

November/December 2015 Volume 32, No 6

Blacksmith Association of Missouri

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Sunday General, Douglas Harling

Ken demonstrates spark testing steel to check hardness.



Cover: Phile works the power hammer at the November meeting at his shop.

Editor

Jon and Heather McCarty

Contributing Writers

Ken Jansen Don Birdsall Bob Stormer

Photo Contributions

Bruce Herzog Bob Stormer

President's Message

Phil Cox

Mailing Labels

Bruce Herzog

The Newsletter of the Blacksmiths Association of Missouri is published six times a year and is mailed to members of BAM.

The annual fee for regular mem-

The annual fee for regular membership is \$30/year; a portion of this amount is for a subscription to this newsletter for one year. Editorial inquiries should be addressed to: Jon McCarty 815 Miller Street, New Haven, MO 63068; (636)359-1246,

or send an email to:
bameditor2015@gmail.com
BAM membership inquiries should
be addressed to: Bruce Herzog,
2212 Aileswick Dr., St. Louis, MO
63129; (314) 892-4690 or send
email to bjherzog@charter.net.
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Includes a Subscriptions to the Anvil's Ring and The Hammers' Blow magazines	
Regular Member\$55 yr.	
Senior Citizen (Age 65+)\$50	
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St. Louis, MO 63129				
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Bruce Herzog

Treasurer/Conference Kent & Deanna Harbit

Web site www.bamsite.org

Web Master
Bernie Tappel
bamweb@embarqmail.com

Scholarship Chair Esther Digh

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The Blacksmiths' Association of Missouri is an affiliate of the Artist Blacksmiths' Association of North America, and is devoted to the preservation and advancement of blacksmithing and to communication among blacksmiths in Missouri and surrounding areas. The Newsletter of the Blacksmiths' Association of Missouri's goal is to support these aims. Letters to the editor, tech tips, tools for sale or anything else which furthers these ends will be considered for publication.

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From the President

By Phil Cox

November already, half way to the next BAM conference. Where does time go?

We had a good day for the meeting here on the 7th. Margie said about 80 and a few people had to leave before lunch.

At one time everyone except a few ladies were inside the shop. The morning started a little cool but I had a fire going outside to warm up by. There was good activity in the tailgate row with several items and money changing hands. One perk of hosting a meeting is I can see all the items before anyone else. I did get a nice pair of big tongs. Thanks to everyone who cleaned up my free stuff table. Kind of a sneaky way to get some help cleaning up around here.

I talked Ken into helping me with the demo. I had a few request to do something on heat treating. By the seat of your pants as one guy put it. I hope some of you learned things you can use.

We had a short but good meeting. Several new members were present. Always glad to get a chance to meet new members. Bruce gave us a treasurer report. It seems we are in good shape money wise. We may spend a little more than normal on the up coming BAM conference as it will be the 25th. After me nearly forgetting Mike, he gave us a report on BAM 25, as usual he has it under control. He is seeking volunteers for several positions. One of those is someone to do the contest. If anyone is interested Mike or I can fill you in on what you need to do.

Also discussed was the scholarship program. Ester will now be putting info about scholarships that have been given, who got them, where they went and when they will be doing the payback. Speaking of that there is still time and money left in 2015 but you must get your app. in quickly. You can get more info in the newsletter or the web site. I encourage you to try for a scholarship if you have a class you would like to attend. Remember when one of us goes several get a chance to learn.

I tried something a little different on the trade item (any forged item). Kind of held my breath wondering how that would work. I thought we had a great offering with many well done items. I am sure Bruce took pictures for the newsletter.

Iron in the hat had a table over flowing with treas-

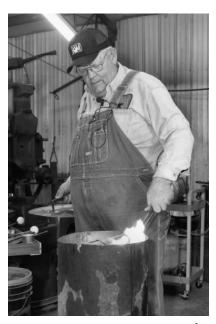
ures just waiting to find a new home. When I was cleaning up there were a lot of red tickets in the trash can. That means a lot of green backs for Karen to give to Bruce. Thanks to all those who take part in this important part of our organization.

We all need to send a big THANK YOU to Patti Tappel for continuing to find new items for the traveling boutique. She continues to find new unique items of high quality to wrangle money out of our wallets and into the BAM offers.

As winter and cold weather is upon us again I want to remind you all to be safe. As we try to stay warm don't forget to make sure you have enough fresh air to replace the oxygen our fires burn and the carbon monoxide they give off. Those of us who use propane need to be very careful as we have no flue to carry the exhaust gasses out of the shop. I make sure to place my gas forge close to my coal forge and make sure the flue is open and drawing. Leaving a window or door with a little opening can help supply fresh air. Along the same lines, when your shop is really cold don't forget to warm your anvil and hammer dies before you use them. I use a 4x4x1 inch chunk of steel to heat to red and lay on the dies or anvil to warm it up. Don't forget to get the top die as close as possible to the steel as it lays on the bottom die.

About my bed time so until next time keep your fires hot and clean and your anvil bright.

Phil



From the Editor

By Jon McCarty

Well this is the last newsletter of the year. We made it thru our first year as editors. Heather and I have both really enjoyed this first year and we look forward to many more.

I wanted to bring up a couple things. First, something I noticed at a local demonstration. We were at Fire Fest in New Haven with Pat McCarty and Denny Quinn. While Pat went to lunch I stepped in to demo for a bit. This is a fairly informal event so our area is open to the public. An aspiring blacksmith came to visit and was asking questions. I love answering questions but he kept standing very close while I was forging. Later I noticed the same thing while Pat was at the forge. And it occurred to me that many of us who are familiar with the art of blacksmithing forget that just because we are not the one with the hammer we still need to be responsible for our own safety. Don't count on the demonstrator to be watching out for you. Keep your distance from the anvil and forge. A demonstrating smith often moves from fire to anvil or vise quickly, they may not be expecting you there. Its often hard enough to keep younger children away from the fire and pretty orange metal. Set a good example for others who may be watching. I know regardless of who's fault it was I would feel horrible if I turned around a burned someone with hot steel, on accident.

OK now that I got that out of my system lets move on. I have been working on the gas forge workshop. We currently have 16 people interested, so if you want a spot let me know. With holidays and winter weather we are looking at possibly having the workshop at the conference. I will contact everyone once we have a date set for sure. So watch for that.

This issues Shop Tips is missing. I didn't get to find anything good this time around but I do have a couple questions from Matthew Burnett:

Question 1.

Why do so many blacksmiths make tongs from high-carbon steel? I have been aware of some making them out of 4140 and railroad clips, both very tough steels. I do not understand the advantage over mild or medium-carbon steel, especially when tongs were made from iron, often with forge-welded reins, in the past. Can anyone explain the logic behind this practice?

Question 2.

I am planning on building a tumbler to clean the things I forge. Does anyone have any suggestions on the speed it should run and what medium to put in the drum with the forged items?

