On the Anvil NEWSLETTER

PHILIP SIMMONS ARTIST BLACKSMITH GUILD

INSIDE THIS ISSUE

Jim Looper photo

Hello fellow guild members!

I hope everyone is doing well and are safe! I wasn't able to make it to the last guild meeting, but you all were in my thoughts!

The February meeting is hosted down in Conway. Walter our host and demonstrator, made a hanging double candle holder/ship's candle with a twisted shank, copper cups and drip pans. Keith Gunter won it (Lucky!) and about 50 people including the kids attended. Chicken bog was supplied as the main dish and was reported that to be good and plentiful. Jim Looper videoed the demo and put it on our Facebook Forum page. It's like I was there!

Thanks as always to those that host meetings. In this case, Walter and the L. W. Paul Living History Farm. The Guild raised $707.00 from iron in the hat, a big haul considering the smaller crowd.

There's a lot going on in the blacksmithing world in the coming months:

- The Batson Bladesmithing Symposium has been postponed
- The AACB Conference in Murfreesboro, Tn. on May 14-16. I can give you personal feedback on the AACB one, I had a great time and was impressed with the organization
- The ABANA conference in Saratoga NYat the Washington County Fair, Jun 3-6, 2020. I've never been to the ABANA conference, but most people seem to love it and go every year.

Speaking of ABANA, please cross your fingers for Barry Myers! Our newsletter editor is nominated for the prestigious Joe Humble Award. There is a write-up on this award on Page 2.

In other news, please congratulate Bob Stukes for stepping up and becoming a officer of the guild! Bob's been bringing Ray to meetings for years and we are happy to have him on our Board! Todd Elder is our new Vice President! Todd is a great smith and teacher, and I am excited he's apart of our team as well!

Our new Vice-President, Todd, has arranged to have a class with Jason Lonon from North Carolina. The class will be at the Jaco Farm on May 15—17. More details to come…

Please welcome our new members: Carolyn Farris, Ryan Hosenfeld, Crystal Kornickey, Rickey Lee, St. Germain Alexander, and returning members: Harold Shorter and Jimmy Stone.

Our website if back in action! Go to it and see stuff that Ray and Josh Weston have put on it! There will be more to come on it as Ray gets the kinks out of it, but at least Bill Kirkley won't be seeing Viagra ads...

Sadly, in consultation with our Board, I have decided that our April meeting is cancelled due to the virus situation.

That's all for now,

Keep Hammering, Jody!

IRON IN THE HAT

Item	Donated by	Lucky Winner
Knife Kit	Jim Looper	Bill Largin
Flint Striker	Bob Hill	Keith Gunter
Cross Necklace	Keith Gunter	Clyde Umphlett
Damascus Kit	Keith Gunter	David Snider
Coatrack	Tony Etheridge	Johnny Marks
8 Machine cut blades	Joe Holloday	Clark Ard Keith Williams
Hammer	Mike Tucker	Johnny Marks
Knife	Mike Tucker	David Bush
Coal Rake	Will Rambilus	Bill Largin
Hatchet	Todd Elder	Cameron Rombilus
Bottle Opener	William Caughman	Johnny Marks
Tool Box	Tracy Hartfield	Tony Etheridge
Froze-up Blower	Rusty Osborne	Garrett Still
Treble Cleft	Layne Law	Dana Moberg
Gloves and spring	Johnny Marks	Landy Young
Scroll Template	David Bush	Layne Law
RR Iron	Charles Meyer	Jim Looper
Coil Spring	Charles Meyer	William Hoffman
Hand Soap	Charles Meyer	Todd Elder
Jack Hammer Bits	Charles Meyer	Tommy Taylor
Rivets	Charles Meyer	Layne Law
Lawn blades	Charles Meyer	Keith Williams Clark Ard
Coleman Stove	Charles Meyer	Clark Ard
Coil Spring	Jim Looper	Todd Elder
Oyster Knife	Clyde Umphlet	Keith Gunter
Ships Candle Demo Piece	Walter Hill	Keith Gunter

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!

