



On the Anvil NEWSLETTER

PHILIP SIMMONS ARTIST BLACKSMITH GUILD

<http://philipsimmonsartistblacksmithguild.com>

From the President's Anvil:

May 2014



We had a great meeting at Magnolia Plantation and Gardens, with about 55 people in attendance. Ed Berry performed the demonstration Saturday morning, which consisted of making a bowl adz from scratch using skills he acquired while attending John C. Campbell Folk School in Brasstown, North Carolina, recently. He started with 1" bar stock and punched and formed the eye. Then, he fullered it drawing out the blade, which he split at the end, and forge-welded a 1095 bit (repurposed hay rake tine) for the cutting edge. Ed annealed it in vermiculite. After lunch, when it had cooled, he shaped the bit while it was still soft, which was followed by hardening and tempering. This produced a very nice adz, and I thank Ed for doing this demonstration for the Guild. He made it look easy. Ed shared a quote with us during the demo about forge welding: "It takes a little bit of practice and a lot of faith." I believe it!

In the afternoon, Bob Kaltenbach told us about a project he is involved with at the Living History Park in North Augusta. They are building a gritsmill. He said they needed some strap hinges for the doors and window shutters, and miraculously, the material to make the hinges appeared. (Must be the faith thing Ed was talking about.) The rest of Saturday afternoon and Sunday, we made strap hinges and pintles, with experienced and new smiths producing very fine sets of hinges for Bob's project at the park. Lots of forge welds, and it was reported that they all stuck every time. (Glad they didn't see mine!)

With any event like this, there are always people behind the scenes that make it possible. I would like to thank Bill and Lynda Creek and Ray Pearre for hosting. They had tables set up, forges in place, and the fried chicken was ready to eat at lunchtime.

The Iron in the Hat produced \$566. With lots of nice forged items made by members, this helps us pay the bills, buy materials, and provides money for scholarships and instructors.

Our new members include: Tom Mancke, Zach Liollo, Craig Guinn, Jetter Guinn, Robert Champbell, Braxton Brazell, Nate Ball and Carl Kistner – who is 86 years young and full of curiosity about blacksmithing. Take time to get to know our new members and make them feel welcome.

Finally, please remember Johnny Marks in your prayers. He is home recovering from some heart problems.

Thanks, Jesse

Iron in the Hat

<u>Item</u>	<u>Donated By</u>	<u>Won By</u>
Leaf Hook	Peter Mueller	Josh Weston
Tongs	Phil Rosche	Hunter Smith
Vintage International Truck Sign	Phil Rosche	Ben Gibbons (guest)
Grinder Wheel	Phil Rosche	Bill Burgess
Hook	Jesse Barfield	Andrew Ward
Forge Fan	Jesse Barfield	Hunter Smith
Fire Rake	Jesse Barfield	Teresa Smith
Poker and Shovel	Bill Creek	Walter Beard
Oyster Knife	Ray Pearre	Tommy Peoples
Cable Damascus Knife	Meck Hartfield	Camp Anderson
Fire Extinguisher	Jody Durham	Walter Beard
Tool Box and Forge Supplies	Charles Meyer	Andrew Ward
Crochet Basket and Cloth	Patricia Hartfield	Bruce Hester
Center Scribe	Perry Thomasson	Bill Creek
Roller Chain Damascus Kit	Perry Thomasson	Meck Hartfield
6 Railroad Spikes	Perry Thomasson	Bill Burgess
Anvil Ring Magazines	Al Jenkins	Ben Gibbons (guest)
Hammer's Blow Magazines	Al Jenkins	Rick Thompson
ABANA Poster	ABANA	Andrew Ward
RR Spike Steak Turner	Josh Weston	Tommy Peoples
Sash Weight	John Tanner	Josh Weston
Handy Magazines	John Tanner	Bruce Hester
Leafing Hammer	Mike Tucker	Perry Thomasson
Tomahawk Drift	Clyde Umphlet	Ben Gibbons (guest)
Hexagon Steel Shaft	Clyde Umphlet	Bill Creek
WWI Bayonets	Ashby Morton	Logan Durham
2 WWI Bayonets	Ashby Morton	Bob Kaltenbach
Blower	Bob Kaltenbach	Bill Burgess

For Sale:

- **Fire Bricks – Brand New, Industrial Grade.** \$1 ea. **Ed Sylvester 803.414.2487.** These same bricks were as much as \$8 at Madison!
- **Hosfield.Bender**, with extension bender and 20 attachments on a nice stand \$900.00. **Sewell coal** for sale. 135# for \$45, Layne Law 843-333-9964
- **Blacksmith Classes:** John Boyd Smith is offering an instructional blacksmithing program at his smithy near Spartanburg. John is internationally known for his realism in forged steel. Call 912-655-9448, email flemingsmith@aol.com, or website JohnBoydSmith.com.
- **Tire Hammer Plans:** Send check/money order for \$30 to Clay Spencer, 73 Penniston Pvt. Drive, Somerville, AL 35670-7013. Includes postage to US and Canadian addresses. Other countries e-mail clay@tirehammer.com for price. 256-558-3658. Tire Hammers for sale contact me for current price. Also, **Beverly Shear Blades Sharpened**, \$41 includes return shipping in US. Remove blades and ship to address above. Extra cost for deep nicks or blades sharpened at wrong angles.
- **Big Chuck o' Iron.** 8"x8"x56" 900+ lbs. mass for anvil, treadle hammer, or tire hammer. \$300 Jeff Hatfield 864-216-3707

On April 4-6 the Guild had a Hammer-in at Historic Camden. Mike Tucker, our past president, was our instructor. The topic of the hammer-in was “leaves and flowers”. Mike again demonstrated for us his talent and taught us how to make several leaf types, including a ginko leaf that was incorporated in a bottle opener. After the leaves, Mike taught us how to make a calla lily. The leaves were made from ½ sq and the lily was made from 5/8 sq. With two leaves and a calla lily, some forged welded them together to make a nice floral element that could be included in any project. This hammer-in was significant as there were 21 participants and we assembled 15 coal forges in one place at the same time...maybe a record. All expressed thanks for the opportunity to learn new skills and we enjoyed a chili lunch Saturday compliments of Phil Rosche’. Bill and Ray added a Camp Oven Cobbler for desert...no one enjoyed the cobbler more than Mike. THANKS, MIKE! There will be another Hammer-in later this year. Tell us what you would like to learn and plan to attend. Ray Pearre



Mike Tucker leading the hammer-in



Chuck Smith helping Tommy Taylor



Charlie Meyer forging his ginko leaf



Ed Berry, Bill Creek and Charlie Meyer busy at the work



Ed Sylvester examining his leaf



Photos by Ray Pearre and Matthew Morse, potential member!

A Word about Hammer-ins

We had a great hammer-in the weekend of April 4-6 in Camden. Mike Tucker demonstrated how to make leaves and flowers and then we all went off and tried our own hands at it. Saturday was the busiest day with over 20 people learning and swinging the hammer.

I actually started blacksmithing in 1979 at Colonial Williamsburg. I was fortunate to work with some really great blacksmiths. John Allgood, who was one of the founders of ABANA; Peter Ross, who is probably one of the most respected blacksmiths in the world; and Rick Guthrie, who now teaches at the American College of the Building Arts; just to name a few. Despite the fact I've been blacksmithing so long, and had a good basis for my work, I'll be the first to tell you that I'm still a beginner. I really enjoyed the Camden hammer-in and learned a lot.

Where do hammer-ins fit in with our guild's overall program? I think if you are lucky enough to get a week long or weekend scholarship, you'll probably learn the most. If you attend a demonstration at a meeting, you will pick up some knowledge; but you probably will get little if any hands on experience. The hammer-ins fit between these two. They probably won't be as intense as the class you'd take at John C. Campbell or elsewhere, but they provide the hands on element that demonstrations don't.

I think there are a lot of basic blacksmithing skills that we all could learn or improve upon. We have some talented blacksmiths in the guild who are willing to share their time and knowledge with others. If you would like to participate in future hammer-ins, tell the officers and board members of the guild the kinds of skills you'd like to gain. You need to be vocal about this. Maybe you don't know what you what you don't know. A number of the other blacksmithing chapters have developed lists of blacksmithing skills which may help. Here is one of those lists:

Drawing out	Splitting
Upsetting	Fullering, grooving, veining, set hammering
Bending	Riveting
Punching and slitting	Forge welding
Drifting	Heading bolts, nails, rivets
Mortise and tennon	Cutting
Collaring	Swaging
Scroll work	Twisting

Look over the list. Identify those areas you don't know much about, or the ones you need help with. There's your basis for suggestions for hammer-ins.

