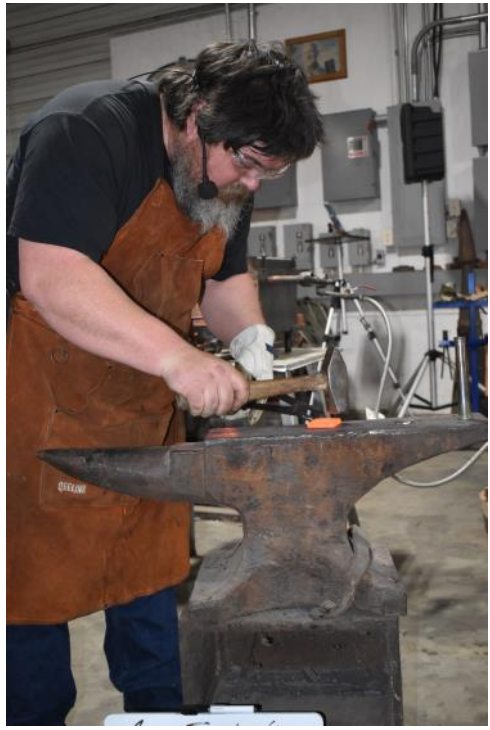


# RAM

January/February 2023



January/February 2023  
Volume 40 No 1

# Blacksmith Association of Missouri

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The Newsletter of the Blacksmiths Association of Missouri is published six times a year and is mailed to members of BAM. Editorial inquiries should be addressed to: Mike McLaughlin, 122 Milwaukee Ave., Lawson, Mo. 64062 816-296-3935 or send an email to: bameditor2015@gmail.com

The annual fee for regular membership is \$30/year; a portion of this amount is for a subscription to this newsletter for one year. BAM membership inquiries should be addressed to: Bart White 802 Maple Lane Macon Mo. 63552 bwhite10000@hotmail.com 636-226-8155

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## Membership Application

Name: \_\_\_\_\_

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New Member  Renewal  ABANA member  
\$30 per year

Are you interested in taking a class?

How did you learn about BAM?  
\_\_\_\_\_  
\_\_\_\_\_

Memberships are for one year from receipt of dues. Dues are \$30, which includes a subscription to the bimonthly BAM newsletter. Please make checks payable to Blacksmith Association of Missouri

### ABANA Membership Application

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Check here to be included in the searchable on-line 'Find a Blacksmith Directory'

Send this form in an envelope with your payment to:

BAM  
C/O Bart White  
802 Maple Lane  
Macon, Mo. 63552

I \_\_\_\_\_ hereby apply for membership in the  
Artist-Blacksmith's Association of North America and enclose  
\$ \_\_\_\_\_

MasterCard  Visa  Check/Money Order

Card Number

Exp Date:   
(Required)

Checks must be in U.S. Currency  
SEND RENEWAL TO:  
**ABANA Central Office**  
PO Box 462  
Johnstown, PA 15907-4817

(814)-254-4817  
[www.abana.org](http://www.abana.org) To join online.

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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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## Presidents Letter

Hello BAM Members, we had a great turnout at the February 4, 2023 meeting. I would like to thank Dale and Carol Kirby for hosting us again. As in past years, it was a great venue for winter and a large space for the number of attendees. Be sure to check out photos and demonstration information and meeting minutes in this newsletter.

BAM is doing well. Membership is consistently around 560 members and we are able to continue providing the same activities, events and resources without raising membership dues since 2015. How many things can you say that about? This could not have been done without the hard work of all the current and past Officers, Committee Members, and Volunteers. That is something we should not take for granted.

Stepping up to help each other is BAM's greatest attribute on its road to continued success. Whether it is Officer positions, committee member positions, conference volunteers, hosting meetings, etc. BAM needs your participation and you will find it rewarding. BAM is us. Interested in participating, please contact Officers or Specific Committee Chairs.

Remember to keep the rust off the anvil by using it.

Santo



### Editor Notes:

Abana has their new website up and running. There is a lot of information about the National Curriculum. Or you can just ask Don Anders, Matthew Burnett, or John Dilsaver.

Under the education tab is Controlled Hand Forging. It is a series of articles teaching the fundamentals of hand forging. These were published in the Hammers Blow Magazine. They also have some online classes. They have some youtube videos out there also. Get your clicking finger going and check it out.

The Conference is coming up and I am ready for it.

Don't forget to contact Ashley Farnsworth and let him know you would like to volunteer.

