

September 2010



Hampton Roads Hammer

In this Issue: * September Meeting * Rope Twister * Albanian Iron Work * 3 Leg Scroll Trivet * Cold Bending *

Director's Holler:

With the completion of our demo rig in sight now, we can start actively looking for events to participate in. We will still need a small demo forge, but for now Joe G. and Steve L. are graciously allowing us to borrow theirs when we need to. A Big Thanks to Eric Hinckley for donating all the materials, colonial style anvil and loaning us a vice for the rig. The rig should be completely finished by our October 9th meeting. We had a very productive August meeting and want to thank everyone for showing up and helping out.

The fall is upon us and it makes for excellent working temperatures. I hope that everyone had a chance to get out there and make something at their forge. If you made something neat bring it along to the next meeting and show it off.

***See you at the Forge
Vince***

September's Meeting:

There was a lot going on at this meeting. We finished making the decorative washers for the demo rig. All that is left to do is a little distressing and coloring of the legs. Then we need to paint the washers and reassemble the rig. If it is ready October 9th we will use it at our meeting to break it in. It was designed to light and can disassemble to fit in most vehicles

trunks or cab. Tony Pirrone showed us some variations of his leaf hooks and curtain tie backs. Joe and Mike Lambiase worked on tuning up Joe's new Anyang 33 hammer. All in all a productive day for ABGT. Gitte Gentile tested out her cupcake recipe and received a thumbs up.



Mike & Joe working hard inside



Putting the rig together



Bob Orcutt, Tony and Mike



We need a few more cupcakes to make sure we like them



The washers are ready to go on



Setting the rig up is fast as it is light



What's cooking?



Looks good!

Rope Twister Project: by Steve LaPaugh

On September 4, 2010 when I delivered the restored forge to the Watermen's museum, and not having any other projects lined up in my shop at the time, I asked Mike Steen if he had any other shop work for me to do. To that question he rummaged around for a couple of minutes and came up with their current rope twister which was an assemblage of three cadmium plated J-bolts, passing through a painted piece of shiplap siding each double nutted to an offset 1/8 x 1 flat bar link on one end and the two end ones nailed loosely to another piece of siding. The center link was connected to the second piece of siding with a long bolt which also held the round wooden handle used to twist all three hooks simultaneously.



Mike's task for me was to make a hand forged and functional device that would look more like a colonial tool to perform the same function as his rope twister. So I took some photos of Mike's twister to use as a reference back at my shop and I was off and running. Back at the shop, I made a freehand sketch of my design to calculate the material needed. After talking with a rope maker in the Tidewater Blacksmith Guild, he suggested adding steel bushings to keep the wood from wallowing out where the steel turns in the wood. I asked my neighbor Gorge Pope, a wood worker, to provide the hardwood and cut and plane it to size for the project. The only material I was missing was missing was a short length of round wood for the twister hand-crank. I did however have a small cherry tree branch I was saving for just such an occasion which I cut to and turned on my metal lathe to make the crank handle. Next I bent all three crank assemblies taking great care to make sure all of the radiuses were the exact same length.



The center crank handle length was left longer to accommodate the wooden handle. The metal bushings on the rope end of the cranks had to be slipped on before I forged the hook ends.

The stationary board had to be made in two pieces with the holes for the steel bushings drilled on the joint line to allow assembly over the bushings. Bushings were just press-fitted into the crank board after it was match drilled with the stationary board.



The first trial fit-up told me the three crank radius lengths were not the same as I could not align them with the bushings in the rotating board. Correcting this took many, many try's until I was able to get it to work. In retrospect, I should have designed a curve into the crank radius thus I could have easily adjusted the curvature to either lengthen or shorten the radius to make them the same length. At final assembly washers were installed, the cranks were marked and cross-drilled and retained with cotter pins. I used a colonial design "U" strap with a bolt across the bottom and a wood wedge driven in the top to clamp the two pieces of the stationary board together and yet be removable for maintenance or repair. The completed assembly is not perfect because when it is rotated, it clicks each time the cranks pass the horizontal centerline. This doesn't seem too objectionable to me as it has rather a pleasing sound and could be of value if you needed to count the number of turns made. Remember the old manufacturing adage, "If you can't fix it, feature it!"



Iron Work of Albania: by Vince Nakovics

We departed on the 31st of August, spent a night layover in Rome, Italy and then arrived in Tirana, Albania at noon on the 2nd of September. We were greeted by my wife's Aunt Bianca and family friend John. The main purpose of this trip was to meet and get to know my wife's family. We were only there for about 4 days and we were busy meeting cousins and friends, there was little time for searching out local Blacksmiths, next time I will devote some time to finding a blacksmith shop or shops. Since the communist regime had a strangle hold on the country for almost 50 years a lot of the old work is gone and a lot of what is left, of the ironwork was hastily welded for functionality. The work being done today is much better, than when the communist regime was in, and is reminiscent of a time long ago! I've included a few pictures from around town while out and about. There is a lot being done and a lot still needing to be done in Albania. Three Cheers for the Albanian people! Twenty years since shaking the Communist regime.



