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Great weekend for blackstarted on Friday with a hammer-in that lasted thru Sunday afternoon. Lots of folks attending the meeting on Saturday - approx. 65 – 70, with Todd Elder showing what he learned recently in a class with Justin Burke, a young blacksmith from TN. His demonstration produced a polled hatchet that looks good and is a functional cutting tool that can be used as a hand ax.

Todd started with a hot rolled mild steel strap  $3/8 \times 1 \frac{1}{2} \times 7 \frac{1}{2}$  shaping the poll, eye, cheeks and the bit area while the piece was still laid out flat. Todd was meticulous in laying out, shaping and making sure everything was symmetrical and each side of the ax was aligned as it should be. He used the compass he made in Shel Browder's class to check his measurements.

All this was done to prepare the piece for folding, this is when eye came into view, then the piece was forge welded between the eye and the cleft where the carbon steel bit would be inserted. He then took a piece of 1080 carbon steel, shaped it to fit the bit area on the ax, fluxed and forged welded the bit followed by more shaping. We all enjoyed and learned from Todd's demonstration and would like to recognize the fact that his skills have increased significantly since he joined the

Great weekend for blacksmithing in the Garden! It started on Friday with a hammer-in that lasted thru Guild. He graciously placed one of his axes in the IITH and drew a lot of tickets and several of mine (I didn't win!). New member J.D. Norris really liked it...

> The fried chicken was good also plentiful as always, the sides made by the great cooks of the Guild were also abundant and delicious. Thanks to Ray, Lynda and Bill for hosting and setting up for the hammer-in.

> John Tanner talked about our support for the SC State Fair in October. If you will man a booth and demonstrate at the fair, we need to know so that we can be sure we know we have enough support to successfully represent ourselves. Be ready to sign up by the June meeting. Let John or an officer know.

Bob Kaltenbach and Barry Myers had a hammer-in at the North Augusta Living History Park. They taught scroll ends and other things that the would-be smiths wanted to know.

Iron in the Hat produced \$961 with lots forged items made by our blacksmith members. That was the second highest since 2010 when Ray started keeping records. Thank you.

Our new members include: Britt and Ann Barnes, Daniel Gill, Jason Knight, JD Norris, Chuck Otap, Greg Sandlin, Wade Wallace, and James Wilson. Six of these joined over the April Meeting and Hammer-in weekend.

Hope to see you at the Marcengill's, June, 11

Thanks for supporting Guild, Keep Hammering, Jesse Donated by:

Won by:

### **IRON IN THE HAT**

Letter Stamp Set Safety Glasses Flint Striker Forged Large Bick Hook - Jesse Barfield style Flat Bar Tongs Bolster/Header Bob War Horsehead Bottle Opener Fat Lighter Welding Hood Screws/spring lot Flux Spoon Damascus Letter Opener Forged Hammer Leaf Bottle Opener Fire Rake

Harness Hook - Norris style

"Backyard Blacksmith" book

Fine Damascus Knife

**RR Track Hardy Tool** 

Center Finder/Scribe Mica Table Lamp

Stainless Round Rod

Hummingbird Feeder

Sterling Silver You Pick

Artifact Key Chain

**Fireplace** Poker

Bird

316 Stailess Cuffs

Rail Clips

**RR** Spikes

**RR** Spikes

Horseshoes

Tape Measure

Scrape Blade

Leaf Hammer

Item

Ray Pearre Ray Pearre Ray Pearre **Bill Creek** J. D. Norris Phil Rosche Phil Rosche Phil Rosche Todd Elder William Creek Jody Durham Jody Durham Mike Tucker Mike Tucker Mike Tucker Mike Tucker Jesse Barfield Jesse Barfield Al Jenkins Steve Allen Meck Hartfield **Barry Myers Barry Myers Barry Myers** Jim Pender Perry Thomasson Perry Thomasson Perry Thomasson Walt Beard **Rick Thompson Rick Thompson Bill Burgess Bill Burgess** Jason Knight John Tanner Jamie Herndon Jamie Herndon

Pair of Leaf Key Chain Fobs Kevlar Sleeve Steel Drum Steel Drum **Copper Bracelet** 

RR Spike Knife Horseshoe Oyster Knife **Chuck Baldwin** Clvde Umphlet **Travis Farrel Travis Farrel** Tony and Pam