If you have any suggestions for Matthew, or any cool ideas that really help you out around your shop send them to me. Email me at bameditor2015@gmail.com or mail to BAM Editor, 815 Miller St, New Haven MO 63068

Stay safe and create! Jon

Douglas Harling: Residence of the Heart

December 6, 2015 - March 6, 2016

Keeler and Sturm Galleries

The Metal Museum is pleased to announce *Residence of the Heart*, an exhibition featuring work by Douglas Harling will be on view at the Museum from December 6, 2015 March 6, 2016.

The Metal Museum will host a one day workshop with Douglas Harling that will be open to the public on Saturday, March 5, 2016 in the blacksmith shop. On Sunday, March 6, 2016 Members of the Metal Museum will have the opportunity to participate in a Brunch and Slide Lecture given by Harling in the Library, followed by a Gallery Talk from 2:30pm3pm in the Museum's Keeler and Sturm Galleries that is open to the public. The Closing Reception for the exhibition will be on Sunday, March 6, 2016 from 3pm5pm at the Metal Museum.

Douglas Harling is best known for his contemporary gold granulation techniques. In an essay in the *The Penland Book of Jewelry: Master Classes in Jewelry Techniques*Harling writes in length about the granulation process stating, "Of all the surface decoration techniques in precious metal, perhaps none are more mysterious and daunting for the contemporary metalsmith than

granulation." Granulation is an ancient technique, yet Harling uses his pro-

cess to create decidedly contemporary designs. Harling says, "The act of combining classic technique and traditional materials with personal exploration fit well with my vision of fine craft." *Residence of the Heart* will feature a dozen artworks including

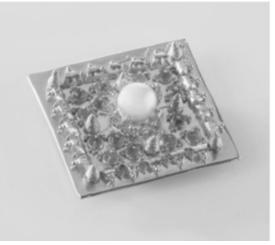
jewelry and hollowware. The jewelry featured in the exhibition is mostly 22k gold with several precious gems such as opals, emeralds, pearls, rubies and sapphires. The hollowware selections include three silver enameled alms bowls and cups.

ABOUT DOUGLAS HARLING: Har ling lives in Kalispell, Montana and is head of the Goldsmithing and Jewelry Arts Program at Flathead Valley Community College. His awards include a Southern Arts Federation/NEA Grant, a North Carolina Artist Fellowship Grant, and an American Craft Council Award of Excellence. He has taught numerous workshops across the country and exhibits his work internationally. Exhibitions include; *Innovation/Tradition: Masterpieces of Southern Craft* assembled through the Southern Arts Federation, *The Nature of Craft and The Penland Experience* at The Mint Museum of Craft + Design, Charlotte NC, and *The Art of Gold* toured through ExhibitsUSA. Douglas received his MFA in Metals from Southern Illinois University at Carbondale in 1992.



Road Home, Douglas Harding

M E T A L M U S E U M



800 Buddas, Douglas Harling

ABOUT THE METAL MUSEUM: The Metal Museum is the only institution in the United States devot-



Sunday General, Douglas Harling

ed exclusively to the advancement of the art and craft of fine metalwork. This is achieved through exhibitions,

collections, conservation, restoration and consulting services, classes, internship opportunities, artists residencies and apprenticeships,

research and onsite fabrication of artwork and architectural elements. http://www.metalmuseum.org/@metalmuseum.org

Meeting Minutes

By Bob Stormer

President Phil Cox thanked all the attendees for making the trip to his shop, and emphasized the importance of attending the meetings. The attendees, in turn, thanked Phil for hosting a very good meeting.

Bruce Herzog gave the financial report and noted that the membership count is now at 614.

Phil continues to get requests for blacksmith demonstrators, and the most recent was from a filmmaker in the St. Louis area who wants to produce a film of blacksmithing for posting the internet. He wants to film a master and apprentice sequence if possible. If anyone is interested they should contact Phil at peacox49@gmail.com to get additional information.

The gas forge workshop using the Gensheimer burner is progressing. There are about 15 members currently signed up, with the maximum set at 20 participants. The total price will be around \$300 and the location and date are to be determined. If you are interested contact Jon McCarty at 636-359-1246 or BAMeditor2015@gmail.com.

Bernie Tappel suggested listing the scholarships that are awarded in the BAM newsletter. Esther Digh agreed with the idea to inform all members about who got scholarships, who they are studying with and what they'll be learning. Esther mentioned that Steve O'Grady has been awarded a scholarship to study knife making with someone in Arizona. There is still money left in this year's scholarship fund and this needs to be requested by 31 December. Refer to past newsletters or the BAM web page for the application form. Esther stressed that details about what you expect to learn and who you will be learning from are important. If you need help completing the form contact Esther at estherdigh@gmail.com.

Bernie Tappel also brought up the question about whether the BAM insurance covers the member when they host BAM events at their shop. Bruce Herzog reported that the last time he had to renew BAM insurance he told the broker he works with that BAM has bi-monthly meetings, a conference and about 6 other events we'd like covered every year. The insurance is due for renewal again soon. To provide Bruce help in defining what we want covered, it was decided at the meeting that the membership will vote on which events would be sanctioned and therefore covered by BAM insurance. This voting will occur at the regularly scheduled meetings. At this meeting both Ken Jansen's Black Friday Hammer-In and Pat McCarty's New Years Day Hammer-In will be BAM sanctioned events. If you plan to host an event that you want covered by BAM, you need to request that no later than the last regular BAM meeting prior to your event.

Ken Jansen's Black Friday Hammer-In will be held Friday, November 27th at his shop located at 2257 Carter Road, Moscow Mills, MO. The project will be making bending forks. If you have stock to bring that will help reduce the burden on Ken's stock pile that would be appreciated. Contact Ken at 636-295-5844 for directions or questions. Directions will likely be available on the BAM web page.

Pat McCarty's New Years Day Hammer-In will be January 1st at his shop at 333 Hayley Ridge Lane Washington, MO, or contact him 636-239-3814. Directions will likely be posted on the BAM web page.

Kate Dinneen presented information on the International Blacksmithing Event taking place in September 2016 at Ypres Flanders, Belgium. The focus of the event is to use blacksmithing skills from around the world to honor all First World War participants. There is a link to a really good article on the event on the BAM web page. You can also contact Kate at kld31057@gmail.com or 785-841-6271.

Mike McLaughlin gave an update on the 2016 BAM Conference. The conference will be Thursday, April 28th though Sunday, May 1st. The theme is Forging Friendships. The demonstrators are:

Audra and Mike Draper - http://draperknives.info/

Elmer Roush and Lynda Metcalfe - http://

www.elmerroush.com/ and http://www.lyndametcalfe.com/

Bob Alexander and Pat McCarty - http://www.washingtonforge.net/

Please make auction, boutique, and tool box items to help support BAM biggest income opportunity of the year. Conference volunteers are needed for demonstrator support, iron-in-the-hat and raffle ticket sales, boutique sales and set-up and clean up. Contact Mike at 816-296-3935 or Steve McCarthy at 417-260-1861.

The meeting was adjourned.



Ken demonstrates a spark test at the November Meeting.

MTS Workshop

Number 1-beginner Workshop Saturday April 2nd 2016

Number 2-beginner workshop Saturday April 9th 2016

Location: Ray Scott: HCR 2, Box 196 Eminence, MO. 65466

No daytime phone number Evening telephone number 573-226-5541 Start time 8:00 am. Sharp.

