

On the Anvil NEWSLETTER

PHILIP SIMMONS ARTIST BLACKSMITH GUILD

Iron in the Hat	2
For Sale//Upcoming Events	3
Madison Pics	4-7
Steel Rolling	8
Gerald Boggs Punching	9-10
Next Meeting Notice	12



Our June meeting was held at the shop of Roger and Gail Marcengill in Westminster SC with Jerry and Bessie Fowler assisting as host for the event. John Tanner did the demonstration making a candle stand from mild steel bar stock and a piece of round sheet steel. John commenced to flattening / drawing one end of the bar stock then splitting it about 6 inches but not all the way to the end. He then opened this split section shaped and flattened it to make a stable base.

The other end of the bar stock was forged round to a tapered point and bent to the final shape with the point in the up position. John took the sheet steel round then forged it into a cupped shape using a swedge block afterwards punching a hole in the center. This was forged brazed onto the point of the stand using an acetylene torch with Jody Durham's assistance (it was hard to hold straight and braze at the same time!).

Thanks, John, for stepping up and doing this demonstration for the Guild and donating the candle holder to the Iron-in-the-hat.

The main course of our meal was lasagna with many sides provided by our hosts and the good cooks of our membership. Good stuff!

Iron the hat produced \$426 from a small (about 38) but enthusiastic crowd.

I would like to thank all the people of the PSABG that had a part in the design and building of the Philp Sim-

mons Tribute Gate, it was a huge success and the auction of this piece in Madison GA brought in much needed revenue for the support of the Southern Blacksmith Association which ultimately supports us too.

They are: Mike DuBois, Barry Myers, Josh Weston, Ray Pearre, Jody Durham, Jim Pender and myself. These contributions to the success of the project included original concept, rough drawing, drawings with dimensions, digital rendering of the finished gate, building the metal frame, making the heart centerpiece, making PSABG name plates, assembly of all these pieces prior to Madison, building the wooden support frame. Then there was Madison, we had to assemble all the other SBA Guild members rings into the gate, which completed just after the auction had started. I may be biased but I think this is one of the better group projects I have seen at the SBA in the time that I have been a member.

I also want to thank all of you who contributed tools to the toolbox made by former member Watson Jolly. It was a big part of the fund raising as it was the center piece in the blacksmith outfit that was part of the Iron-in-the-Hat at Madison.

There were 7 new members. They are: Lucas Andrews, David Freeman, Glenn Funderburk, Micheal Merriken, Andrew Morris, Jesse Schuman, John Hartfield, and Ben Secrist. Welcome to all of you.

Thanks for your continuing support, Jesse

IRON IN THE HAT

Item	Donated By	Won By
Wine Rack	Roger Marcengill	John Tanner
Anvils Ring Magazines	John Tanner	Perry Thomasson
Drill Motor	Guild	Perry Thomasson
Drill Motor	Guild	John Hartfield
Drill Motor	Guild	Meck Hartfield
Recipricating Saw	Guild	Meck Hartfield
Fire Rake	Jesse Barfield	Griz Hockwalt
Copper Horse	Gail Marcengill	Clyde Umphlett
Tomahawk	Griz Hockwalt	Tony Etheridge
1084 Steel	Griz Hockwalt	Rame Campbell
Barbeque Fork	Robert Campbell	Andy Barnett
Knife	Cary Eppes	Tony Etheridge
Bag O' Rust	Jesse Barfield	Robert Campbell
Table	Jody Durham	Rame Campbell
Knife	Jerry Fowler	Perry Thomasson
Bolts	Jody Durham	John Tanner
Large Chain Piece	Joe Holladay	Rame Campbell
John Deere Prints	Barry Myers	ML Tanner
Vise Spacer	Barry Myers	Ray Pearre
Freezone Cylinders	Perry Thomasson	Ray Pearre
Bearing Races	Perry Thomasson	John Tanner
Springs	Perry Thomasson	Jody Durham
Ball Bearings	Perry Thomasson	Ray Pearre
Shoe Last	Barry Myers	Bessie Fowler
Walnut and Poplar Box	Andy Barnett	John Tanner
Herb Chopper	Andy Barnett	Barry Myers
Skull Bottle Opener	Tony Etheridge	Barry Myers
Candle holder demo piece	John Tanner	Robert Campbell

Not seeing the Content you want?
Submit requests for the kind of info and articles you are interested in, or better yet, submit an article yourself!