I hope you like this issue.

Mike M.

## **February 4, 2023 - BAM Meeting Minutes**

The meeting was held at the Kirby's Distillery facility in Higbee, MO. Special thanks to our Hosts Dale and Carol Kirby!

Bart White gave the Membership report. Several new members joined at the Higbee meeting and were asked to stand and be recognized. With the new recruits we are at 570 members.

Chris Miller gave the Treasury report. We had a lot of expenses in January and minimal income which was mostly from coal sales. Expenses included the annual insurance bill and we also paid for a load of coal in December. So our bank balance is a little lower than usual, but it should recover with the conference income and future coal sales. We have recently received word from Amazon that the Amazon Smile program is being discontinued as of February 20, 2023. Amazon will send us an extra quarter award based on our history as part of the program termination. Santo prepared the 2022 BAM tax return, and will file as soon as the IRS website is working again.

Santo mentioned that members should have received the conference flier by now and that he had notified 66 affiliates and Mike McLaughlin notified 13 affiliate newsletter editors of our upcoming BAM conference electronically.

Ashley Farnsworth gave the Conference report. If you didn't get a flier, let Ashley know. We have 54 conference registrations to date. The stained glass classes are full and other classes are filling up. Mike Gentsch is building a Tool Box for the conference raffle and we need tools (hand tools punches, chisels, etc.) to fill it. Bring them to the conference. We need volunteers for site captains to help the demonstrators in case they need anything. We also need volunteers for the gallery. Volunteers will receive free registration. Contact Ashley for site captains and Paul Talaski for gallery help.

Don Anders gave the MTS report. There will be two beginner blacksmithing classes at conference. This spring there are two Saturday classes coming up in Eminence (at Ray Scott's), and we're also expecting two Boy Scout engagements.

Don mentioned the ABANA NC (National Curriculum) and brought couple of example items of what is expected. If you have any interest in the NC program contact Don or Santo; ABANA is still making some subsidized offer to BAM regarding the NC program, but we would need interested blacksmiths in order to pursue that opportunity.

Matthew Burnett explained that there has been some interest in BAM having another grinder workshop. So far there has been 10 people express interest. The participant cost to build a 2" X 72" Belt Grinder with 2 HP motor with variable speed control and the moveable arms is estimated to be \$1500. We would need someone to lead the organization and execution of the event. It could be hosted at Matthew's Missouri School of Blacksmithing facility in Cameron if desired. If you are interested in participating in the workshop or if you want to lead that effort, contact Santo.

Santo mentioned that if you are interested in running for any BAM officer position (President, Vice President (2), Treasurer, or Secretary) to remember that Conference is when we hold annual elections. To run for office, you need to have been a member for two years. Santo also pointed out that at conference, he will complete his third year and if needed he's willing to serve one more year, but then he would step down. Presidents historically have not served more than three terms. And if anyone is interested, but would like to learn about the position, Santo will arrange for them to shadow him and include them in officer meetings and correspondence so they can learn about the job first.

Santo updated us on the website. We have been looking for someone to take over the site for the last year, but not yet found the right fit. We are trying to get online membership registration on the BAM website. Santo has been researching PayPal to enable online membership registration, but is having problems getting all the data to appear on their reports that is needed for membership information. We will continue to pursue the capability.

Santo listed upcoming events and indicated Bernie's Hammer In on Thursday July 27<sup>th</sup> is an Official BAM event.

Karen Bouckaert gave the library report. If you come to a BAM meeting and there is no table with books, that's because the library trailer is outside. You can check out the books in the trailer the same way that you do when they're inside. Please return checked out library books directly to Karen so they are sure to get checked back in properly. Feel free to donate books to the library. The library trailer will be on display at the conference, but not for checking out books as conference is too busy for that.

Steve McCarthy reported on the Forging Contest for Conference. He, Ken Jansen and Mark Lawson will run the contest this year. This year we will have a "blind" forging contest similar to last year, but this year we will have two levels: beginner and advanced competition.

Meeting adjourned!