Here is a new wall topper nicely done.

1890's balcony in restoration process



New Fence around a recently renovated Cathedral downtown Shkodra.



Arbor Pillar & Lamp Post

Well & Bucket Reel



Rail detail



3 Legged Scroll Trivet (reprinted from "The Upsetter" Jan-Feb 2002)

By Larry Carrigan

3 Legged Scroll Trivet - material 3/8" sq.

Start with the finished item (Fig. 1) - this is what we are headed for. First, you will need a full size pattern to work from. Start by drawing a 7" diameter circle and dividing it into three equal segments of 120 degrees each (Fig. 2). Then indicate where the legs will be.



FIG. 1

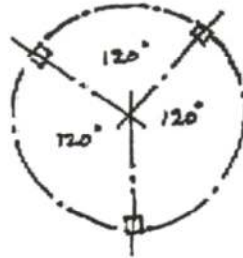


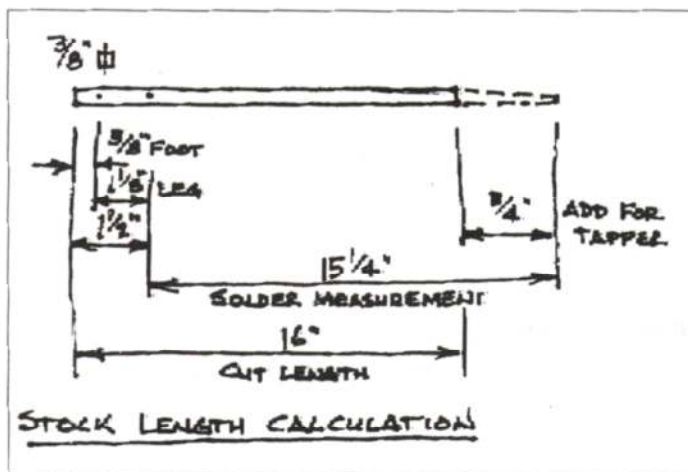
FIG. 2



FIG. 3

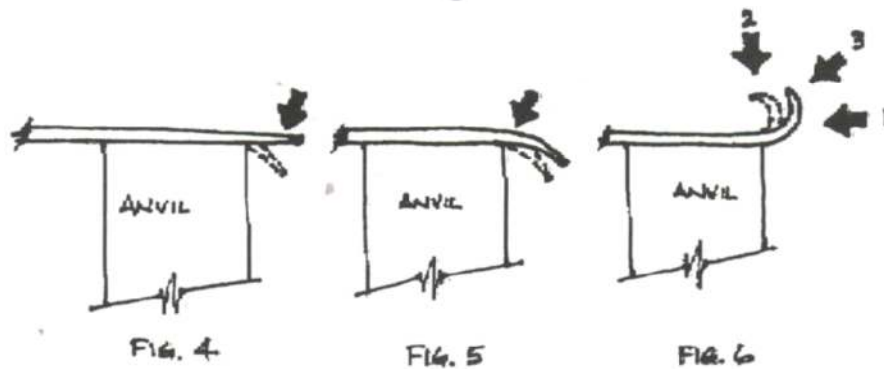
Do this on two separate sheets of paper. On the first sheet of paper draw in one of the scroll sections (Fig. 3). When you are satisfied with the looks of this scroll, tape this sheet to a window (this only works during daylight) or a light table. Using the circle and segment lines as reference points, trace the scroll sections onto the second sheet of paper 3 times as you rotate the paper around the center of the circle. If all the parts don't mesh correctly, make the necessary adjustments, on paper, until they fit together right.

Use a length of soft solder and form it to the scroll pattern (down the center) from end to end to determine the amount of stock required to form the scroll. Make a test piece to determine how much the stock will grow when it is tapered. Subtract that amount from the required stock length and then add the amount of stock required for the foot and leg (I'll get to that in a minute). Also see Stock Length Calculations.



Now transfer one scroll section from the paper pattern to a scrap piece of sheet metal to be used as a "fire-proof" reference while forming a "master scroll". The drawing can be transferred to the metal by using carbon paper or by rubbing the back of the drawing with chalk and then tracing the scroll image onto the metal surface. Trace over the chalk outline with silver pencil or soapstone so it won't rub off.

Start forming the scroll by holding the tapered end over the far side of the anvil a small amount and hitting down on it into the air; move it for-

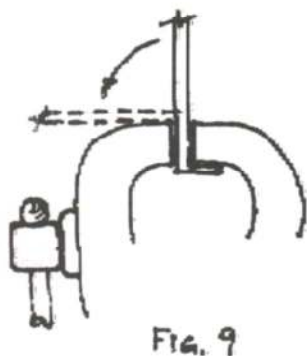
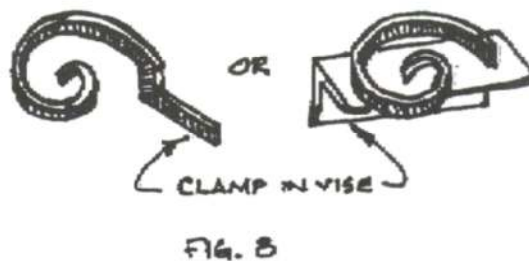


ward slightly and hit it down again (Fig. 4 and 5). Turn the piece over and hit it back towards yourself as indicated in Fig. 6. Repeat this process until the scroll matches the drawing. This is the "master scroll" from which you will make a "scroll form" that will make all the parts of the final trivet