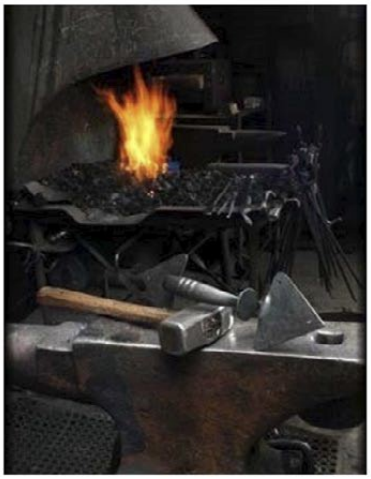
"The Joe Humble Newsletter Editor of the Year Award was initiated by the ABANA Board of Directors in 1994 to give recognition to the workers who publish the affiliate newsletters. It was named in honor of the first affiliate newsletter editor who published a monthly edition for over 14 years. Joe was on the ABANA Board, served as president and established the first affiliate. The submissions are by past and present editors and the selection committee is made up of former Humble Award winners and Affiliate Editor volunteers, so the winner is selected by his/her peers. Many of the editors exchange newsletters with other affiliates so they know what all the other editors are publishing."

ABANA 2020 Conference

Washington County Fairgrounds
392 Old Schuylerville Rd.
Greenwich, NY

Information Available at

www.abana2020.com
abana2020 on facebook
abana.org
ABANA Central Office
423-913-1022



Hammer Signals of Riveting Gang

Machinery- April, 1918

The riveter generally arranges a code of signals with his holder-on whereby he may communicate his next move through the side of the ship or bulkhead which usually separates them. For instance, continued blows of the hammer means "Hurry up- come on with the rivets." Two short blows means "Go back and hold on the last rivet driven to finish up the head." Three short blows means "Take out the rivet"; if followed by continuous blows, the signal means "Come on with the rivets and get them hot" The most common reason for taking out a rivet without driving it is because it is not hot enough. A riveter and holder-on who are accustomed to working together soon learn each other habits or methods and are able to cooperate without frequent delays for conference.

Because of the noise and difficulty of talking through the side of the ship, these hammer signals should be sufficiently well understood to enable the riveter to signal all his more common wants. Such items as "rivets too long," "too short," "not hot enough," "get on the last rivet," "wait awhile," "come on with the rivets," "in the wrong hole," etc., should be well understood. Because of this understanding that is established between the members of the riveting gang. It is customary for a foreman to keep the gang intact, and always assign the same men to work together where possible.

Driving Rivets

In driving cone-head or button-head rivets, they should be "plugged" squarely into the hole, care being taken not to bend over the point of the rivet, but to upset it, filling the hole its entire length. The machine should be strong enough to form a perfect head without rocking to work down the edges. The machine should be started off lightly until the rivet has settled into the hole somewhat, to prevent bending to one side. In driving any kind of rivets held or backed up by a dolly-bar or hand-hammer, the riveter must learn to run his machine slowly until enough head is formed to hold the rivet in the hole, as otherwise the holder-on will have difficulty in keeping the hammer or dolly-bar on the rivet. The necessary equipment for driving flush rivets includes a pneumatic clipping hammer and several "hot-flat" chisels for chipping off the surplus material. The extra difficulty of driving flush rivets lies in the necessity of getting the rivet headed to a point where the surplus metal may be chipped off while it is still hot and soft, and the difficulty of holding and guiding a flat die on a flat surface. The rivet must be plugged in the hole and the surplus metal worked over to one side and chipped off as quickly as possible. The rivet may then be finished down to a flat surface or, on shell work, left slightly rounding.

In driving flush rivets, it is customary to go back to the last one driven and give it an extra finishing after it has cooled somewhat. A blow must never be struck on a rivet point until the holder-on has his hammer or dolly-bar firmly on the head, because the rivet is likely to be loosened. When there is a large amount of deck work to be riveted, it pays to rig up a "deck machine," which is a riveter carried by some kind of support. A common rig is a kind of wheelbarrow which holds the riveting machine in a vertical position and has two handles whereby it may be wheeled about and guided on the rivet.