Josh Weston Britt Barnes/Wes

Todd Elder

William Creek Adam Hevia Barry Myers Adam Hevia Jamie Herndon William Creek Ann Barnes **Billy Bob Burgess Charles Meyer** Adam Hevia Jesse Barfield Rick Thompson Griffin Hves Todd Elder Ray Pearre Anne Barnes Barry Myers Al Jenkins Clyde Umphlet William Creek LaDonna Burgess Bill Creek John Tanner LaDonna Burgess Charles Meyer Walter Beard Rick Thompson Jack Coy **Billy Bob Burgess** John Tanner Jesse Barfield Peter Mueller Rick Thompson Pia Kincade Walter Beard Johnny Marks Gordon Baker Pia Kincade Jesse Barfield William Creek charles Meyer Johnny Marks Kurt Larson Griffin Hves William Creek Jack Coy Phil Rosche Bill Creek

Kurt Larson Perry Thomasson

J. D. Norris

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

#### From Google!

A man who governs his passions is master of the world. We must either command them, or be enslaved by them. It is better to be a hammer than an anvil. - St. Dominic Guzman -



Garden gate made by Bill Creek and Ray Pearre for Magnolia Gardens.

Demo piece ax

# Flower Stamen by Bill Kirkley

The stamen is often made up of multiple filaments. This article describes a method of recreating that look.

Weld the end of a piece of 1/4" cable to anchor all if the wires. Weld that end of the cable to a 1/4" rod.

Unwind the cable. Pull it through a hole drilled in a piece of steel to the desired filament length. Cut it off with an abrasive disk. Pull it through the flower and weld it in place. This is a really unique use of cable. Thanks Bill!



quently, to determine the length of straight stock required to bend into any shape, measure the



length of the line following the center of the stock of the bent shape.

As another example Fig. 54 will serve.

Suppose a center line be drawn, as shown by the dotted line. As the stock is  $\mathbf{1''}$  thick, the length of the center line of the part A will be 5", at B 8", C 5", D 2", E  $3\frac{1}{2}$ ", and the total length of stock required  $2\mathbf{1}\frac{1}{2}$ ".

A convenient form for making calculations is as follows:

$$A = 5''$$

$$B = 8''$$

$$C = 5''$$

$$E = 3\frac{1}{2}''$$
tol

Total. . .  $21\frac{1}{2}'' =$ length of stock required.





## **Historic Anvil Shooting**

A 21 anvil salute replaced the traditional 21 gun salute on Victoria Day 1860 in New Westminister, British Columbia, after the town's cannon and status as capital of British Columbia was taken away.

On November 7, 1864 during the Civil War, the commander of the Iowa Home Guard militia in Davis County Iowa, having no artillery piece at his disposal, ordered a local citizen to fire an anvil to alert the militiamen in the outlying townships in response to intelligence received of the presence of Confederate bushwackers in Davis County.

Unfortunately, the private citizen who carried out the order to fire the anvil was seriously injured.

The anvil survived the incident intact.

Reprinted from the Irons in the Fire, newsletter of the Central Virginia Blacksmith Guild

The article to the left was found by Ray Pearre on Zack Liollio's Facebook Page. It is an important bit of knowledge to learn. For those of you who thought that our old member, John Thompson, just went to Hawaii to sit under a coconut tree and get tan, here are some things that he is doing to keep busy! Thanks, John for send ing us some inspiring pictures. I especially like the drill holder. Barry



Cast this hammer and brooch in the classes first pour. The material is Silicon Bronze.



Fun hold downs are a must for inspiration.



Forming a five point star on big hooks.



Jig to sharpen drills. Gets all the angles right.

## "Tool Steels and Heat Treating, for Blacksmiths"

*Editors Note: The presentation on the following pages has been cobbled together from my notes & readings - Tony Austin* Reprinted from The Newsletter of the Kootenay Blacksmiths, *Hammer Marks* Winter-Spring 2016 4

## An Introduction to Tool Steel

### A Short History of Tool Steel

Back in the days before the development of the Bessemer Converter (1854), there were basically two ferrous materials, wrought iron and steel. Wrought iron was the used to forge most architectural and household items and "steel" was used to make all forms of cutting edges tools. The wrought iron was a very low carbon material but did contain several percent of a silicon oxide slag from the refining process. Steel was wrought iron with carbon added. Steels generally had between 0.50 and 1 percent carbon. There were no "mild" steels before Sir Henry Bessemer developed his revolutionary steel making process.