The material for the scroll form can be lighter or a different configuration than the final scrolls. In this case the finished scrolls are 3/8" square and the scroll form is 1/4"x 1/2". Taper the end of the scroll form material and start to form a scroll the same way as when making the master scroll (over the edge of the anvil, hit down, advance the stock, hit down, roll it over and hit



back to you). Clamp the "master scroll" in the vise (Fig. 7), place the form material into the scroll and tap the other end with a hammer. The scroll form material will follow the inside track of the master scroll and give you a perfect image of the scroll. Put an offset in the form or weld it to a short angle iron for mounting in a vise (Fig. 8). Now we are ready to make scroll trivets.



Before you cut all the 3/8" stock to length, lets consider the feet and legs. The trivet will stand about 1 1/2" tall, and I put the 90 degree bend at the top of the leg using the vise. I use the penny foot on the end of the leg as a stop, clamp the vise jaws shut and bend the leg (Fig. 9). The depth of my vise jaws are 1 1/8", added to the 3/8" material thickness, equals 1 1/2" leg length.

First make the penny foot 3/8" of the stock on the near side of the anvil and hit straight down, half on the anvil face and half off (Fig. 10). This will result with forming a step (Fig. 11). Continue thinning this area until it is about 1/16" thick and 5/8" roughly

FIG. 10

FIG. 11

FIG. 12

FIG. 13

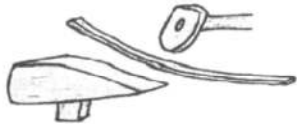
round. Upset the corners of this area until you obtain a nice round shape (Fig. 12). Form a 90 degree bend in the foot, at the step, by using down-ward glancing blows off the far side of the anvil (Fig. 13). Now go back to the step above and bend the leg at 90 degrees. Consideration needs to be given to the orientation of the foot and leg as to the direction of the scroll. If the foot points in the wrong direction, don't panic, its called a design change. Just add a 90 or 180 degree twist to the leg to gain the correct orientation. The important thing is to make the same "mistake" on all three scrolls.

Draw out the taper, start the scroll end as before and bend around the scroll form while holding the tip of the material to the tip of the form with scroll tongs or pliers. Make sure it stays level and flat, but of most importance is to make sure that all the material is at the same temperature (or color). Different temperatures will bend differently around the same form so that the parts won't fit together properly.

The three finished scrolls are now fit together and either tack welded on the back side, collared or wire wrapped to hold them in place. Wire brush and finish to taste.

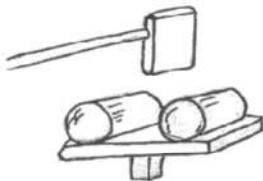
Cold Bending (reprinted from the Florida Clinker Breaker April 2003)

A lot of the time it is easier to bend an arc cold than it is to heat up a small section of your stock at a time. Here are a few tools that can help.



1. Make a hardy tool for your anvil by welding a shank onto a splitting wedge, old maul head or any triangular piece of metal.

2. Weld two short sections of railroad rail together. 6 to 7 inch spacing between the two rails is a good multipurpose bending tool. Wider spacing allows you to work heavier stock. Narrower spacing allows you to make a tighter radius.



3. For the treadle hammer. Weld two large pieces of round stock on a plate. Weld a handle to a piece of flat stock. The combination will allow you to create an arc by making controlled hits while moving the stock a half-inch or so at a time. This tool also creates a great U bend for pot-rack hooks

-Bill Robertson-

Mission Statement

We are an Artisan group that has joined together to make the most of our diverse skills and outlooks. It is our sincere desire to promote, encourage and show the public and other interested persons the tremendous contributions and skill of the traditional Blacksmith and the relevance of their contributions in the modern world. We provide continuing skills training for our members, along with a place to develop their artistic skills with like minded persons, regardless of the modern or traditional expression.

Director:	Vince Nakovics	restoreman123@msn.com
1 st Director:	Joe Gentile	amx-ray@cox.net
Training Coordinator:	Joe Gentile	
Newsletter Editor:	Vince Nakovics	
Resident Photographer:	Steve LaPaugh	slapaugh@verizon.net



www.blacksmithsupply.com

Blacksmith Guild of Virginia
www.blacksmithguildofva.com

Happy Haven Forge
www.happyhavenforge.com

Tidewater Blacksmith Guild
www.tidewaterblacksmiths.com

Yesteryear School of Blacksmithing
www.yesteryearschool.com

Gentile Forge
www.jganvil.com

Warwick Forge
slapaugh@verizon.net

All ABANA Affiliate Organizations have permission to use articles in Artist Blacksmith Group of Tidewater's Hampton Roads Hammers newsletter in the promotion of education and interest in the art of Blacksmithing.

Hook by Steve LaPaugh