### February 2023 BAM Meeting Iron in the Hat

Donated By	Won by	Item
BAM Library	Aaron Owen	Book: Metal Design 2002
Bill George	Steven Allen	Linseed/Beeswax Blacksmith wax
Paul Talaski	Christen Parker	Small Parts Caddy & pegboard
Karen Bouckaert	Mike Morton	Conference T-shirt & Doo Rag
Ken Jansen	Steven Allen	Stabilized Walnut
Fred Miller	Dan Wedemeyer	Gloves
Karen Bouckaert	Mike Morton	Book Ends
John Huff	Tom Moran	Horseshoes
Paul Talaski	Willy Bagley	Hand-crank Grinder
Dan Wedemeyer	Chris Bopp	(2) Leaf Springs
Karen Bouckaert	Bob Stormer	Plastic Buckets
John Sherwood	Dale Kirby	(Back) Scratcher
Chris Bopp	Willy Bagley	Briggs & Stratton Engine
Dennis 'Jake' Jacobs	Mike Morton	Pocket Knife Sheath
BAM Library	John Edwards	Cooler
John Murray	Denny Quinn	Tomahawk w/5160 cutting edge
Rick Meyer	Ken Jansen	Horseshoes
Ken Jansen	Dan Wedemeyer	Stabilized Walnut
Mike Morton	Ken Jansen	Hook Rule
Willy Bagley	Christen Parker	Saw Blade
John Schonfeldt	John Barnes	Sucker Rod
Bernie Tappel	V.J. McCrackin	Tongs
BAM Library	Rob Cotter	Book: Metal Design 2002
The Tappel's	Willy Bagley	Anvil Brand Tape Measure & Safety Glasses
Don Anders	Dennis 'Jake' Jacobs	Blacksmith's Jumbo Block Brush
Denny Quinn	Dale Cannon	Leaf Spring
Mark Lawson	Chris Miller	Safety Glasses, Socket Set & Misc. Metal
Hollis Harbit	David Rosemann	(1) Lot of 3/8 Rod
Mark Lawson	Chris Miller	Socket Kit
Mark Lawson	Steve McCarthy	Spade Drill Bits
Adam Ratley	Hollis Harbit	Railroad Steel Bar
Dennis Marshal	Bob Triphahn	Demo Piece – Door Latch
Willy Bagley	Scott Birdno	Quench Tank - Metal
Jeremy Howell	Steven Allen	Demo Piece – Mokume Gane
Bob Eckert	Dennis 'Jake' Jacobs	Disk Blades
Dale Kirby	Dan Wedemeyer	Quench Tank – Oak Barrel
<b><u>Atlas Knife and Tool</u></b>	V.J. McCrackin	Knife Maker Anvil

Thanks to Atlas Knife and Tool for their sponsorship of the Knife Makers Anvil!

## Pat McCarty's Headache Hammer-in Jan 1<sup>st</sup>, 2023

By Bob Stormer

The fog had pretty well enshrouded Washington, MO the early morning of January 1<sup>st</sup>, 2023, but there must have been a guiding light over the Washington Forge because the people just kept coming. The proprietor, Pat McCarty, was ready for them with a warm fire in the wood stove and three tables full of iron-in-the-hat bargains. He also had the coffee pots ready and donuts for the travelers. With the shop up to about 50% capacity, Pat lit the fire in the main forge and proceeded make his daily leaf, a ritual Pat performs every morning when he starts forging. As people filtered in, Pat began to demonstrate the project of the day, a heart riveted to a piece of T-bar stock. Before starting the demo, Pat had three helpers cutting stock to length for the project in the back room. After the demo, a handful of participants picked their stock and began following the example that would lead to very fine-looking heart, possibly a Valentine's Day gift for a spouse or friend. I think Mike McLaughlin will be documenting the demo in more detail.



In every corner of the shop, and there lots of corners in Pat's shop, I could see groups of three or four people sharing stories that were important to them in 2022. Even with the blacksmithing talent that most of them had, they were content to talk and listen in their various groups. At one point, I saw one of our most accomplished smiths helping a beginner with the hammering technique on the project. I'm sure that was not an isolated case. These are the people who make BAM such a great organization.

Part way through the day, Pat solicited help adjusting his Bradley power hammer from other smiths who had experience with Bradley hammers. When I watch this, I am convinced it's part of their blacksmith DNA to help others.



As is the custom for this "Headache Hammer-In," the food was wonderful. Pat donates the woodshop area of his shop to act as the cafeteria for the day. This year, roasters full of jambalaya and potato soup were the main course. Lots of other snacks and desserts contributed by attendees guaranteed nobody went home hungry.

The final group activity of the day was when Pat's sister, Karen McCarty Wright, use her photographic talents to guide everybody into a group picture outside of the shop. She seems to have a special knack for getting everybody to be visible and smile at the appropriate time. This photo by Karen gives you an idea of how many people were at the hammer-in. A few people had to leave early to take care of other family New Year's Day plans. I realize you can't pick out everybody in the photo, but if you go to the "BAM Gallery" on Facebook you can zoom in on the group photo and you'll find a lots of photos of the inside of Pat's very unique shop.