For centuries steel was made by taking the best grades of wrought iron and packing them in charcoal in a clay box and then heating for 6 to 8 days at 2000F. The iron would absorb carbon from the charcoal and become "Blister Steel". For better grades, this was folded and forged welded into "shear quality" steel.

In the 1740's an English clock maker by the name of Benjamin Huntsman, frustrated that he couldn't get good steel for springs, came up with the crucible process for making cast tool steel. He took blister steel and melted it in a sealed clay crucible. Originally just iron and carbon were cast, later various alloys were added. This process was used until the mid 1950's. In the early 1900's the electric arc furnace came into use for making tool and specialty steels and almost 100 percent are made that way today.

#### **Tool steel**

Tool steel refers to a variety of carbon and alloy steels that are particularly well-suited to be made into tools. Their suitability comes from their distinctive hardness, resistance to abrasion and deformation and their ability to hold a cutting edge at elevated temperatures. As a result tool steels are suited for use in the shaping of other materials.

With a carbon content between 0.5% and 1.5%, tool steels are manufactured under carefully controlled conditions to produce the required quality. The presence of carbides in their matrix plays the dominant role in the qualities of tool steel. The effects of alloying elements on tool steel properties, are as listed below:

**Carbon:** Raising carbon content increases hardness slightly and wear resistance considerably. **Manganese:** Small amounts of of manganense reduce brittleness and improve forgeability. Larger amounts of manganese improve harden-ability, permit oil quenching, and reduce quenching deformation. **Silicon:** Improves strength, toughness, and shock resistance. **Tungsten:** Improves "hot hardness" - used in high-speed tool steel. **Vanadium:** Refines carbide structure and improves forgeability, also improving hardness and wear resistance. **Molybdenum:** Improves deep hardening, toughness, and in larger amounts, "hot hardness". Used in high speed tool steel because it's cheaper than tungsten. **Chromium:** Improves harden-ability, wear resistance and toughness. **Nickel:** Improves toughness and wear resistance to a lesser degree.

Including these elements in varying combinations can act synergistically, increasing the effects of using them alone.

#### **Tool Steel Classifications**

There are two main systems of classification in North America: **American Iron and Steel Institute** (AISI)/ **Society of Automotive Engineers** (SAE), which uses a 4 or 5 digit number to designate a particular material. The first 2 digits denote the alloy content and the last 2 or 3 digits the points of Carbon. I have listed the most common blacksmith used Classes below.

AISI/SAE Classifications			
Туре	Class	Example(use) Q	uench
Carbon Steels	10XX 1060	(hammers)	W
	1095	(knives, edged tools)	W/O
Chrome/Molybdenum	41XX 4140	(hammers,tongs, anvil tools)	W/O
Nickel/Chrome/Moly	43XX 4340	(hammers,tongs, anvil tools)	W/O
1% Chrome	51XX 5160	(drifts, punches, pow/ham toolii	ng) O
Chrome/High Carbon	52XXX 52100	(tooling) [and knives, Barry]	0

American Society for Testing Materials (ASTM), which uses a letter- number designation.

ASTM	Classifications	

Туре	Class	Characteristics	Example (Use)
Cold Working	W	Water Hardening W1	(hammer/eye punch/cold cut)
	0	Oil hardening O1	(mandrels/master engraving)
	А	Air Hardening; A2	(cold cut/embossing tools)
	D	High Carbon/Chrome D2	(cold cuts/woodworking tools)
Hot Work	Н	Chrome Base H13	(hot swaging/cutting/shearing tools)
Shock Resist	S	Air Hardening S7	(hot/cold swage/cut/shear tools)

#### **Class Description**

Water Hardening (W): Low cost, high carbon steel which can't be used where high temperatures are involved.

Air Hardening (A): Very versatile, all-purpose tool steel that is characterized by low distortion during heat treatment, due to it's increased chromium content. This tool steel has good machinability and a balance of wear resistance and toughness.