I wouldn't mind having 3 or 4 hammer-ins a year in the off meeting months. Organizing hammer-ins takes a lot of organization and effort, they just "don't happen". We welcome volunteers to assist in arranging, planning, feeding, etc. We need to think ahead about dates, location, and what skills we want to learn and sharpen. Once again, tell the officers and board members –Ray Pearre is a good keeper of your requests - the kinds of hammer-ins you'd like to see in the future. Phil Roshe

Blacksmith Apron and Buckles by Bill Kirkley

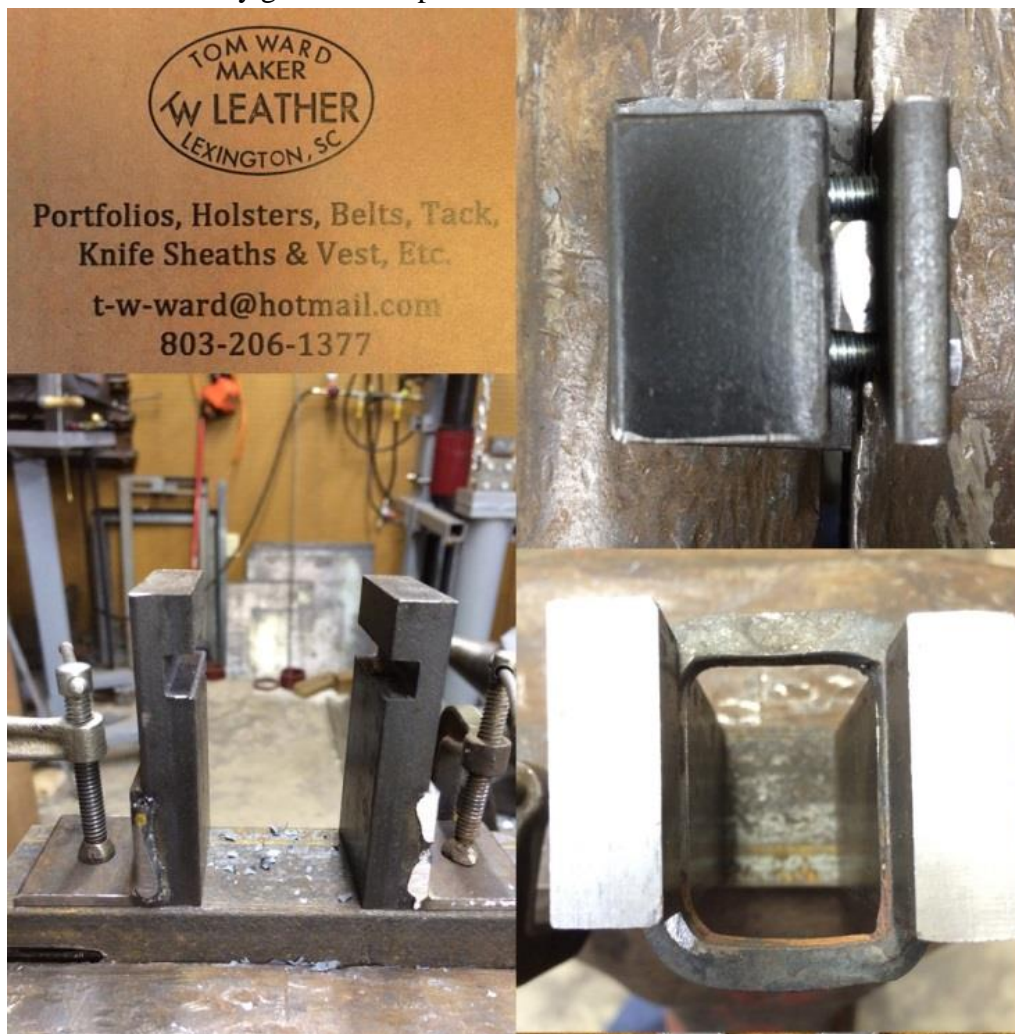
A year or so ago I was sitting down, stick welding. I noticed it was getting a little warm in the shop. I lifted the hood and found the source of the warmth, my shirt was on fire! It was nothing big, just the slow burn of cotton. I patted it out and was a little more careful.

Some people are a bit slow; it took over a year to finally get an apron! I looked online and did not see anything that I liked. I checked around and found Tom Ward, a local leather craftsman right here in Lexington, SC. I contacted him and after a couple of visits we came up on a design I liked.

While looking for apron ideas online, I found an apron on a site and liked the buckles. I decided to make the buckles for my apron based on the design I saw.

To get consistent buckles I made a bending jig and a twisting jig. I found it best to bend from the center of the bar. I used ¼ inch square bar for the buckle and 3/16 for the round parts.