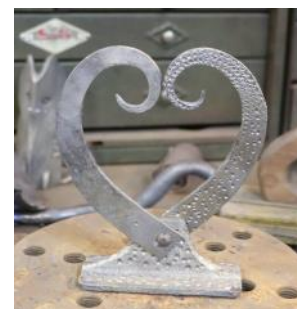
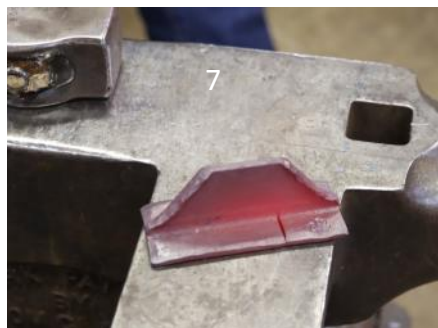
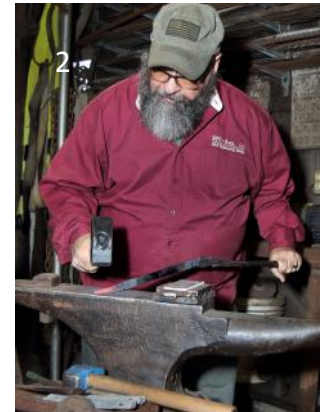








The project for Pat's Hammer in was a Heart shaped sculpture. He used about 9" of 3/16" x 3/4" flat bar, about 4" of T - bar and a rivet.(1) Draw out one end of the 3/4" bar to a long taper.(2) If you want the sides to be the same length mark the center of the bar and draw them out the same length. Start a scroll on the end to fit the bending jig he made.(3) Then heat and finish the bend in the jig.(4,5) You could do this free handed at the anvil also. Then do the same to the other end. Chamfer the edges or texture the piece however you would like. Cut the bar in half. You now have the two heart pieces. Pat then heated and hot cut the T-bar at about a 45 degree angle.(6) Heat and upset the edges to get rid of the sharp edge from cutting.(7) You can texture it however you would like. Drill holes and rivet the piece together. The nice thing about a project like this it really gives you a lot of personal freedom.









## Dennis Marshall Demo

Written By Mike M. Pics. Bob Stormer, Mike M. John Sherwood

Colonial Thumb Latch Norfolk Style. The design came from Jerry Darnell's Colonial iron works book. Dennis made a few small changes to fit his style.

He started with  $\frac{1}{2}$ " square bar 8" long. This will be the handle and hinge point for the latch. The slot punch for the latch was made from a reground cold chisel. The drift was made from  $\frac{3}{16}$ " x  $\frac{3}{4}$ " mild steel flat bar. If you are going to make a bunch of these a tool steel drift would be better. He marked the bar about 1.5" from one end to start the punched hole. Punch lightly at first to make sure you are in the center of the bar.(1) He said if you get off a little on one side you can stop and go from the other side to help get it centered. After you clear the slug you will heat it and drift it.(2,3) If you are still a little off you will have to drift it a few more times before you finish this piece.

He then started to set down where the "cusps" the flat area that will attach to the door.(4) Staying about  $\frac{1}{8}$ " of an inch from your slot on the near side of the anvil do half faced blows to set down the start of the cusp. Heat again and go to the far side of the anvil about  $\frac{1}{8}$ " from the slot and set it down.(5)

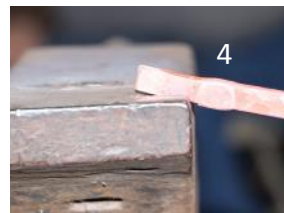
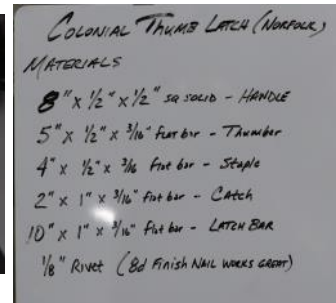
The long side will end up being the handle. Keep it straight. He set it down about  $\frac{1}{2}$ " the thickness of the bar. Before he went too far he used a fullering tool to fuller at the transition from the slotted boss to the cusp and handle.(6,7) It helps keep that area from spreading too wide. He then created the cusp on the far end of the handle. Set about 1" on the anvil and use half faced blows to set it down.(8,9)

Make sure you do it on the correct side. He finishes spreading out the cusps later in the process. It makes it easier to hold on to. Bring the thickness down to about  $\frac{1}{2}$  the thickness of the bar from this cusp to the slot. He then fullered it where the lower cusp meets the handle.