**D** Type (D): High carbon, high chromium (air hardening) tool steel. Formulated to combine abrasion resistance and air hardening.

**Oil Hardening (O):**General purpose tool steel, with good abrasion resistance and toughness for a wide variety of applications.

**Shock Resisting (S):** Designed to resist shock at high or low temperatures. S types have a high impact resistance, but a low abrasion resistance.

Hot Working (H): These tool steels are used to cut material at high temperatures, they have added strength and hardness for prolonged exposure to elevated temperatures.

### **Tool Steel Selection**

In order to select the proper steel for a given application or tool, you need to look at the following characteristics:

1.) Heat resistance/Hot Hardness: Can we use it on hot metal?

- 2.) Shock resistance: How tough is the steel? How strong? What is the depth of hardness?
- 3.) Wear resistance: How well does it handle abrasion, how well does it hold an edge? How hard is it?
- 4.) Machinability: How easy is it to saw, drill and machine in its soft or annealed state?

5.) **Forgeability:** How easy is it to forge? How small is the forging temperature range? Does it go "hot short" (the tendency for some alloys to separate along grain boundaries when stressed or deformed at temperatures near the melting point)?

6.) **Ease of Heat-Treating:** What is used to quench from critical temperature, water, oil, air, etc.? How prone to cracking is the steel on quenching? How much does it distort?

7.) Availability: While cost is a factor, in most cases "availability" to the blacksmith in small quantities and reasonable sizes is the big issue. Is the material available as scrap?

Some Junkyard Tool Steels					
Application	AISI/SAE	ASTM	Application	AISI/SAE	ASTM
Agricultural Steel	1080		Harrow Disk	1080	
Axels	1040		Hay Rake Teeth	1095	
Ball Bearings/Races	52100		Jackhammer Bits		S5*
Band Saw Blades		L6	Leaf Springs	1085/5160	
Bolts, Anchor	1040		Plow Disk/Shares	1080	
Cams		A6,S7	Pneumatic Tools		L6,A6,S7
Coil Spring, Truck	5160		Railroad Rail	1080	
Files		W2*	Transmission Shafts	4140	
Hammers		L6	Valve Springs	1060	
				a	

[\*Other articles say jackhammer bits are no longer Sx, but are 4140. Old files are sometimes 1095, Barry] A Proper Forging Heat for Tool Steel

Before attempting any work with tool steel, a piece of the scrap metal is to be experimented with, heated and hardened several times at various heats and the effect on the grain size of the steel examined. The steel should also be experimented with to determine just how high a heat it will withstand. When heavy forging is to be done, i.e., when the first rough shaping is done upon the tool a comparatively high heat should be used. The steel should be forged at about what might be called a good yellow heat. The lighter hammering, when finishing, should be done at a lower heat, about the hardening heat and very little, if any hammering below that heat.

From 'Forging' by John Jernberg, 1918

### **Testing for Temperability**

If you are using an unknown scrap steel, for your toolmaking, you need to test the material. **Test 1**: hold the piece on a power grinder and examine the sparks. The rule of thumb is a dull spark is mild steel, and a brilliant, sharply exploding spark is high carbon steel.

**Test 2**: Place the first inch of the material into the forge and heat to a light cherry red glow and immediately quench it completely in water at room temperature. Clamp the piece in the vice and test it with a sharp file if the file slides off like a needle on glass, the steel is temperable.

Reprinted from 'The Complete Modern Blacksmith' Alexander G. Weygers, 1974

[I will include the remainder of this article in the July August newsletter. Savor and absorb this much and you will be better ready for the next edition... Barry]



Remember, tangential....



## **Equal Length Leg Bending Fixture By Jim Carothers**

Blacksmith's often have the need to make equal length legs for an assembly; the 3-leg leaf trivet shown is a good example. Other items that might have equal length legs are towel racks, door handles, floor or table lamp bases, Colonial lighting pieces, etc. At the 2004 Saltfork Craftsmen ABA annual conference, demonstrator Bob Patrick showed us a simple bend-



In Photo Three you see a bending / scrolling fork being used to bend the leg over against the fixture. A bit of truing up and alignment of the bend at the anvil may be necessary.

I have several of these bending fixtures with different offsets and different top bends; some have the top corner forged nearly square to produce a bend with a tight inside radius ( Photo Four).