The twisting was harder than I thought it would be. I ended up using round nose tongs. It took several heats as I could only get 1/8 turn per heat!





It was a great project. Let me know if you need to see the jigs and I will bring them to the next meeting I can attend.

Bill Kirkley



Ildstaal ~ Viking-Era Fire Steel

Demonstration by Beth Holmberg at Vista Hammerfest

A *fire steel* is a metal piece that you can strike with a piece of flint in order to start a fire. This design is based on historical research and learning done by Beth while living in Denmark.

To make a good fire steel, you need a high-carbon steel, at least 1% carbon. For this demonstration, W-1 was used. 1095 will work, as will old files, but, it is important to grind off the teeth from any old file to avoid folding them into cold shuts, which will just break off. The idea is to forge the high-carbon steel and then rapidly quench it in water to form large carbon crystals. It is these rough crystals that will engage the flint to make the necessary sparks. Beware of highly alloyed high-carbon steels. They seem to make poor fire steels. You want high-carbon. It is the carbon that makes the sparks.

Working with High-carbon Steel

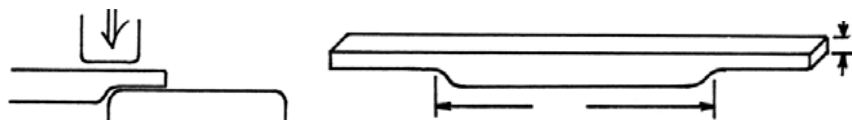
- It is tough, hard to forge even when hot.
- It has a low melting temperature, so don't get it too hot.
- Don't burn it! If it burns, you lose the carbon that you need.
- If you hit it too cold, it will crack.
- So go slow and watch your temperatures!

Stock. W-1 tool steel 3/8" round x 4" long.

1. Flatten the 3/8" round to about 1/4" thick, all the way down. Leave the cross dimension at whatever

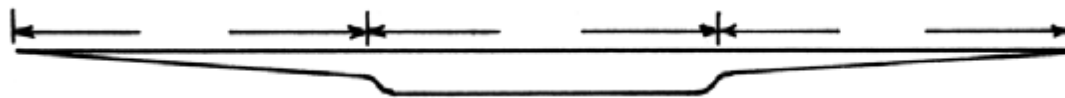
it naturally becomes. In other words, don't forge down the width.

2. Make a tongue on each end by using half-face blows on the rounded edge of the anvil, starting a scant 1" from the end. Make the tongue 1/4" x 1/4".



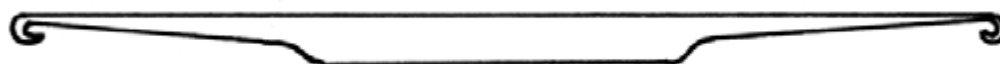
3. Measure the length x above. In the demonstration it was about 2 1/2". Use the x=x=x method to scale this to your desired final size. **Note:** If you miss the length – if it's short – you can move

the shoulder by using the rounded corners. If you use a sharp corner, you would most likely get a crack there.



4. Draw out each end to a nice taper of length x. The end is sort of a ribbon, tapering to a flat point. For hand comfort, you can soften the corners of the taper a little bit.

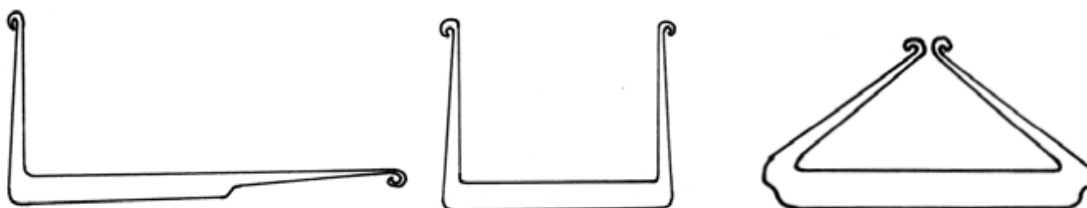
5. Scroll the tips into tiny tapers, curling *toward the bulge side*. ***Be careful to keep the tips hot. It is easy to snap the tip off if it gets cool.***