Students should be there and ready to go at 8:00 am. Both days.

Students must wear safety glasses while instruction and workshops are

being run.

Students need to bring a lunch both days.

Water will be available.

Students should wear cotton or wool clothing, no synthetic type of

clothes.

Gloves and aprons are not provided. Must be a BAM Member (Insurance requirement) \$30.00 dollars for a one year membership. Cost of each workshop is: \$30.00 dollars per student per day.

Instructors are: Ray Scott Don Birdsall 573-364-7223

Directions to Ray Scott's Shop: At Eminence, MO. Go east on highway 106 five miles to highway V go north two miles. Look for a white fence on right side of the highway, turn at the gate and drive down to the shop.

If not a member sends membership dues (\$25.00 dollars) to:

Bruce Herzog 212 Aileswick Drive St. Louis, MO.

Send payment for workshops to Ray Scott at the above address.

Any questions call: Ray Scott or Don Birdsall

Thank you and hope to see you at the workshops.

November Meeting Demonstration

By Bob Stormer

Phil Cox and Ken Jansen teamed up to demonstrate various heat treating techniques and results using different steel compositions and quench mediums. Ken used the spark test to help determine the effect of the hardening process. For the spark test to be effective you must use constant pressure on the same grit belt, at the same belt speed. It will take some practice to learn the spark patterns for the various hardness of different steels. The best way to check an unknown steel is to compare the spark pattern with that of a known steel of known hardness. Labeling the steel samples and keeping them handy for comparisons. Low carbon steel has long sparks with few branches and high carbon steel has many branches with lots of sparks. Low carbon steels typically have 10-30 points of carbon, while medium carbon steels typically have 30-50 points of carbon. Above 50 points is normally considered high carbon steel. One point of carbon content equates to .1% carbon.

Phil started with a piece of A36, which is a common low carbon steel. Unfortunately, the carbon content is not part of the steels composition specification so it's nearly impossible to know the carbon content. Its primary specification is that it must have a 36,000 lb tensile strength. He heated it to about 1550°F, at which temperature the steel becomes non-magnetic. This temperature is also called the critical temperature because that's the temperature at which quenching will change the molecular structure of the steel, making it harder. Phil used a magnet hanging from a chain so it was easy to determine if the steel had reached the nonmagnetic temperature. He later also used an infrared thermometer to get a more accurate reading which seemed very consistent with the magnet method.

Phil first quenched the A36 in water that was at room temperature. When Phil quenches the stock he uses a figure 8 swirling pattern in the medium. Ken did a spark test that showed an improvement in hardness over non hardened A36. He then ground a chisel point on it, being careful not to overheat the edge. He then used the chisel point to

cut a fairly deep groove in a piece of the original non-hardened A36 stock. The chisel point was not damaged at all. Since the actual carbon content of the A36 was not known, the conclusion was that heat treated A36 was harder than non-heat treated A36 of the same stock.



The next experiment was also using A36, but quenching it in Robb Gunther's Super Quench. The recipe is listed below, and can also be found with an internet search.

5 gallons of water

- 5 lbs table salt (plain or iodized, canning salt or rock salt, it makes no difference.)
- 32 oz Dawn Liquid Dishwashing Detergent (blue. Blue was chosen because that's what happened to be available at the moment. It was noted later on that as the solution deteriorated to the point that it should be disposed of, the color slowly changed to green. Hence, the blue detergent is recommended. Any other blue colored liquid detergent could work just as good.)
- 8 oz Shaklee Basic I. (The solution needs a surfactant to maximize contact between the solution and the piece being quenched. Amway Basic H

will also work. Your local farmer's supply should be able to help here, as similar surfactants are used to facilitate the distribution of fertilizer in soil. In response to a question from the viewing stands, Robb said that just about any wetting agent should do, even the stuff photo film developers use. Just follow directions on amount of agent to be added to a given amount of water, then scale up or down to the 5 gallons of water used in this formulation.)

There was a distinctly different sound when Phil quenched the A36 in the super quench. Phil didn't have a Rockwell tester so it was difficult to quantify how much harder the steel was in this test. The spark test suggested it was harder, as did another chisel test.



The next test was done on 1045. This steel was quenched in a combination of oil and water. Phil converted the bottom part of an electric water heater to a quench tank. It had 10 gallons of peanut oil floating on 14 gallons of water. The heating element can be used to pre-heat the oil/water, for this demo it was used at room temperature. Phil plunges the steel through the oil, which has a slower quench and then it enters the water which has a faster quench. The faster water quench helps cool the en-

tire piece which prevents residual heat from effecting the heat treat. If Ken did the spark test on this one I missed it and can't report the results, sorry.

Any steel with less than 50 points of carbon can be quenched in water or super quench without the need for tempering after hardening. Any of the steels with more than 50 points of carbon would likely crack if quenched in water, and will need tempering after quenching in oil.

Miscellaneous Thoughts:

Truck axles are a good source of 4140 can be quenched in water and makes very good hammers and other impact tools.

An internet search on "junkyard steels" will provide lots of ideas where to find many of the steels used in tool making.

If you have a smart phone there is app called "Heat Treat" that can be very useful. There is also an app called "Knife Steel" that will help you determine the composition of the steel.

A good sharp file will cut steel that is hardened to RC50 or less. A dull file can be partially restored by soaking it overnight in vinegar. A mild muriatic acid will also work. Cleaning thoroughly with water after treatment is essential to prevent major corrosion.

Rebar is a poor choice for welding.

H13 can best be hardened by heating to non-magnetic and air cooling three times.

For power hammer tools Phil uses 4140 that is forged then normalized. Normalizing is accomplished by heating to non-magnetic and letting it air cool.

Annealing is accomplished by heating to nonmagnetic and burying it in wood ashes or vermiculite over night to slow the cooling process.