Using a cross peen, he spread the width of the handle. He went for a thickness of about  $\frac{3}{16}$ ". It needs to have a little taper from the top to the bottom. Bevel the edges of the handle area. Make sure everything stays in line.

Use some heat and the vise if you need to straighten and remove any twists. Then using a cross peen and a rounding hammer he spread out the cusp on the end of the handle that is nearest the slot. He made it kind of round. It finished about  $\frac{1}{8}$ " thick. It can be trued up using a file or belt sander. You can make the cusp any shape you wish. Then do the other end.(10) He heated up the boss area and using the vise with the jaws open just a little, drift the hole again.

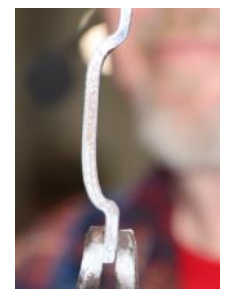
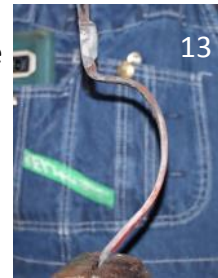




Once you have everything in line and cleaned up it is time to bend the handle. He heated up the end near the boss, clamped the boss in the vise held the far end with tongs and gave a few hammer blows to bend the handle out. (11,12) Heat towards the other end and clamp the cusp in the vise and give it a few hammer blows.(13) This should give you a nice curve. Adjust as necessary. Place it on a flat surface to get the cusps flat.(14) File and true up the slot in the handle. Drill holes to mount.



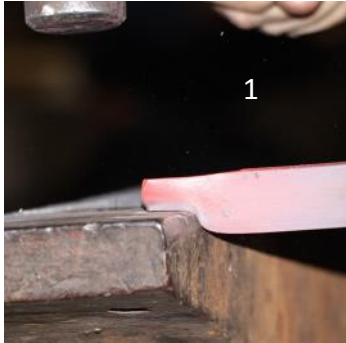
**Staple.**  $\frac{1}{2}$ " x  $\frac{3}{16}$ " x 4" long flat bar. It limits the travel of the latch bar. The It needs to have enough He had a jig he made to bend it easily. The top part of the jig was 2" wide and the bottom was 2- $\frac{3}{8}$ " wide.(15) You need to allow for the thickness of the material. This will give 2" of travel for the latch bar. Heat the entire piece place on top of the jig and center it place top of jig on this and hit it squarely.(16,17) Rotate it in the fixture and heat and do it again if necessary. Then heat and flare the ends out into a shape you like.(18) Drill holes to mount.



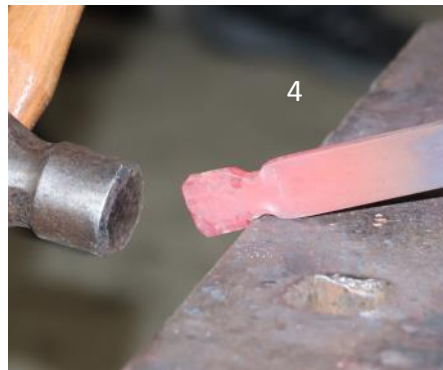
**Thumber.**  $\frac{1}{2}$ " x  $\frac{3}{16}$ " flat bar 5" long. Dennis makes his thumb piece a little larger than the book states. Set  $\frac{3}{4}$ " to 1" on the edge of the anvil.(19) Hammer down to create the thumb piece. Spread it out and round it.(20) This will be where your thumb presses on the latch so make it nice. Taper the other end.(21) Make sure to keep the same thickness. This must pass through slot in the handle. Roll a little curly Q on the end.(22) Make sure it fits through the slot also. This should end up about 7' long. This will fit through about a 1- $\frac{5}{8}$ " door. Different door thicknesses will require different lengths to operate correctly.