We haven't seen much movement on the return of library books. Look out your back window! Tony and Pam will be there soon! Get your affairs in order...

To be honest, I looked through some of my stuff and found a cd on making a rose that is from the Library. Please look through your stuff. too!



Mike Du Bois with Zeevik and Mike Saari at the conclusion of the SBA Convention

I found this on Facebook. Yeah, I know! It may not be a total waste of time... Anyway, this was a post by **Michele M von Bergen** on **BLADE SMITHING WORLD**, a FB group.

"FYI: For those that make mosaic can [canister] damascus who like me thought that white out was a great mold release, I was wrong, it is deadly . Boron nitride [#78855a65](#) at McMaster- Carr is what you should use. We used that in our mokume gane which was in a sealed metal bag with activated charcoal added. No vent holes so it can be used in mosaic can damascus or mokume gane. McMaster-Carr has the best price—spray or liquid..I've only used liquid like paste. Works like a champ. if your making mokume gane using torque plates you coat the bolts and plate"

I looked up the MSDS and WhiteOut should not be heated or the fumes breathed.

For Sale:

Fire Bricks – Brand New, Industrial Grade. \$1 ea. Ed Sylvester 803.414.2487

Tire Hammer Plans: Send a check or money order for \$30US or send \$32US to Paypal.Me/ClaySpencer. clay@otelco.net. PDFs will be e-mailed outside US.

Beverly shear blades sharpened. Remove your blades and send in USPS small flat rate box with check for \$41US Clay Spencer 73 Penniston Pvt. Drive, Somerville, AL 35670-7103.

Blacksmith Classes: Beginner to Advanced. Glenn Owen, Hemmingway. Contact Glenn at forgeontheridge@yahoo.com or www.forgeontheridge.com.

Forklift tine sections for striking anvils, \$30. Jody Durham, 864-985-3919 ironsmith@gmail.com **Sewell Pea Coal,** washed , \$11 per 5 gallon bucket. Will also sell in bulk at lower price. Derice Hochsteller, Aiken, 803-221-2218

Upcoming Events

Knife Making Hammer-in: September 16. Josh Weston, Forged in Fire Champion, will lead a bladesmithing adventure for each attendee to make a knife blade, forge to shape and file to finish.. Harden at the class, temper and handle to be applied at home. Ray Pearre will take your reservation. This will be held at Magnolia Gardens. Begins at 9 AM. Bring your forge, vise and anvil if you have them. Stock will be 3/4" 1085 round stock. Bring tongs to hold the 3/4" round and flattened stock.

October Guild Meeting. October 7, Hemmingway, SC. Glen Owen Host and Demonstrator

October 13–15, PSABG at the SC State Fair. Contact John Tanner to volunteer. 803.422.4714.

October 12–15, Autumn on the Ashley at Magnolia Gardens, Contact Ray Pearre. Friday will be a hammer-in. Saturday and Sunday is a craft fair.

Living History Park, North Augusta. 18th Century Event. October 21, 22. Barry Myers and Bob Kaltenbach will be demonstrating.

Colonial Days, Camden, November 4-5. Joe Marsh, Barry Myers and Bob Kaltenbach will be demonstrating. There is an admission fee.

December Guild Meeting. December 2, Lexington County Museum. 231 Fox Street, Lexington, SC Heyward Haltiwanger Host, Todd Elder to demonstrate a hatchet.

1st Saturday, Blacksmithing, Bladesmithing, Farriering and art fair at Dreamcatcher Forge near Table Rock 12-4PM vendors, food, music, & games. Come hammer, fellowship, and sell your wares. 265 Mt Bethel Rd, Pickens SC 29671 Shawn Ellis www.dreamcatcherforge.com Dcforge@gmail.com 864-650-4542

2nd Saturdays Blacksmith demonstrations at Roper Mountain Science Center, Greenville, SC, Ryan Calloway contact.864-386-5546

3rd Saturdays Blacksmith demonstrations at Hagood Mill, Pickens, SC. Often, our own Griz Hockwalt!