Referring again to Photo One, you see three legs all bent to the same height above the feet. If you would like to see this fixture in use, check out the 2004 Saltfork Annual Conference video from the association library; Bob's demonstration includes this fixture and many other useful tips.

Reprinted with permission from the Central States Metal Artisans



Glen told the Forge that he took the idea for a table next to the anvil, as Joe Delisimunovic suggested, and came up with this solution. The table is for tools needed for work in progress. Glen

"My table is removable for easy storage. This is the 'left-

Spring 1995

Reprinted from the Forge, the newsletter of the Vancouver Island Blacksmith Association

## Jamie Herndon and Jeff Hatfield win honors!

MAULDIN, SC – The City of Mauldin's Office of Cultural Affairs is proud to announce the selection of the second installation along the Mauldin Public Art Trail. Swansea, SC artists Jamie von Herndon and Jeff Hatfield's sculpture entitled "Palmetto with Flowers" has been selected by the Mauldin Cultural Council and approved by the City and will be fabricated and installed over the next few months.

The sculpture, pictured above, embraces the theme for this year's selection, "South Carolina Strong", a nod to the resilience, strength, and unity of South Carolinians during the tragedy at Emmanuel AME Church in



Charleston and flooding statewide in 2015. As the artists state in their description of the artwork,

In memory of the Charleston tragedy and the overall theme of strength and resilience shown by South Carolinians during the recent flood, Team H proposes to use the South Carolina palm tree adorned with handmade blacksmithed flowers, leaves, and stems centered on a steel base. Symbolic colors such South Carolina Royal Blue and red oxide will be used to represent the history of the state, the flowing waters of the flood, and blood respectively. Nine Magnolias will be emphasized (Location, color, size, etc.) to represent the nine lives tragically lost in Charleston. These Magnolias will be the largest flower used with other native flowers on the base of the sculpture surrounding the tree's trunk. The blacksmithed vegetation will be left unpainted so they will rust. The rust will be a symbol for the blood that has been shed during the Charleston tragedy. Rust will grow on all of the un-coated steel structures and will be allowed to flow down the sculpture and the surrounding concrete base to the ground over time.

The artwork is the second iteration of a public art program in Mauldin approved by the City in December of 2014. The Mauldin Public Art Trail is an annual program that will feature

nine unique pieces of public art situated around the perimeter of the Mauldin Cultural Center's outdoor amphitheater that are replaced every ten years.

A new work is selected each year by the Mauldin Cultural Council, a nonprofit arts organization that supports artistic efforts around the community and at the Mauldin Cultural Center, to fill one of nine predetermined slots around the amphitheater. After all slots are filled, the oldest piece gets replaced every year and the "retired" artwork is relocated to another area in the community permanently.

"It's a really unique program that allows us to work with numerous artists from across the state and have them interact with our community," says George Patrick McLeer, administrator for the Office of Cultural Affairs. Each year is guided by a special theme and the program is open only to South Carolina artists.

"The selection committee really appreciated the creative approach to this year's theme. Harkening back to the history of the Palmetto tree and its strength in protecting South Carolinians two hundred years ago, and high-lighting its resiliency as a symbol of strength and unity today made this piece stand out," McLeer said. He add-ed that, "The committee also found it unique and fitting that the nine flowers slowly change appearance over time by having them naturally rust to represent the tragic loss of life at Emmanuel AME Church."

Once final details are dialed in, including exact schedules, materials, and site preparation, work will begin. McLeer stated that the target for installation is mid-December of 2016.

## 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. <u>clay@otelco.net</u>. 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

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.

# **Upcoming Events**

May 14th SC Railroad Museum, Winnsboro, SC. Zack Liollio contact-843-709-8974

May, 21st Ryan Calloway's shop, Demonstrators: Jody Durham, sculpting a Rams Head and others as time permits; and Phil Rosche showing decorative bar ends.

June, 11th PSABG Meeting, Marcengills',132 Ringing Anvil Drive, Westminster, SC

July, 4th Weekend PSABG, History Days at Magnolia Garden, Ray Pearre contact

July, 13-16, ABANA Conference, Salt Lake City, UT https://www.abana.org/

Aug. 13, PSABG Meeting, Camden, SC. This is the same day as the Battle of Camden Remembrance Day.

