at the threshold of delivering more cost-effective technologies to the red-hot solar market. Both Nanosolar and Miasolé say they've made technology breakthroughs.

"Solar companies rely on the same photovoltaic process: Sunlight in the form of photons hits a light-absorbing semiconductor material in the solar cell, exciting electrons and creating an electric current...But Nanosolar and Miasolé have shed silicon as their semiconductor material -- its crystal form is bulky and inflexible. Instead, they're using a copper alloy, copper-indium-gallium-diselenide, that can be deposited on more flexible material -- transforming bulky solar panels into thin foils (Marshall)." The challenge now is to produce in bulk to achieve economies of scale.

"Many of us dream of tapping alternative energy sources so we can live 'off the grid.' But you don't need to unplug from the utility grid in order to use solar panels to produce your own power. For most of us, a simpler grid-tied system is a better choice than an off-the-grid setup. Instead of costly batteries, you can use the grid to 'store' your excess solar power. In most states, net metering laws require your utility to credit you whenever your system produces more power than you use. This means that when the sun is shining, your electric meter may spin backwards!" I know that I will be going back to SEI to learn more about renewable energy. Renewable energy is the future. *Leonard Wilfret.*

Leonard Wilfret will do a presentation on Solar Power for our shops, home and farms at the July LCWWC meeting.