Sometimes it pays to provide an extra man to chip the rivet when using this type of machine.

Holding-on

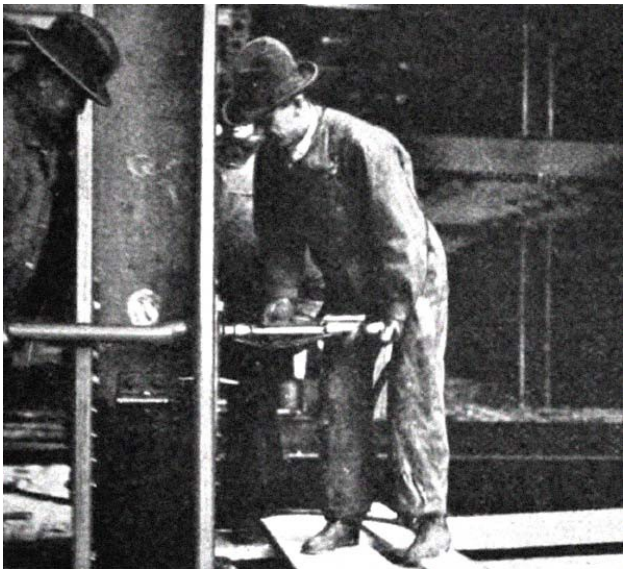
Getting the rivets into the holes hot and "getting the heads up" is a necessary preliminary to obtaining tight work, and it is up to the holder-on to see that this is done. The device used to hold the rivet in position while it is being driven should be adapted to the work. In any case, mere pressure will not suffice, there must be sufficient weight behind the rivet to form a solid anvil against which it may be headed. For general use in connection with air hammers, the pneumatic "holder-on" is best adapted. These are made by several companies, but are all of practically similar construction. A solid piston of steel of about 3 inches in diameter works in a cylinder and is forced out by air pressure. One end carries a die adapted to fit the head of the rivet. The other end of the machine is extended by screwing in a piece of pipe of convenient length to reach some solid backing.

Under normal conditions, these machines will save much time and labor, and they require less

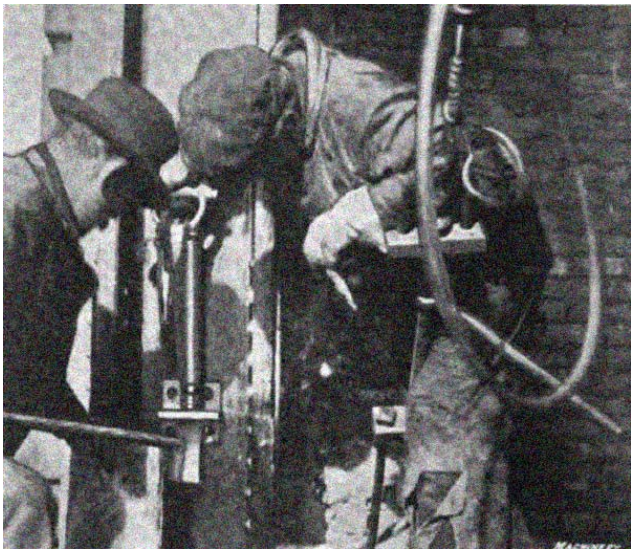
skill and experience than the hand method. When the rivets are to be driven by hand, the hand-holding hammer or dolly -bar is the most satisfactory, as it rebounds under the impact of the heavy blow of the hand-hammer and "gets the head up." The pneumatic holding machine is likely to yield somewhat to the heavy blow and fail to come back strong enough to get the head up in every instance when used in connection with hand work.

Crooked-neck dies may be used in the holding machines to extend around angles, but they must be rigid, because any elasticity in the neck will result in a yielding action and the rivet will not be held solidly enough to insure good work.