Trade Items from November Meeting



Made By: Bernie Tappel

Traded To: Mike McLaughlin



Made By: Ken Jansen

Traded To: Josh Rhoads



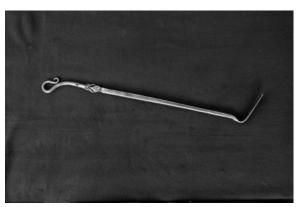
Made By: Kate Dinneen

Traded To: Steve McCarthy



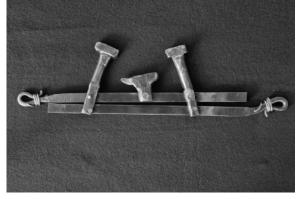
Made By: Mark Lawson

Traded To: UNKNOWN



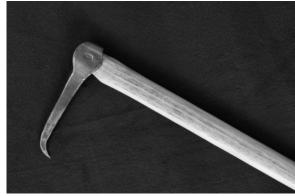
Made By: Steve McCarthy

Traded To:Nick Berardi



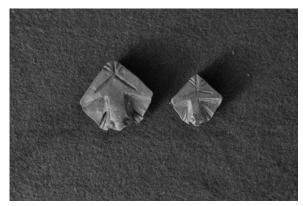
Made By: Dylan Branson

Traded To: John Sherwood



Made By: Phil Cox

Traded To:Dan Wedemeyer



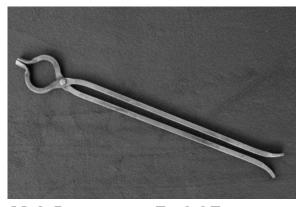
Made By:
Don Anders

Traded To: William Bagley



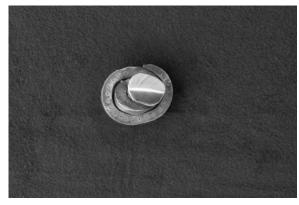
Made By:
Bob Stormer

Traded To: Matthew Burnett



Made By:
Bobby Chambers

Traded To: Kate Dinneen



Made By: Nick Berardi

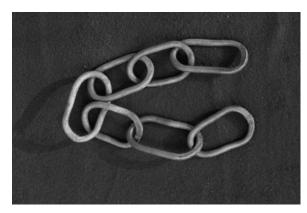
Traded To: Dylan Branson



Made By: Traded To: Preston Williams Bernie Tappel



Made By: Traded To: Neal Poort Don Nichols



Made By: Traded To: Josh Rhoads Neal Poort

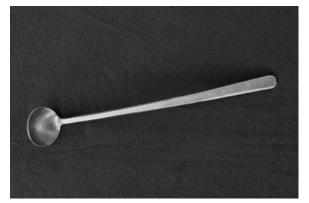
It's great to see this many trade items. This is a great way to share ideas and techniques. Please remember to sign your tickets. This helps everyone know who made the trade item they received. I know I am really bad at remembering names. I for one have relied on this list to see who made my items.



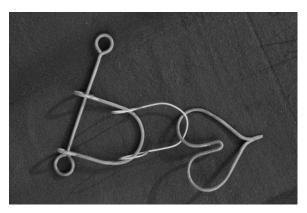
Made By: Traded To: Randy Carrier UNKNOWN



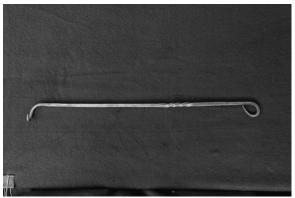
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Chris Owen Mark Lawson



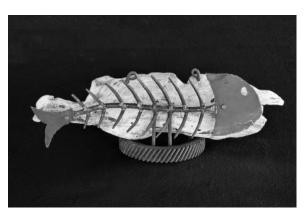
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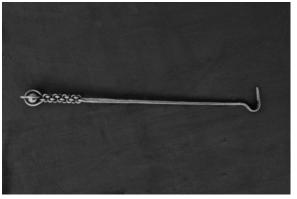


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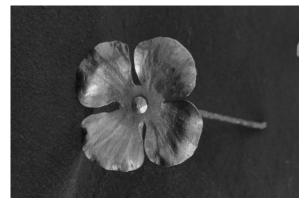


Made By: Joe Malesky

Traded To: Phil Cox



Made By: Traded To: Don Nichols Don Anders



Made By: Traded To:
William Bagley Bobby Chambers



Made By:
John Sherwood

Traded To: Bob Stormer

Making chain

By Ken Jansen

At the November 2015 meeting a Phil Cox's shop somehow right before lunch Bernie Tappel and I got into a conversation about making chain. I made the comment there were two ways to weld chain and Bernie replied there is only one, it turns out we were both right but more on that later. Making chain was a time and material intense job and there were many innovations in tooling and processes to make it as efficient as possible. I do not know exactly when electric welded chain started to be the norm, but would assume it to be in the first few decades of the 1900's. Modern chain is welded on the side of the link whereas old time chain was welded on the end. There are some old video's on the internet you can find that shows some of this. I had read over the years about two different methods of making chain one of which I understood and the other I didn't quite comprehend. The way I have been making chain to date was basically like the split link chain coupler you can buy in the store. Basically a long scarf on either end of your piece of stock bent into a curve the same shape as the finished size of the chain to be and then it is bent in half where these two scarfs overlap and you take a welding heat and forge them together. So to count the heats if all is going smoothly then you have one heat for each end to scarf and bend the curve, another heat to bend the piece in half and hopefully line it up, then at least one welding heat (most likely two), so a minimum of 4 heats and likely 5 or more especially if your ends don't line up correctly the first time. I have timed it and it takes about an hour per foot of chain in 1/4" stock. Bernie explained the other method at Phil's meeting before lunch but being dense as a lead brick I was still unconvinced. It was decided that after lunch we would lite Phil's coal forge and make some chain. The following is my test run after we made the three link chain at Phil's. First you need to cut your stock to length, the length of the stock will determine the size of the links, you can make a pretty standard sized chain with 4.5 to 5 inches of \(\frac{1}{4} \) inch stock. I like making chains out of square stock because I think it looks neat even though most all chain is made of round stock. A chain made of round stock will move more freely than one made of square stock. Anyway What I will be discussing here is chain made out of a piece of 1/4" square stock that is 6" long.



- 1) Cut the stock to length.
- 2) Take a medium orange heat and bend the stock in the shape of a "U" keeping the ends even.
- 3) Next you need to scarf the ends for welding. A scarf is where you thin and taper the ends to allow them to weld seamlessly without thinning the finished product too much. Take bright orange heat on the ends of the "U" and come to the edge of the anvil. You want a fairly sharp edge but not completely square, the part of my anvil I used has about 1/16" to 3/32" radius. Holding the piece with the end at approximately 45 degrees to the edge



4)Strike a half faced blow or two to define the scarf area.



5) Using the peen of the hammer draw the scarf towards the center of the "U"





6) Do the same to the other side of the "U" but from the opposite side of the bar so you have opposing scarfs.



7) Now you need to bend the ends of the "U" so that the scarfs overlap, I do this over the tip of the horn.



8) Now you can flux it and get ready to weld. The neat thing about this method is that with a little practice you can do steps 3 through 8 in one heat, this is only the second heat on the bar presuming you cut the bars cold.

9) Take a welding heat and bring your piece quickly to the anvil and give it a couple of light blows flat on the anvil to stick the weld.





In the same heat after only a couple blows on each side at most move to the horn and hook the piece and hit on the outside to weld the point you see in the previous picture.



10) I then take another slight heat and break the corners.

11) Once you have two of these made then you make a third one but don't weld it. Heat the end of the link opposite of the scarf and twist it open and thread the two links you already made on and twist it closed. Using a piece of baling wire hold the two links to the end of the connecting link opposite of the scarfs (make sure the baling wire is long enough for you to grab it on your tong hand when you take the chain from the fire) and put it back in the fire to take

another welding heat. Weld it the same way as the other ones. Now you have a 3 link chain. Make another and join them and you have a 7 link chain etc.