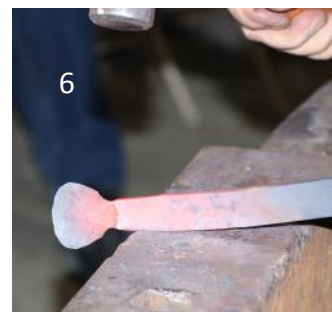
**Catch.** 1" x 3/16" flat bar about 2" long. He used a longer bar to have a handle to hold on to. Set about 3/4" on the edge of the anvil. (1) Hammer it down and make it about 1/2" wide. This is going to be a screw on style. Heat and use your hot to cut it off the bar.(2) You could cut it with a saw or angle grinder. Hold at about a 45-degree angle and cut it off. Clean up with a file or sander. This must have enough of an angle that the latch bar will slide up it when the door closes. Bend tab up in a "U" shape create the catch area for the latch bar. There needs to be enough space for the latch bar to drop in to. Drill holes to mount.



Latch bar. 1" x 3/16" flat bar 10" long. Fuller edges about 1" in from the end.(3) Round up the end and flatten it out a bit.(4,5) Make it however you like. Taper the bar for about 4" from the fuller to the full width of the bar.(6) Cut the bar off at 10". Dennis said the book said that about 8" long is all that is necessary, but he likes them about 10 " for what he does. Drill hole to mount.



File and clean up everything. Drill the hole in the boss of the handle for the rivet that will hold the thumber to the latch. Drill hole for the thumber. Then assemble all the pieces. There is a lot of fitting and filing to be done to get everything to fit and work correctly. This is in Jerry Darnell's book volume 1. This is a great reference.





## Jeremie Howell Demo.

Written By Mike M. Pics: Bob Stormer, Mike M.

Jeremie is going to show how he does Mokume. The most common type is nickel and copper. These two metals give a good contrast and are good for making patterns.

His first batch was made from a stack of quarters. He tied them together with a high temp wire.(1) If you have a tig welder you can weld the stacks together. He stacks

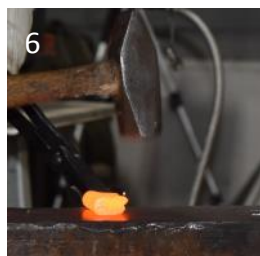
them on a post vise with a piece of masking tape.(2) He rolls them in the tape then wires them together. The quarters need to be clean. The tape will burn off. He makes sure to heat the stack evenly. He is going to set the weld with light hammer blows at the anvil. Jeremie uses coal when he makes it at home. The gas forge was not cooperating. It was oxidizing too much. The wire burnt off before the quarters were hot. (3)

His other method was using a 1" diameter piece of pipe with a bottom welded on it. He cleans then drops them in the pipe, heats it up, then uses a mandrel punch to lightly hammer them together in the pipe.(4) Once they are stuck together you can dump them out re-heat and finish flattening them out. The forge was still not cooperating. Still too oxidizing.

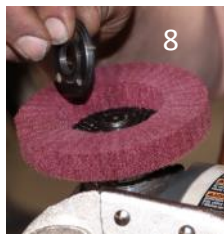
The quarters will have a liquid look to them when they are ready to weld together. Everything needs to be clean and fit tightly together to prevent oxidation in the middle. He also dips in kerosene sometimes to prevent this.



One more try. He had some sheet material that he had previously tig welded together. He brought that up to where it had a little liquid look to it and was able to hammer it together.(5) He repeated the heat and hammer together a few more times hitting a little harder each time. He then folded it over and welded that together to get more thickness.(6) He then drilled a few divot holes to create a pattern.(7) Then flattened it out again. After polishing it will have a kind of rain drop pattern. He used a scotchbrite type pad on an angle grinder to polish them.(8)



The keychain on the right was made from quarters.(9) He used a cut off wheel to cut a pattern in the billet. Then flattened it out and polished it. What I learned from this demo is that you need your material clean and your fire running right. It also takes



some practice to get everything right. Jeremie had figured out how to make it work at his forge but it just wasn't cooperating at an unfamiliar forge.

So give it a try.