Oct. 22nd, NOTE THE CHANGE! PSABG Meeting, College of the Building Arts, Meeting St. Charleston,

Oct. 8th and 9th Autumn on the Ashley Craft Fair at Magnolia Gardens, contact Ray Pearre

Dec. 10, PSABG Meeting, Jeff Hatfield's shop in Woodruff, SC.

2nd Saturdays Blacksmith demonstrations at Roper Mountain Science Center, Greenville, SC

3rd Saturdays Blacksmith demonstrations at Hagood Mill, Pickens, SC

## **Common Mistakes to Avoid**

- Cutting through your work on the anvil without using a plate. Doing so will mar the face of your anvil.
- Not wearing glasses. Burns to your skin will heal, burns to your eyes are permanent.
- Gripping your hammer too tightly. Your hammer should be held loosely, so that the power comes from your body, through your shoulder, arm, wrist and hand. Grip the hammer too tightly, and you'll put too much stress on your wrist and elbow.
- Hammering on steel that is too cold. Not only are you wasting a lot of effort, you risk putting undue stress on the work.
- Not cleaning the scale off your anvil between heats. If you don't, the next time you work your piece, you'll be driving that scale into your work.
- Not straightening your work as you go. If you don't straighten your work after every heat, you'll end up with a lot of unnecessary work at the end. A few seconds at the end of every heat will save you valuable minutes later on.
- Hammering all the way through your piece on your cutoff hardy. You will cause yourself unnecessary work having to redress the edge of your hardy and you'll put yourself and others at risk when the piece flies off.
- Using an improper set of tongs. If you don't have firm control of your work, you'll waste energy and even risk losing control of it completely.
- Positioning your head directly over top of your work when hammering on it. This is a simple recipe for a forehead bruise.
- Working when fatigued. Being overly tired makes you sloppy, grumpy and causes you to make poor decisions.
- Working when distracted. Unless you are very experienced, if you are about to engage in a conversation, pull your work out of the center of the fire and leave it there until you are ready to work again.
- Trying to forge weld with an oxygen-rich fire. Oxygen is the enemy.

From The Iron Trillium September 2010

May June 2016

### **Philip Simmons Artist Blacksmith Guild**

http://philipsimmonsartistblacksmithguild.com/

#### **President: Jesse Barfield** 2423 Stribling Circle, Lancaster, SC29720 803-287-0929 Jesse.Barfield@duke-energy.com Vice President: Jody Durham 767 Lynnhaven Dr., Seneca, SC29678 864-985-3919 ironsmith@gmail.com Librarian: Meck Hartfield 623 Poston Rd., Johnsonville, SC29555 843-625-9118 thartfield@me.com Secretary/Treasurer: Ray Pearre 4605 Durant Ave., N. Charleston, SC29405 843-860-0532/pearrecr@att.net **Newsletter Editor: Barry Myers** 1847 Pisgah Rd, N. Augusta, SC29841 803-640-5504/ blmyers647@gmail.com Webmistress: Jamie Herndon

414 Henry Stabler Rd, Swansea, SC 29160 803-665-7083 stevensjamie22@yahoo.com

#### **Board Members**

John Tanner 208 Copeland Rd., Swansea, SC 29160 803-568-5534 blacksmith@comporium.net

Ryan Calloway 12 Andrews St. Greenville, SC 29601 864-386-5546 Ryan@creativeironworks.net

Jason Jaco 29 Woodpine Ct Columbia, SC 29212 803-799-1865/texasstreet@hotmail.com

#### Josh Weston 6925 Tanner Hall Blvd. Hanahan, SC 29410 734-709-9677/josh.a.weston@gmail.com

	New Member Renewal
Name:	Address:
	City: State: Zip: Phone:
email:	Sponsor
Ι	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 ASSMPLIMPTION OF RISK

Membership Application

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 - 2015" or "Dues for 2016 are due"

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

## JUNE 11<sup>th</sup>, 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. Jerry may demonstrate shoeing a horse! We are still deciding on who will be worthy to demonstrate for you!

Bring a side, drinks or dessert to contribute for the lunch. Also, bring something nice, maybe something forged for iron in the hat. I guarantee that a good time will be had by some. Barry