I made about 2.5 feet of chain using this method in about 1.5 hours on Sunday and I expect it to get quicker as time goes on and I don't have to hunt for the right tools etc. I think if I were going to do a lot of this I would make some chain tongs to assist in holding the work. Bolt tongs work but not as well as a dedicated pair of tongs would. So to who was right Bernie or me, I have to say that the way Bernie showed me was definitely faster and I think a little cleaner, the weld area is smaller than the way I used to make chain so there is a better chance of getting it all stuck on the first go, I think on about half the links I welded Sunday I took a second welding heat to clean it up and I don't think I can expect to get much better than that. As to me being right I was, sort of, there is a right way to weld chain and a wrong way and I was doing it the wrong way all these years.

Ken Jansen

Poppy Info for Ypres 2016

Downloadable poppy template: http://www.ypres2016.com/wip/wp-content/uploads/2015/10/poppie-rev002.pdf

How to make the poppy videos: http://www.ypres2016.com/design/making-the-poppies/

The original idea was that blacksmiths around the world would make just the petal part of the project and then send that on to Terry Clark in the UK where another team would make and attach the stamens.

However, there will be a need for some poppies to remain in the US to be used to help raise funds to get our Master, Jeffrey Funk and perhaps some other over to the event in Sept. So if you'd like to try your hand at the stamen/stems have a go. Please ship the stamens and poppy petals unattached, it is much easi-



er to pack them not put together. They can be welded together once they reach their destination.

The Stamen/Stem is made starting with 5/8 rd (16mm) and the stem is hammered down to (7mm) The poppy seed heads I have made are 20mm long overall. Before the end (top hat) was forged I think that the overall measurement was 23mm.

Where to send poppy petals and stamens:

In the US Kate Dinneen 1582 N 1500 Rd Lawrence, KS 66046 In the UK
Terrence Clark
Wildfields Farm
Woodstreet Village
NR Guildford
Surrey GU3 3DT
England

If you send the poppy and stamen to Terry please, when filling out the customs form, put the value at \$0.00 and label them as metal samples. Otherwise Terry will be required to pay a rather large tax on them.

Iron in the Hat - November Meeting

WON BY DONATED BY **ITEM** Willy Bagley Michael Gorzel saw blades

Don Nichols Josh Peak Anvil Ring & Hammers Blow Magazines

Richard Stubblefield Tim Rice Freon Tank for forge

Dan Wedemever Tim Rice Misc metal Ned/Ester Digh John Coates Blacksmith Plate Willey Bagley Doug Clemons Ultra gripper The Gorzels Skyler Lawer garage door spring

Kate Dinneen Willy Bagley notes on gate design from Peter Parkinson Workshop

Don Forlow Steve McCarthy Post Vise damit guard Ned/Ester Digh Dan Wedemeyer 2 Blacksmith tiles Ned Digh Don Nichols case of 60watt light bulbs Patti Tappel hand made broom Margie Cox Don Forlow Ned Digh Assor. Bolts Daniel Wedemeyer Bill George Honey & beeswax Willy Bagley Steve McCarthy square stock Michael Gorzel Willy Bagley saw blades 1/4" copper Steve McCarthy Mark Lawson

Willy Bagley Jeanie Pendergast round stock Joe Malesky Mark Lawson oxygen tank Ken Jansen PickARoon Phil Cox

Doug Clemons William Blansit rail road spike & track clips

Willy Bagley Don Forlow square stock 1/4" copper Steve McCarthy Dan Wedemeyer Don Forlow William Blansit 2" shaft with eve Steve McCarthy Daniel Wedemeyer 1/4" copper Dale Crabb Leif Lawyer tongs

John Sherwood blacksmith puzzle & kit Leif Lawyer garage door spring The Gorzels Willy Bagley Ned/Ester Digh Bill George Blacksmith tile Joe Malesky Kate Dinneen metal cable Karen Bouckaert Ken Jansen cat litter buckets Don Forlow Mark Lawson misc metal & post vise

Tom Bohl Charles Catron Jim Bilbrey 79 NW 485 Road 118 South Elm 345 CR 414

Poplar Bluff,, MO 63901 Warrensburg, MO 64093 Cameron,, MO 64429-1963

Mark Dierenfeld John Fink Brian Cooper 21850 Devils Washboard Road 37370 Highway 42 6250 Heinz Road

Clark,, MO 65243 Meta,, MO 65058 New Douglas,, IL 62074

Robert Kesterson Skyler Lawyer Artney Lewis

PO Box K 21149 Private Drive 8496 445 Kent Street Marshfield,, MO 65706 Stark City,, MO 64866 Newburg,, MO 65550-9185

William Walker Joe Malesky Richard Stewart 735 East Summit Street 1150 Jarrett Branch 458 Piggott Lane Strafford,, MO 65757 Alton,, IL 62002 Bolivar,, MO 65613

Bill Welsh Bryan Willis

9 hadfield Drive 2714 Tri County Line Road Ewing,, MO 63440 Lathrop,, MO 64465



Historic Forge

By Heather McCarty

With all the new members I have seen added to our membership I thought this article would be a good one. I hope you enjoy it.

March-April 19993 Your First Tongs By Bob Patrick

Made your first tongs yet? If not, Bob Patrick will walk you through the motions so that you never have to buy a pair again.

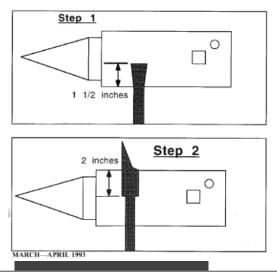
These tongs are patterned after a pair that my grandfather made around the turn of the century for shoeing his farm horses. The originals are somewhat crude, but they work well enough. These tongs will not hold up as well as a well designed pair made of alloy steel. What they will do is allow you to make a number of tongs to hold different sizes of work while you are beginning, plus they will give you valuable experience when you are ready to make better tongs.

Materials

2 pcs. 1/2 inch round mild steel 18 inches long. 1 1/4 inch hex head machine bolt 1 inch long

Procedure

With soapstone, magic marker or other marker make a mark on your anvil 1 1/2 inches from the side facing you. Heat one end of the 1/2 inch round piece to forging temperature for several inches. Place on the anvil until the end reaches the mark on the anvil face. Flatten to an even 1/2 inch



in thickness, then flair the end to about 1 inch in width. Repeat this operation for the other piece of 1/2 inch round

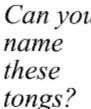
Next, make a mark on the anvil face 2 inches from the edge opposite you. Heat the first bar so that the area past the flattened end is at forging heat. Be careful not to fburn the forged end. With the bar in its original position, turn the bar counterclockwise 90 degrees, and placing the flattened end off the far edge of the anvil as far as it was flattened in the original step, flatten to an even 1/4 inch thickness back to the 2 in mark. Now straighten the piece reasonably. Slightly cup the flattened end. Repeat with the other piece.