This is a photo of Mr. Simmons I had not previously seen, offered by one of the other newsletters, photo courtesy of *Ancestral Connections* website, *Adiama*.

A collection of dark, possibly black, objects displayed on a white cloth. The objects include a large turtle, a crab, a scorpion, a bird, and various smaller items like a rose and a flower. The objects are arranged on a white cloth, and some have small white tags attached to them. The background is a wooden wall.



More Pics of the Gallery. Note the engraved vise by Clay Spencer. It won the People Choice Award!



Shel Browder demonstrated sword making. The short sword's guard, handle and shell guard is shown below his picture.

Below is Zeevik Gottlieb and some of the sculptures he made. Our own Jason Anderson is shown peering through the "A" in the SBA sculpture Zeevik made.





Clockwise from upper left: Gordon Williams, Mike Saari, Mike's sculptured table (and Jesse's truck), and Mike forging a point

PSAGB was well represented in the forging competition. I was unable to find pictures of all of our teams, sorry about that. We had a good time!



Steel Rolling

Article by OnlineMetals.com (<http://blog.onlinemetals.com/hot-rolled-vs-cold-rolled-steel/>)

Reprinted with permission from The Prairie Blacksmiths Association

When we discuss the two types of rolled steel, it's best to first understand what it means to roll steel. Rolling is a metal forming process in which metal stock passes through one or more pairs of rolls to reduce the thickness and to make the thickness even throughout the material, as if rolling dough. Rolling is classified according to the temperature of the metal rolled. If the temperature of the metal is above its recrystallization temperature, then the process is known as hot rolling. If the temperature of the metal is below its recrystallization temperature, the process is known as cold rolling. In terms of usage and volume, hot rolling processes more than any other manufacturing process and cold rolling processes the most by tonnage out of all cold working processes. Roll stands holding pairs of rolls are grouped together into rolling mills that can quickly process metal into products such as structural steel I-beams, angle stock, channel stock, bar stock, and rails. Most steel mills have rolling mill divisions that can convert the casting products into finished products.

Hot Roll Steel

Hot rolling is a process involving rolling the steel at a high temperature (around or over 1700 degrees F) which is above the steel's recrystallization temperature. When steel is above the recrystallization temperature, it can be shaped and formed easily and the steel can be made in much larger sizes. Hot rolled steel is typically cheaper than cold rolled steel due to the fact that it is often manufactured without any delays in the process, and therefore the reheating of the steel is not required (as it is with cold rolled). When the steel cools off, it will shrink slightly thus giving less control of the size and shape of the finished product when compared to cold rolled. Hot rolled products like hot rolled steel bars are used in the welding and construction trades to make railroad tracks and I-beams and are used in situations where precise shapes and tolerances are not required.

Cold Roll Steel

Cold rolled steel is essentially hot rolled steel that has had further processing. By processing further in cold reduction mills, where the material is cooled (at room temperature) followed by annealing and/or tempers rolling. This process will produce steel with closer dimensional tolerances and a wider range of surface finishes.

The term Cold Rolled is mistakenly used on all products, when actually the product name refers to the rolling of flat rolled sheet and coil products. When referring to bar products, the term used is "cold finishing", which usually consists of cold drawing and/or turning, grinding and polishing. This process results in higher yield points and has four main advantages:

Cold drawing increases the yield and tensile strengths, often eliminating further costly thermal treatments. Turning gets rid of surface imperfections. Grinding narrows the original size tolerance range. Polishing improves the surface finish. All cold products provide a superior surface finish and are superior in tolerance, concentricity, and straightness when compared to hot rolled.

Cold finished bars are typically harder to work with than hot rolled due to the increased carbon content. However, this cannot be said about cold rolled sheet and hot rolled sheet. With these two products, the cold rolled product has low carbon content and it is typically annealed, making it softer than hot rolled sheet. Usage should include any project where tolerances, surface condition, and straightness are the major issues.