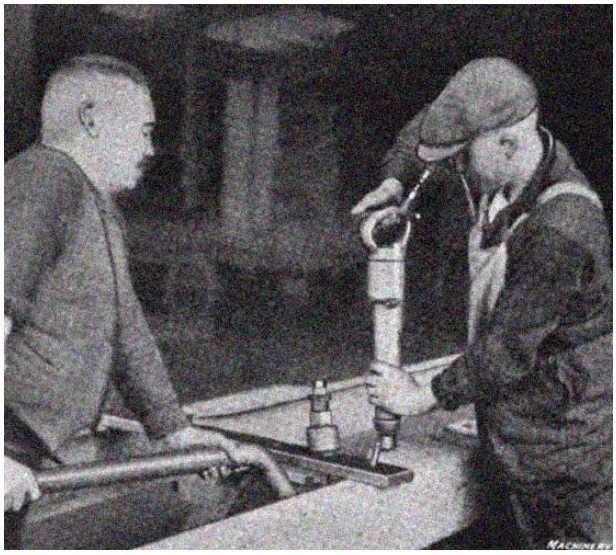
Dolly-bar having extension to serve as a fucrum.



Holding-On with offset Dolly-bar.



One method of using hand Holding-On hammer.



Dolly-bar used as lever for Holding-On

Reprinted from The Upsetter, Newsletter of the Michigan Artist Blacksmith Association

Blacksmith's Hammer Signals.

When the blacksmith gives the anvil quick light blows it is a signal to the helper to use the sledge, or to striker quicker. The force of the blows given by the blacksmith's hammer indicates the force of the blow it is required to give the sledge.

The blacksmith's helper is supposed to strike the work in the middle of the width of the anvil, and when this requires to be varied the blacksmith indicates where the sledge blows are to fall by touching the required spot with his hand-hammer.

If the sledge is required to have a lateral motion while descending, the blacksmith indicated the same to the helper by delivering hand-hammer blows in which the hand-hammer moves in the direction required for the sledge to move.

If the blacksmith delivers a heavy blow upon the work and an intermediate light blow upon the work, it denotes that heavy sledge blows are required. If there are two or more helpers the blacksmith strikes a blow between each helper's sledge hammer blow, the object being to merely denote where the sledge blows are to fall.

When the blacksmith desires the sledge blows to cease, he lets the hand-hammer head fall upon the anvil and continues its rebound upon the same until it ceases. Thus the movements of the hand-hammer constitute signals to the helper, and what appear desultory blow to the common observer, constitute the method of communication between the blacksmith and the helper.

Blacksmith "Hammer Signals" publication history, Almost word for word!

(It's nice to know that blacksmiths liked to share information even back in 1880-)

Google book search appearance – oldest to newest

2/14/1880 - Mining and Scientific Press – an Illustrated Journal of Mining, Popular Science and General News

4/7/1880 – The Canadian Patent Office Record and Mechanics' Magazine

10/17/1885 - Scientific American, an Illustrated Journal of Art, Science & Mechanics

10/30/1885 - Public Opinion – A Comprehensive Summary of The Press Throughout The World On All Important Current Topics

11/6/1885 - The Illustrated Carpenter and Builder – A Weekly Journal for Joiners, Decorators, Painters, Plumbers, Gas-Fitters, Architects, etc.

1891 - A Comprehensive Reference Book on Practical Coal Mining, by W Wardle

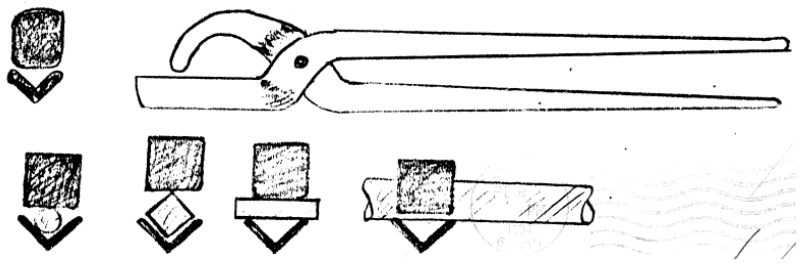
1891 - Practical Blacksmithing, volume 4, by M T Richardson