# Trade Items February 4th. Door Knocker

Pics: Bruce Herzog



John Dilsaver to Jake



Jim Ratliff to Willy Bagley



Willy Bagley to Kurt Knickmeyer



Dale Cannon to Matthew Burnett



Jeremie Howell to Chris Bopp



Denny Quinn to Dennis Marshall



Mark Lawson to Bernie Tappel



Bernie Tappel to John Sherwood



Steven Allen to Jeremie Howell



Troy Albrecht to Melanie Knocke



Shaina Smith to Denny Quinn



Dennis Marshall to Dan Wedemeyer



Bill George to Troy Albrecht





Matthew Burnett to John Schonfeldt



John Schonfeldt to Dale Cannon



John Sherwood to Bill George



Scott Birdno to Garth Owens



Santo Giuffrida to Daniel Wedemeyer



Jake to Shaina Smith



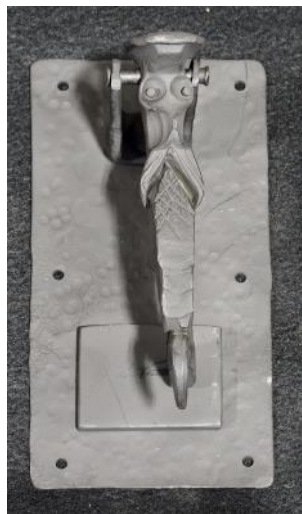
Chris Bopp to Jim Ratliff



Garth Owens to Steven Allen



Dan Wedemeyer to Mark Lawson



Don Anders to Santo Giuffrida



Daniel Wedemeyer to John Dilsaver (left)



Melanie Knocke to Scott Birdno



Kurt Knickmeyer to Don Anders



## Hydraulic pressbuild

The friendships forged in the July/August 2019 tire hammer group build, at the Mo School of Blacksmithing and hosted by Mathew Burnett, are still paying dividends for participants Dennis Jacobs, John Schonfeldt, Mike Morton, and John Dilsaver. These individuals just finished up work on a group build of four 25 ton hydraulic presses. This 3 1/2 day group build was held at John and Sandy Scholfeldt's home, forge, and shop just outside Ozawkie, KS. The build was Jan 17 – 20, 2023.

Planning for this began last year. We all intended to go to Texas for the ABANA conference in Denton, TX, but when that was canceled we all went to the Appalachian Area Blacksmith conference in Murfreesboro, TN. While looking at some presses at that conference we started having conversations among ourselves along the lines of "maybe we could build these."

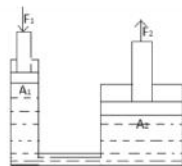
This was my (John D's) third group build with BAM connections. I've built a belt grinder, tire hammer, and now the hydraulic press. I've learned a lot in the group builds. My fabrication skills are better. What I plan to do here is to say a bit about the very basic physics of a hydraulic press, then look at a couple of the areas I learned about during this build, make a few general comments about group builds, and list some references one can go to for more information.

### Basic physics ideas:

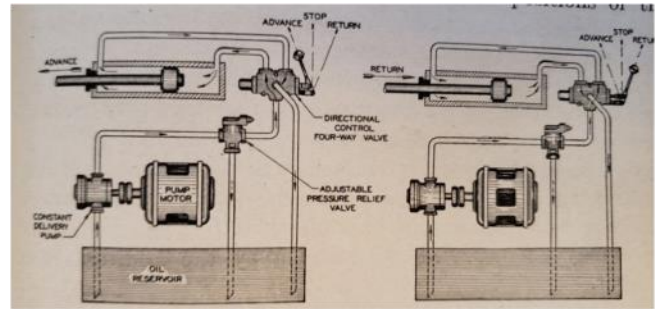
A hydraulic press in essence is like a lever. The principle of a lever is that a small force acting through a long distance can be converted into a large force acting through a short distance. For example, raising a car with an old style bumper jack lets human muscle power lift an automobile. This is just like the teeter totter we all played on as children. Personally, I generally played the role of the heavier child sitting closer to the fulcrum.



The hydraulic principle is similar to the lever. This is more like a hydraulic jack that one might use to lift their car, or another heavy piece of equipment. The fluid is incompressible and pressure is transmitted through the fluid. In the diagram, the small diameter piston moves a longer distance to raise the large diameter piston a smaller distance. For the hydraulic press the pressure is supplied by a pump, not a piston in a cylinder.



Next, here is the basic plan of a hydraulic system like our press. Much more complete info can be obtained from the two books listed at the end, online websites and videos, visits to our shops and the shops of more experienced BAM members. This diagram is from Henry Burghardt's 1946 Machine Tool Operation.



The pump we selected produces a maximum pressure of 2500 pounds per square inch. The cylinder is 5 inches in diameter. The cross sectional area of a 5 inch circle is just under 20 square inches. If these 20 square inches experience a force of 2500 pounds each,  $2500 \times 20 = 50,000$  pounds of force, and  $50,000/2000$  gives about a 25 ton force rating for this press.