1 inch back from the shoulder, center punch the piece as in the drawing for each piece. Both bars should be the same, not mirror images. Bolt the two bars together with the cups facing each other. Don't worry if the tongs don't match yet, but the ends should be approximately the same length. Heat the bolt and lightly hammer the end of the bolt over the nut. Heat the end of the tongs again and again and gently open and close the tongs. Place a short scrap of 1/2 inch round between the jaws and by light hammering and shaping in the vise, adjust the tongs so they feel comfortable. Remove the 1/2 inch round rod and very lightly close the jaws a bit further, so that they have a little bit of spring when closed on a piece of 1/2 inch round after the tongs have cooled. Let the tongs cool, and they will serve for holding both round and flat stock. Oil the join of the tongs and work them back and forth when cold

The same basic tongs can be adjusted to fit various sizes of round and flat stock. Make several pair, and with experience gained, you will be ready to tackle a proper pair of tongs.

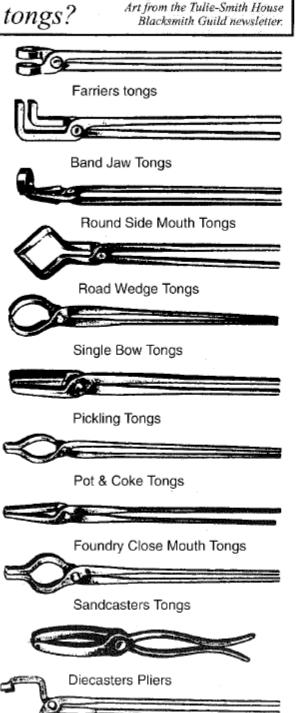
The biggest problem making this type of tongs is that begginers have a tendency to forge the metal too thin, and thus end up with a weak pair of tongs. Lear to make tongs that are cleanly forged and comfortable to use, and you will have taken an important step in learning the trade of blacksmithing.

-Bob Patrick

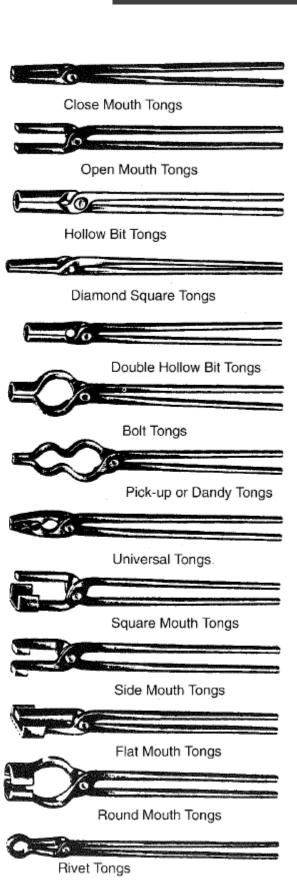


Tongs come in many styles. These Can you Tongs come in many styles. They tongs are standard patterns available from Vaughans, a British company I think. Use these patterns for the business end of your own tongs.

Art from the Tulie-Smith House



Crucible Liftout Tongs



LEARN HOW TO MAKE YOUR LITTLE GIANT POWER HAMMER WORK HARDER THAN EVER!

Please join us for the 23rd annual Little Giant Rebuilding Seminar! Although we did pass ownership of Little Giant to our machinist Roger Rice in 2013, Sid Suedmeier will continue teaching the rebuilding class at his shop at 420 4th Corso in Nebraska City.

We carry on the tradition of our good friend Fred Caylor of teaching how to make Little Giants run well and hit hard.

The 2 ½ day class is a hands-on format. You will help transform a 25 LB Little Giant hammer from functional but sloppy condition into a well tuned, quiet, hard working hammer. Sid Suedmeier, former owner of Little Giant, will share all his knowledge and experience gained from working with Fred and from 24 years of repairing and rebuilding Little Giants.

An old style 25 LB Little Giant will be rebuilt during the class, and a new style machine will be on hand to demonstrate proper assembly and adjustment of both styles.

The class is held in Sid's shop in historical Nebraska City, Nebraska. The city has a wide variety of cafes, outlets (including Pendleton Woolen Mills), antique and gift shops, orchards, wineries and museums.

IF YOU HAVE A LITTLE GIANT, THIS CLASS IS FOR YOU!

No experience is required to attend this class. Past classes have been comprised of students, retirees, artists, welders, doctors, farriers ...anyone who wants to learn will benefit from this class. We approach the rebuilding process using tools that can be found in the average home workshop.

If you are in the market to buy a power hammer, this class will make you an educated shopper. If you already own a Little Giant, or any other brand of power hammer, this class will teach you how to get the best performance possible.

The class costs \$95, refundable up to 7 days prior to the class; advance registration is required. We limit each class to 25 participants. The classes start at 9 AM sharp on Friday, and usually end by Saturday evening. The schedule runs Sunday until noon in case we encounter any exceptional problems in rebuilding, and to answer remaining questions.

When we receive your registration, we will send you a city map, along with travel and hotel information. Airports are located in Omaha (45 miles north), Lincoln (50 miles west) and Kansas City (125 miles south).

March 11-13, 2016 REGISTRATION

Nam	ne:	
Business name:		Ad
dress	S:	
Tele	phone:	
Ema	il address:	
PAY	MENT	
	Check enclosed	
	Visa	
	MasterCard	
	Discover	
	American Express	
	Number:	
	Expiration Date:	
POV	VER HAMMER INFO	
Bran	nd:	
Size		
Seria	al Number:	

Please call or email if you have any questions, or prefer to register by phone. You can reach us at 402.873.6605 or SidsShop@windstream.net.

Suedmeier Enterprises, 420 4th Corso, Nebraska City, NE 68410.

An added bonus this year will be a discounted price on the Little Giant Rebuilding DVD set that we had filmed several years ago. Regular price is \$95; it will be offered to class members for \$50. One set per class member.

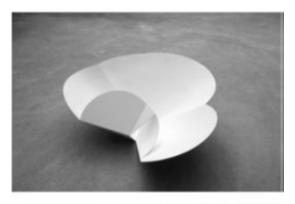


2015 Taiwan International Metal Crafts Competition Traveling Exhibition

December 13, 2015 - March 13, 2016 Gasparrini Galleries

The Metal Museum is pleased to announce 2015 Taiwan International Metal Crafts Competition, a traveling exhibition from the Gold Museum of Taipei City Government. Prize winning artworks will be exhibited in the exhibition, and it will be the first time the exhibition has travelled to the United States. The competition invites metal craft professionals worldwide to participate in hopes to facilitate interaction between Taiwanese and international artists. The opening ceremony for 2015 Taiwan International Metal Crafts Competition will be held on December 13, 12-5pm at the Metal Museum, 374 Metal Museum Drive, Memphis, Tennessee. The Gold Museum of New Taipei City Government has raised the standard of metal crafts in Taiwan with their holding of the National Metal Crafts Competitions for the last eight years. In 2015, they carry on the spirit of promoting the metal crafts of Taiwan, and combine it with the theme of celebrating the 10th Anniversary of the Gold Museum. They have upgraded the scale of the competition this year and renamed it "2015 Taiwan International Metal Crafts Com-

M E T A L M U S E U M



Soliloguy, Ms. Ou, Li-Ting

petition," providing a wider platform to the art of metal crafts from around the world. The competition invites metal craft professionals worldwide to participate, hoping to stimulate art creations with a sense of contemporary and distinctive Taiwanese cultural features. The competition has two categories: Jewelry and Objects. The competition results will be published in an electronic book, while the prize winning artworks will be exhibited in a traveling exhibition. This is the first year the exhibition will come to the United States and it will be hosted at the Metal Museum. The 2015 Taiwan International Metal Crafts Competition called for submissions in two categories: jewelry and objects. In total, the international jury received 330 entries and selected 28 prizewinning artworks (16 in jewelry and 12 in objects). The jury selected the best prizewinning artworks to travel in this exhibition. The gold mining industry began in Jinguashi, Taiwan, when railroad workers found gold in the Keelung River in 1890. The mining industry developed rapidly during Japanese colonization (18951945), and it became a major economic force driving technology development and prosperity in the region. Today, however, the Jinguashi economy no longer relies on the gold mining industry, and many of the old mining facilities now stand vacant in the postindustrial mountain village.