Contact us for all your hot & cold roll steel needs: (800) 704-2157

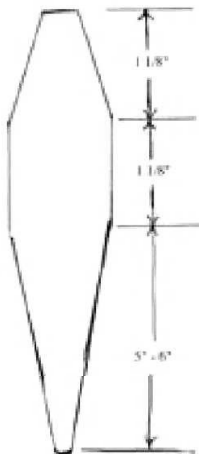
Some of you might remember when Mark Aspery came to Jeff Hatfield's shop. Gerald Boggs came with Mark and stuck for him and generally helped out. He is a master smith in his own right. Here is an article on punching as presented by Bob Ehrenberger:

Gerald Boggs Demonstration

By Bob Ehrenberger

Gerald hit the ground running. On set up day he had a fire going in his demonstration area and was making the things that he would need for his demonstration. Gerald had trained under Mark Aspery and you can see a lot of similarities in the way that he approached his work. Like Mark, Gerald started with making the tools and then progressed to using the tools.

When making hammer eyes, he made the initial hole with a slot punch and then proceeded to drift the hole to size. The slot punch was made from 7" x 3/4" rd. of 4140. 4140 was his tool steel of choice because it would get hard enough to do the job but there was little chance of it getting too hard and breaking. To make the punch he started out by chamfering the struck end. He then created an index for your hand using a rounding hammer over the horn of the anvil. This helps you keep the tool oriented to the slot you are making. Next taper the indexed area into the main bar. Before making the working end of the pinch, he tapered the end a little to get ahead of the spread. As he shaped the end, he would check the width frequently to make sure that it didn't spread too much. Since this punch was going to be used to make slots in 1" material the working area only needed to be slightly longer than 1". The final dimensions of the working end of the punch needed to be 1/8" x 3/4" with slightly rounded edges.



Drift Profile

To make the drift, he started with 6" x 3/4" rd. of 4140. Taper the top as far as the thickness of the material you are going to drift. The fat section also needs to be as long as the material you are going to drift, in this case 1". Shoot for a 1/2" x 7/8" cross section. Flatten the whole blank to 1/2" x 7/8". Chamfer the struck end. Finally make a long taper on the working end.

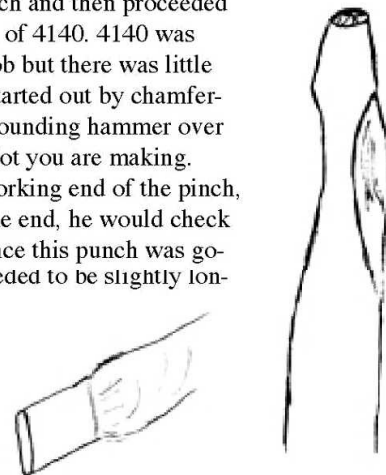


Drift Cross Section

When pinching a hole for a normal hammer, Gerald had a very precise procedure. He would hit the punch 3 times, cool the punch, tap off the excess water, rotate the punch, and repeat. He took his time and only worked while the bar was at a high forging heat. He did not use a lubricant or coal dust and didn't have trouble with the punch sticking. You

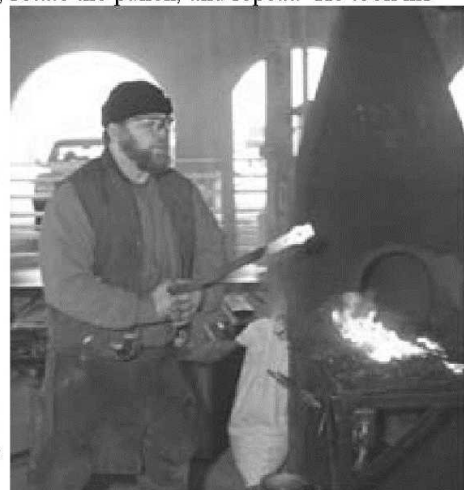
can tell when the punch bottoms out and it is time to flip the bar over and knock the slug out.

When drifting the hole, he did not cool the drift between heats. The drift tends to suck heat from the bar and you don't want it to cool the bar any more than necessary. Again he went slow and didn't work the piece when it had lost its high heat. As he drifted the hole, he would dress the sides of the bar with the drift in place to reduce the swelling sideways.