Also reprinted from the Upsetter, Newsletter of the Michigan Artist Blacksmith Association

Speciality Tongs by Jr. Strusil

Reprinted from the Praire Blacksmith Association

We are always looking for little kinks or tricks of the trade or devices that are realetivily simple and will make working at the anvil easier. Shown here is a tong design that I have developed that make working iron at the anvil easier in the respect that 2 pair, a small pair and a large pair will handle almost any size or shape of material that you may wish to work. They make it easier in the respect that you basical-ly need not look through many pair of tongs for the right one. This design will securely hold round, square, flat, hex and angle iron. They will also work as pickup tongs and will securely hold tapered pieces. As each size will hold several different sizes of the various shapes, a small pair and a large pair will replace approximately 40 pair of speciality tongs.



Forging With Corn

By Steve Alford, Athens, Al.

Dustin Patterson tending the corn fire. The yellow kernels are visually jarring to one used to coke and coal!

I knew something was up as soon as I arrived for the January 2019 meeting of Athens Forge. Al Stephens met me with a big grin. "You need to take a picture of the forge." So I walked on through the shop, passing the donuts and the cookies, and found Dustin Patterson starting the fire in the forge. And noticed that the fuel was… yellow. Yellow? Yes, yellow. The fuel for the day was feed corn instead of coal!

Al had seen this idea on the iforgeiron.com online forum, and decided to give it a try. Compared to coal, according to Al and Dustin, corn burns faster, without clinker. For public demonstrations or nearby neighbors, corn smells a lot better than coal when it burns.

A 50 pound bag of feed corn costs about $8. Athens Forge is currently selling 50 pound bags of coal for $15. I noticed that the bag of corn provided about an hour and 20 minutes of forging time. I'm pretty sure that 50 pounds of coal lasts longer than that, but now that I'm thinking about it, I don't really know how much forging time I get from a bag of coal. Certainly the answer to "how much forging time do I get?" has to be "it depends." There are a lot of variables: forge de-sign, fire management style, does the work call for lots of welding, or heating heavy sections quickly, or is the pace more relaxed with slower heats on smaller pieces?

Someone asked about using wood pellets, as are sold for pellet-type grills. That would be another experiment to try! I think the question of how much forging we get from different fuels is worth considering. Anyone who cares to really keep track, or just share a story, what type of fuel and forge do you use, and how long does your fuel last?

Reprinted from the Bituminous Bits, Newletter of the Alabama Forge Council

As an editorial comment, forging with corn with the food needs of the world is akin to stretching gasoline with ethanol in order to support America's corn farmers. But, it is an option and might be a better use for corn than baiting turkeys. As for me, if I can get coal, I will use it. Barry

Forging a Holdfast

At the 2019 SBA conference, Steve Parker demonstrated power hammer forging on a BluMax 155 hammer that was made available by the Big Blu company. Steve is a full time industrial blacksmith who works for Clifford Jacobs forging company where he makes tools that are used in the shop for handling hot and cold steel. He met Clifton Ralph in 1987 and worked with him for years.

Steve forged a variety of hardie tools, tongs, fullers and flatters at the conference. The pic-tures show how he forged a square corner for a hold fast. He started by fullering two adja-cent depressions. The cusp between the full-ers becomes the square corner.

After fullering he drew out the arm and the shank. He used a Vblock to make a square bend under the power hammer, and then fin-ished the curve of the arm by hand using the horn of the anvil.

Reprinted from the Bituminous Bits, Newsletter of the Alabama Forge Council

Set up the square corner with two adjacent depressions

Draw out the arm and the shank, leaving the cusp between the fullers to become the square corner

Bending the corner in a V block on the power hammer

Finished hold fast. The curve in the arm was completed at the anvil.