ABOUT THE GOLD MUSEUM OF NEW TAIPEI CITY: The Gold Museum of New Taipei City is dedicated to telling the story of the gold mining industry by preserving and exhibiting objects that illustrate the once vibrant and dynamic history of the Jinguashi gold mines. The Gold Museum of New Taipei City is located in the historic mining town of Jinguashi. The museum houses artifacts that illustrate the



Flavor, Ms. Chen, Siou-Yi

development of Taiwan's mining industry. In addition to historic artifacts that were used by the mining industry, the museum also collects and exhibits examples of fine metal craft and works of art to show a more refined aspect of the mining industry. Since 2007 the museum has held four Metal Crafts Competitions that showcase the abundant creative talent among Taiwan's finest metalsmiths. Artwork submitted to the competitions range from utilitarian metal crafts to jewelry and contemporary sculpture. In 2015 the Gold Museum celebrated its 10th anniversary by inviting international artists to participate in the competition. The Gold Museum is excited about partnering with the Metal Museum and hopes to start a dialogue between American and Taiwanese metalsmiths.

BAM Tailgate

Buy, Sell, Trade

Individual Classified ads:

For Sale: Anvil's Ring Magazine collection Sept '73

Present. \$350 Bob Woodard Edwardsville, IL 618-692-6508

Real slate chalkboards for your shop various sizes and prices call Matthew Burnett for details (816) 575-2798

Wanted Tire bender contact Roy Johnston 636-662-2126

Commercial / Resource ads:

Services:

Beverly Shear Blades Sharpened. Remove blades from shear and ship to Clay Spencer, 73 Penniston Pvt. Drive, Somerville, AL 35670 \$41 includes return postage, additional cost for deep notches or blades previously sharpened Blacksmithing E-books on CD at angle.

Little Giant-- We can do repairs on any or all components of your Little Giant front assembly. Contact Roger Rice, Midwest Machine, 6414 King Road, Nebraska City, Nebraska 68410. (402) 873-6603

Roller Blade Treadle Hammers (Clay Spencer design) for Sale or Workshops led to build hammers. Bob Alexander, e-mail to scruboak4@netzero.com, or call 636-586-5350.

Information / Education:

Tong Making Class-Weekend Course, 4 people per class - \$125 per person. Contact: Charles Comstock, Rt.1 Box 20, Deerfield,

MO. 64741 (417) 927-3499, or (417)-321-2286 cell

Back issues of Jerry Hoffmann's Blacksmith's Journal, Call 1-800-944-6134 for more information.

Classes offered, The Ornamental Iron Shop Contact the instructor to register and customize your class. John D. Thompson - Metalsmith 3923 Hwy 25; Hodges, SC 29653 864-374-3933

Classes at Pieh Tool Company, Inc. - Camp Verde, AZ The Bill Pieh Resource for Metalwork. Call now for more information and to enroll:

(928) 554-0700 or (888) 743-4866. www.piehtoolco.com.

Mathias Penn is offering introductory & beginning blacksmith classes. 417-683-9000 Tytheblacksmith@yahoo.com

oldschoolcrafts Blacksmith School, Joe Davis 12625 Lawrence 1175, Mt Vernon, MO 65712 phone 417-461-0387 on the web www.oldschoolcrafts.org E-Mail oldschoolcrafts@hotmail.com

David Norrie blacksmithing school in Colorado David Norrie 303-859-0770 http:// www.forgewithintention.com

or http://www.davidnorrie.com

The Upper Midwest Blacksmiths Assoc (UMBA) video library. An index list can be viewed at www.umbaonline.org

They are VHS or DVD-R Cost is \$5 each with \$2 per order shipping there is no return date, you keep the video for this price. All videos are made at group demos, no commercial titles

Now eight titles are available on CD, \$4/each, or all eight books, \$24 postpaid. More books are in production and will be available soon- order on-line at www.blacksmithingebooks.com, or check/MO to Brian Gilbert, 3404 Hartford Dr., Chattanooga, TN 37415.

Ray Clontz Tire Hammer Plans by Clay Spencer 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

New England School of Metalwork

www.newenglandschoolofmetalwork.com 1-888-753-7502

Power Hammer page

I've taken some time to collect and post old info, catalogs and brochures on power hammers. The link of our NEB web page to this information is: http:// www.newenglandblacksmiths.org/ power hammer info.htm Ralph Sproul

Rochester Arc & Flame Center! Featuring Blacksmith-

Welding & Glass Blowing, over 30 classes available for all levels of interest, rocafc.com 585-349-7110

For Sale: Power Hammer instruction DVDs. \$125 per set. Clifton Ralph, 4041 W 47st, Gary, Indiana, 46408 (219)980-4437

Products:

Scrub Oak Forge: We still have the Ozark Pattern anvils, and hand hammers. For more info on the tools, contact Bob Alexander at 636-586-5350 or scruboak4@netzero.net

Heavy-Duty Fry Pan Blanks 9" diameter, tapered sides 12

Or 13 gauge steel (approx.2 pounds) no predrilled holes for the handle \$12.00 each..1-4, \$10.00 each.5-9, \$9.00 each...10+. Shipping: \$5.00 plus\$1.00 each frypan Bob Tuftee 563-332-4800 6 Hollows Court LeClaire, IA 52753

L Brand Forge Coke now packaged in 50 pound bags on pallets. Send your zip code for a quote on price including delivery.1-678-360-3521 or LBrandForge-Coke@aol.com.

Chile Forge- Next generation gas forges www.chileforge.com David Starr 520/360-2141

Kayne and Son Custom Hardware, 100 Daniel Ridge Road,

Candler, NC 28715. (828) 667-8868 fax (828) 665-8303, email:

kaynehdwe@charter.net, web site:

www.blacksmithsdepot.com.

Offering a full line of blacksmithing equipment. We ship and accept Visa and Mastercard.

D.L. Schwartz Co. Blacksmith and Farrier supplies. 2188 S. US 27, Berne, IN. 46711, 1-800-955-3064

SOFA fire pots are once again available. For information contact

Bob Cruishank, 1495 W. Possum Rd., Springfield, OH.

45506 Phone: (937) 323-1300 or www.creativeironforge.com or www.sofablacksmiths.com

USA Dealer for REFFLINGHAUS ANVILS, 77 to 1250 lb.