Punch end

Punch grip



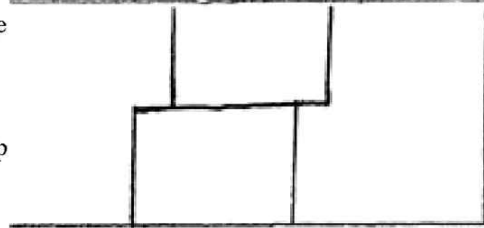
Reprinted from the Newsletter of the Central States Metal Artisans but probably, originally from the Blacksmiths Association of Missouri, that is where Bob E is from.

Gerald Boggs Demonstration

By Bob Ehrenberger

Gerald made lots of stuff, tools and decorative items. But one thing that I had never seen made was a cutler's hammer also called a dog's head hammer. These are distinctive because all the weight is on one end and they frequently have a handle that is set at an angle to the head. He told us that the trick to making the angled hole was to stagger the location of the slot punch and only go half way through from each side. This required a careful layout because the holes are only offset by 1/8".

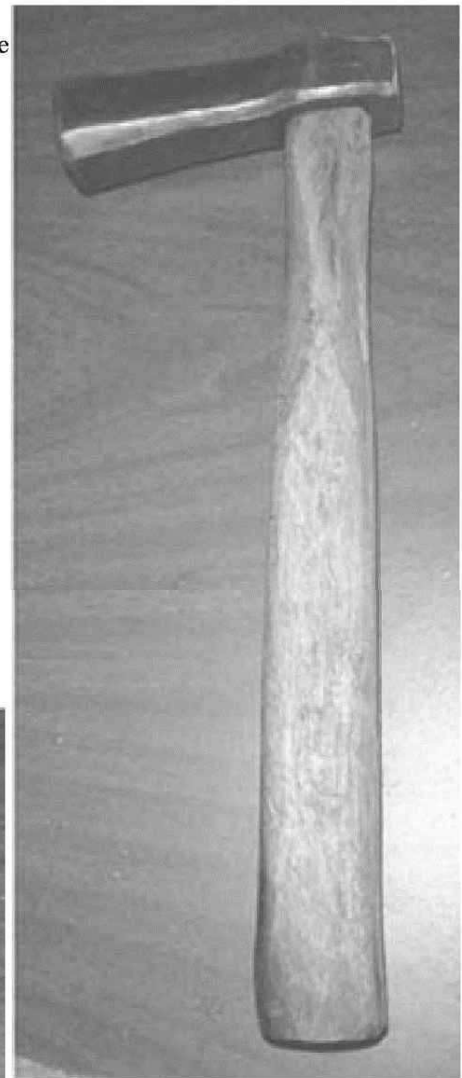
When you are half way through from both sides, you can see a bulge in the area where the two slots overlap. At that point, you put the drift in at an angle and drive it through. It is important that the tip of the drift is smaller than the overlapped section. Our punch is 3/4" long and there is an 1/8" offset on each side so that leaves an overlap of 1/2". So the tip of the drift has to be less than 1/2".



When the drift is driven through and the sides are dressed the transition between the two slots will smooth out and become a continuous angled hole. Because of the angle you have to drive the drift through either using a large hole in a swage block or by supporting the work on the tip of the anvil horn.



Close up of hammer head



Finished Cutler's hammer

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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 of 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 – 2016” or “Dues for 2017 are due” or “Dues paid 2017”

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

August 19, 10 AM

The August Meeting will be at Historic Camden. This is the same day as the Battle of Camden Remembrance Day, you can wear your 18th Century clothes!

Our own Jesse Barfield will host the meeting. Mike Tucker is the demonstrator. Bring a side or dessert and something nicely forged for Iron-in-the-Hat.

We are having a competition of forged items that are donated to Iron-in-the-Hat. The winner gets a big, manly hug, maybe from Ray...or something else, like FREE membership for a year! Ray is the judge, so forge wisely if you want the hug...that he might give you...

Take I-20 to Exit 98, then North on 521 about 2-3 miles on Right. If you're coming South on 521 and come to I-20, turn around and proceed as above...