I missed this demo at Madison last year. Dang. Certainly a quicker way to make a square corner. Barry

Heart Wall Sconce - by Jymm Hoffman

Materials: 3/8" Hot Rolled Square X 18" long
16 – 18 gauge sheet, 5" X 4
2 1/2" long rivets (3/16" diameter or smaller)

Since many people know much of my works are historical reproductions, I feel it is important to include a disclaimer. This is not a copy of an historical item. It is an item that Mark Bokenkamp of Loudonville, Ohio, showed me in the early 1980's. The original creator is unknown but believed to have been alive in the 1980's.

I normally make a pair of these at a time and they have sold more often as a pair than singles. Therefore, I normally start working on both at the same time, heart shapes first. I have found trying to match every step along the way is easier than completing one sconce then trying to match the completed one. The following dimensions are approximate, the key is making both alike. Some have heard me answer questions about how long or how thick by saying, "about that much."

Upset one end of each 3/8" bars to about 1/2" on the end tapering back to the 3/8" bar over about 11/2".

Start spreading to form an approximate outline of the sides of the heart shape. I use my cross peen to fuller out most of this, finishing with the face of my hammer to take out the marks and smooth it up. Some tricks in this process include working both sides as I spread it out. Also, a trick I learned from Peter Ross, Master Blacksmith at Colonial Williamsburg, is to flatten the peen on my hammer. Rounded and very narrow peens end up cutting the metal as it gets thinner. One of the first things I do to a factory made peen is flatten most of it, leaving a radius so there are not sharp edges. Also, another important trick is to focus the blows at the center and work out. Leave the edges thicker than the center until you are close to finishing spreading out the metal. Once I have the width of the heart to my satisfaction, I cool it off to start on the other end.

I taper both pieces down to about 1/4" square for about 5" long. I knock the corner down into octagon. I then put a shoulder on the end and punch the hole for a rivet. Bend and upset the corner for the candle holder and wax cup.
Bend the curve around my horn. After getting the first curve to my liking, I mark the horn with soap stone as a guide for the second.

Twist both pieces. I normally mark my vise with soap stone where the end of the first sconce was held. For the other end I will either set a pair of dividers as a guide for the distance of the twisting wrench or simply keep the other sconce near by. Once the twist is nice and even, I bend the pieces so that they lay flat on the wall from the top of the heart through the twist to the start of the curve away from the wall. Let these parts air cool.

I start on the wax cups. I use my divider to strike two 4" circles, with a deep center punch mark in the sheet. I then trace my candle holder patterns and also put a deep center punch mark in the center.

Cut out the circles and candle holders with a shear. Clean off all burs and clean up the center of the candle holder with a 1/2 round file.

Sink the wax cups (technically raise them down) into my wedge block. I start at the outside edge and spiral down to the center. Take out any wrinkles as soon as you see them.

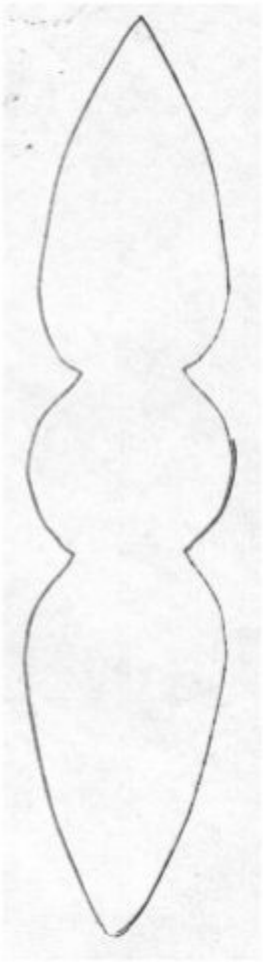
Peen the veins into the candle holders with a chipping hammer, cup them in the step of my anvil. Curl the ends, then finish forming them around a 3/4" diameter rod. Let air cool.

Back to the heart shape at the top of the sconces. I use a half round file to finish the outside shape as well as cut the V into the top of the heart. Then I hot punch the nail holes. Let these air cool.

Drill or cold punch the holes in the candle holders and wax cups. Assemble the candle holders and wax cups to the wall part. Put the rivet on the 3/4" bar that is still in the vice on the screw. Put the pieces on over the rivet. You can then get things to line up relatively well as you peen down the rivet.