European 2 horn with or without upsetting block & side shelf.

Over 100 sizes and styles available. Guaranteed face @ HRC59

Dick Nietfeld www.blksmth.com Phone (308) 384 1088

Wanted:

Blacksmith business cards. I would like to put together a collage of Blacksmith business cards.

Bring them to a meeting or mail them to me with your dues.

Bruce Herzog 2212 Aileswick St. Louis, MO 63129

Demonstrator List

Fred Weisenborn has started a list of members available for demonstrations, fairs, historic events, and festivals, etc. 417 -589-2497 e-mail: jweisenb@llion.org

Around the Anvil BAM has its very own E-Mail news group. If you would like to participate there is a sign up link on the bamsite.org or send an E-Mail to Bernie Tappel at

bamweb@embarqmail.com and he will get you signed up.

Check out back issues of BAM newsletter on www.bamsite.org. It now has a search feature to help you find old articles.

Ad Policy: Blacksmith related ads are free to BAM members. Personal ads will run for two issues. Resource ads are ongoing at my discretion. Send to BAMeditor2015@gmail.com, or call 636-359-1246

Hello folks,

Plans for the World War 1 Memorial to be forged by blacksmiths from around the world in Ypres, Belgium during the first week of September 2016 are bubbling along.

The best places to get up to the minute information are the Facebook page: https://www.facebook.com/poppycenotaph/ and the official site: http://www.ypres2016.com/.

One of the pieces of the whole event will be the making of 12 panels designed by anyone who has an idea connected to the First World War and enters the Design competition. Please, do not hesitate to contact me if you have an idea but are not sure of your drawing/design skills. We'll figure it out! See here for more info about the Design competition: http://www.ypres2016.com/design/panel-design-competition/

Another part of the event is the forging of the poppies, 2016 of which will be 'planted' around the base of the Cenotaph and while others will be used to help raise some of the 250,000 British Pounds needed to put on the event. I'm attaching an information sheet about some of the details on forging the poppies which is not included in the fine videos, see videos here: http://www.ypres2016.com/design/making-the-poppies/

And, of course, you can plan to participate in the actual event. Keep an eye on the website to get details on how to sign up as a delegate and work with some of the masters who will be forging their pieces for the panels in Ypres next September.

Any questions or suggestions or comments? Please send them to me kld310@earthlink.net or call 785-841-6271

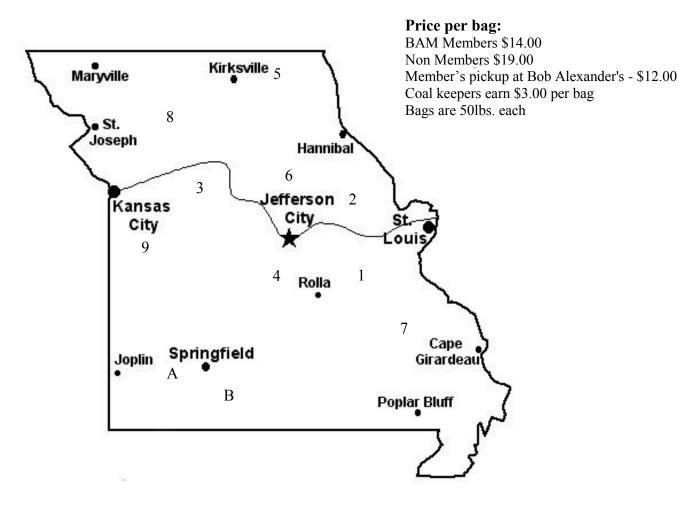
Cordially,

Kate Dinneen
US Coordinator Ypres 2016

Upcoming Events

November 27th 2015 Ken Jansen Hammer in, Moscow Mills MO January 1st 2016 Pat McCarty Hammer in, Washington MO 636-239-3814 January 9th 2016, - BAM Meeting, Andrews & Kirby Cooperage, Higbee, MO 660-456-7660 January 16 2016 - Newsletter content due. March 2016 - BAM Meeting Don Davis Braymer, MO 64624 (No date set yet) April 2nd and 9th 2016 MTS workshop, Eminence MO 573-364-7223 April 28th-May 1st 2016 Ozark Conference, Sedalia MO

BAM Coal Stations



- Bob Alexander (636) 586-6938
 14009 Hardin Rd.
 DeSoto, MO 63020
- Ken Jansen (636) 295-5844 2257 Carter Rd. Moscow Mills, MO 63362
- Doug Clemons (660) 595-2257
 29377 Durango Ave.
 Malta Bend, MO 65339
- 4. Jerry Rehagen (573) 744-5454 390 Bozina Valley Trail Freeburg, MO 65035

- 5. Joe Hurley (660) 379-2365 or (660) 626-7824 Route 1 Box 50 Downing, MO 63536
- Paul Lankford (573) 473-7082
 25849 Audrain County Road 820
 Mexico, MO 65265
- 7. Mob Maes (573) 866-3811 Route 1 Box 106 K Millersville, MO 63766
- 8. Fred Warner (660) 659-2406 cell phone (660) 247-1477 303 N 2nd Street Wheeling, MO 64688
- Bryan Lillibridge (660) 638-4536
 1545 NW 300
 Urich, MO 64788

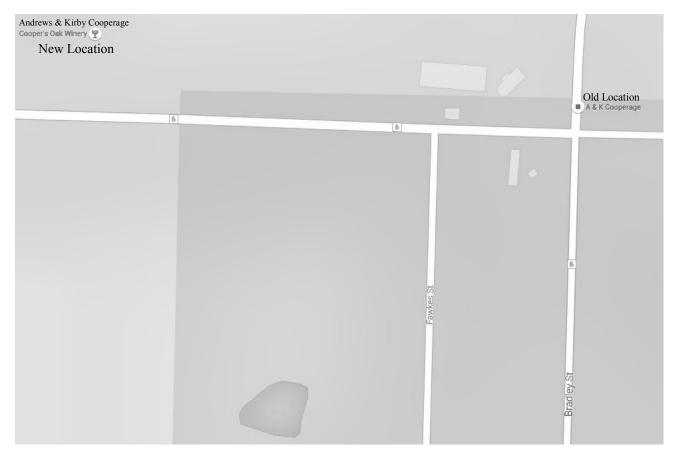
Non BAM Coal

- A. Tim Johnson, Springfield, MO 417-886-8032 \$.40/lb. check, \$.35/lb. cash. Bring your own containers.
- B. Good blacksmithing coal for sale \$13 per 50# bag with bulk delivery available. Matthias Penn Rt. 1 box 479-S Ava, Mo. 65608. (417)-543-2148. Or e-mail tytheblacksmith@yahoo.com.

BAM 2212 AILESWICK DR. ST. LOUIS MO 63129

Please send changes to Bruce Herzog, 2212 Aileswick Dr., St. Louis MO 63129 or e-mail to bjherzog@charter.net

Next Meeting: January 9, 2016 Dale Kirby, Andrews and Kirby Cooperage, Higbee, MO Ph: 660-456-7660



Trade item: Trade item is candle holder with cross. Food will be available.