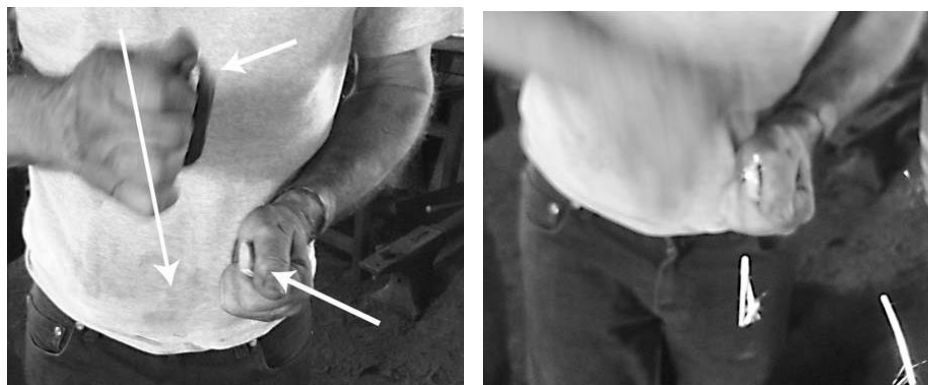
6. Heat at the transition from bulge to taper, and then bend the tapers away from the bulge until the two scrolls just meet. Bend one side half way, then the other, and then bring each side to center alternately. Keep the bends close to the bulge – you want the arms straight. Work from both sides to keep things symmetrical.

7. Adjust it to make it nice and flat.

8. Harden the steel: heat to a bright medium orange, and then agitate in water until cool.



Try it out!



One of the students at Hammerfest made sparks with the fire steel that he just made.



Viking C



Spanish Colonial

The fire steel, or flint and steel combination, was a common method of making fire for 2500 to 3000 years before matches came along. In the manifest records of an 1840s California trading ship,

there were both fire steels and *lucifers*, i.e., matches.

In the Iron Age, people had both pocket-size and larger, kitchen-size fire steels. Kitchen-size or home-size fire steels were used from the Iron Age up through the 19th century, which saw the end of the fire steel era.

For the fire-starting demonstration, Beth had a bit of char cloth and a small pile of jute from an old rope. To start the fire, she started the piece of char cloth with sparks from the fire steel, then quickly dropped that into the ball of jute pieces. Gently blown upon, the jute quickly caught up. Then it had to be quickly dropped to start the larger fire.

Char cloth is a piece of cotton cloth heated in a small Altoids tin – closed off from the air – until it chars. The Altoids tin should have a small nail-hole in the lid to allow the vapors to escape – otherwise you can end up with incomplete char, or with tar stuff on the cloth.

The Spanish Colonial design came from pages 120-122 of *Southwestern Colonial Ironwork: the Spanish*

Blacksmithing Tradition, by Marc Simmons and Frank Turley, Sante Fe, 2007. Available from Frank Turley.

There are photos of maybe a dozen steels from archeological finds..

All photos for this story by Beth Holmberg

Reprinted from the California Blacksmith

I really like making flint strikers, here is another I found on the web. Barry



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Membership Application

___ New Member___ Renewal

Name: _____ Address: _____

City: _____ State: _____ Zip: _____ Phone: _____

email: _____ Sponsor _____

Dues are \$15.00 per person/family, per year. Please remit to:

C. Ray Pearre, Jr.
4605 Durant Ave.
North Charleston, SC 29405

ACKNOWLEDGEMENT AND ASSUMPTION OF RISK

I acknowledge that blacksmithing and related activities are inherently dangerous and involve risks and dangers to participants and spectators that may result in serious injury or death. I have considered these risks and I knowingly assume them. I agree that I am responsible for my own safety during Guild events, including wearing appropriate clothing and protective gear and remaining a safe distance from all dangerous activities. I agree to hold Philip Simmons Artist Blacksmith Guild and guest demonstrators of our craft harmless from liability and expenses arising from my actions and/or omissions.

When was the last time you paid dues?

There is a note below your address on the last page of our newsletters.

It will say something like...

“Dues Last Paid – 2013” or “Dues for 2014 are due”

This note is updated for each newsletter. We appreciate your prompt payments.

Don't Forget to send the check – Pay your dues to keep the newsletter editor solvent 11

JUNE 22nd, 10 AM

The June Meeting will be at the Marcengill's in Westminster.
132 Ringing Anvil Drive, 864-647-1132

Roger and Gail and Jerry and Bessie Fowler are our hosts. Ryan Calloway will be demonstrating. Bring a side, drinks or dessert to contribute for the lunch. Also, bring something nice, maybe something forged for iron in the hat.

August Meeting: Historic Camden, Date and Demonstrator to be determined

October Meeting: Jeff Hatfield's in Woodruff, near Spartanburg, Date and Demonstrator to be determined