Finish options: Cold application of tongue oil; a mix of equal parts of linseed oil, turpentine, and white vinegar; paste wax, or some kind of clear spray.

These always look best when mounted with hand forged nails.



Template for Candle Cups (Actual Size)

For Sale

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

Tire Hammer plans by Clay Spencer. Send Paypal for $30US to clay@tirehammer.com. Or check/money to 73 Penniston Pvt. Dr.,Somerville, AL 35670. I can mail a copy or email PDFS.

Beverly shear blades sharpened. Remove blades, mail in small Flat Rate box, include check/money order for $50, includes return postage. clay@otelco.net, 256-558-3658 .

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 prices. Derice Hochstetler, Aiken, 803-508-1326

Todd Elder is offering Beginning Blacksmithing and Knifemaking Classes. Contact him at (864-978-7232)

Guild Coal: 3 buckets, $30; 6 buckets or 30 gal barrel—$45.00; 11 buckets - 55 gal barrel - $ 60.00; 15 buckets - 1/4 ton - $70.00; 30 buckets - 1/2 ton - $140.00; 60 buckets - 1 ton - $280.00. Contact **Mike Tucker** 803-316-3707

Upcoming events:

Griz Hockwalt is demonstrating at the Bart Garrison Agricultural Museum of South Carolina for special events and tours. The museum is located off of highway 76 in Pendleton S.C, across from Tri-County Tech. Griz will be demonstrating the first Saturday of each month.

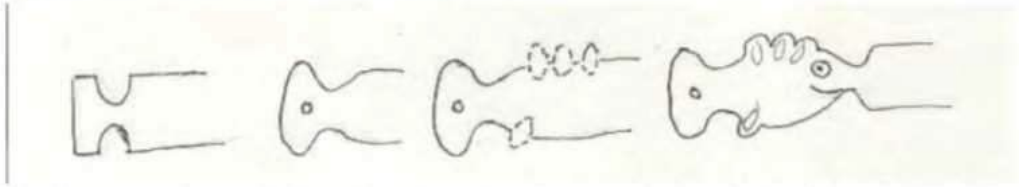
Weekend Class at Jaco Farm with Jason Lonon. Socket Chisel Project for intermediate and advanced smiths. May 15—17. Todd Elder is contact (864-978-7232).

Jesse Barfield and Todd Matthews will be demonstrating to the school children at Historic Camden on April 2/3. Thank the two of you for stepping up. This is the kind of thing that builds esteem for the Guild.

Barry Myers and Bob Kaltenbach will be demonstrating at the Living History Park in North Augusta April 17-19. Friday is school day with the public welcomed (free) on the weekend, but you should go to Magnolia for the Guild meeting on Saturday. **This will probably be cancelled, too! Call Barry before you come.**

2020 Meetings: **June 13, Ryan Calloway and Crew will demonstrate! Roger and Gail Marcengill will host in Westminster**
August 10, Barry Myers will demo making a box joint. Historic Camden

Fish Key Fob,
This is a project the Southern Bunch hopes to use a lot at SCM this year. Leaves are OK but with the sound of surf in the distance these seem more fitting to make for sale in the museum gift shop.
They are a lot of fun, too.
3/16 x 3/4 stock and a small round punch, a half round punch, an eye punch, and a tear drop or egg shaped punch are what you need. You will be "cartooning" in iron, so have fun!



I saw these in a craft co-op in Bristol, VT and failed to write down the name of the smith. Ted Tucker, in his book, "Practical Projects-" shows some fish but not as key fobs. *Fred Mikkelsen*

Reprinted from the New England Blacksmiths

Philip Simmons Artist Blacksmith Guild

http://philipsimmonsartistblacksmithguild.com/

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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. **Make checks out to PSABG** Please remit to:

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

ACKNOWLEDGEMENT AND ASSMPUMPTION 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 – 2019"or"Dues for 2020" are due" or "Dues paid 2020"

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

Don’t come to Magnolia Gardens

April 18

Meeting Cancelled

Be safe, don’t pick your nose.