### Things I learned:



Like prior group builds, I spent a lot of time drilling, tapping, cutting, grinding, and in this build, painting. Much of our build used new parts, but we were able to get surplus I-beams for the frame, and we ground off old paint, and painted the frame as a first step since many areas would be hard to paint after assembly. Jake was particularly impressed by Mike's choice of orange.



The first couple photos show the frames before and after painting.

The flexible coupler we used to connect the electric motor to the pump was new to me. The motor was bolted and then shimmed (with washers) to adjust the alignment with the pump.



The reader can google "L-jaw hub" for info on this type of connection. The pump bracket was welded after the alignment was checked by rotating by hand to decide when it was "good enough". It's important for the life of the pump that the motor/pump alignment is good.



I had wired a 220 plug before. Once. So wiring

this press was a good challenge for me. Jake and John threatened to rename me "sparky" if I got sparks when the switch was turned on. Happily, no sparks resulted.



Here is a view of the foot treadle used to control the valve which controls whether the ram is moving up, down, or not moving. We had a mix of left-handed and right-handed



members in our group. The first prototype, built for John S had a shorter foot treadle on the right. John is left-handed and would hold stock (tongs) in his left hand and press the foot treadle with his right foot.

Mike and I being right handed would hold the tongs right handed and press the treadle with the left foot, so this longer treadle was improvised. Jake is working on a foot pedal on a separate cable to control his press. The connecting tabs on the foot treadle and the valve control lever show examples of the many

small metal parts we cut and drilled along the way. Like with the tire hammer, it would be interesting to know just how many parts are in the entire machine. Our 3½ days of work

passed quickly, lots of stories, visiting, and jokes, not many of which I'm willing to commit to the printed page. I think I know who renamed Mike "Monkey Mike". We had a tremendous amount of fun.



### Group builds:

A first necessity in a project like this is to have skilled participants with professional grade welding skills. With John (not me) and Jake we knew we had those skills. Also, building a prototype first seems necessary, especially when a larger group will be present, to be able to keep people productive. Here, like at the tire hammer group build, a lot of work had been done prior to my arrival. Having equipment to lift, move, and turn the heavy frame elements is vital. When welding the frame elements John's equipment could lift or turn and position the frame elements so Jake wasn't welding out of position. Without this, the build really couldn't happen.

This surprised me, but we worked for 3 ½ days on this without having to make a single trip to a store for something we broke or forgot. That's not to say we never had a problem. When hooking up the hydraulic hoses from the control valve to the cylinder, we found one hose was – a small amount – too short. Initially it wasn't clear how big a problem this was. After some thought, we ground off the welds holding the valve mounting block to the frame,

moved it upwards maybe an inch, re-welded, and all was well. This difficulty and its solution took possibly 90 minutes of our time. It's amazing what a group of workers can accomplish in a few days, with good leadership (and good food!).

### Results:



Here is happy press builder Mike with two finished presses ready to head back to MO. We were fortunate with the weather. Snow began falling at my Sparta, Mo shop just as I was finishing getting everything back inside the shop after Mike had dropped me and the press off on his way back to Branson. The hospitality of hosts John and Sandy Schonfeldt was tremendous. We put in long days of hard work, and storytelling, and were fueled with excellent food and lots of it. Check out the type of spread Sandy laid out

for us at a typical meal. Sandy took such good care of us! I think Mike and I are ready to go back to Ozawie at any time.

John Dilsaver. 2.07.23



### References:

- Batson, James L. Build Your Own Hydraulic Forging Press. Batson Engineering & Metalworks, 1994.
- McDaniel, Randy. Hydraulic Forging Press for the Blacksmith. Skipjack Press, 2014

### Steel Source for knife makers.

A note on a possible new source of knife making material. On a recent trip to Branson Steel, Branson, MO, Mike Morton reports the owners were questioning him about what types of hardenable carbon steel knife makers might want. Their interest was stimulated by inquiries from patrons of the "Silver Anvil", a shop on the landing in Branson, where customers can forge a knife from a horse shoe or a railroad spike. Readers in the Branson area familiar with this shop might inquire. Mike reports this shop is very willing to sell drops, to cut material, and to let him browse around their storage area to see what material is available.



## Black Jack Gate Project

By Walt Hull Pics: Walt Hull, Kate Dineen

We had a very successful workday on Jan. 28 at my shop. The task was to build the posts for the gates and their supporting wings. The main posts which join the wings to the gate consist of a bundle of 6 pieces of 1-3/8" round, tapered and forged to a stylized seed head and held together by two pieces which also serve as the attachments to the wing on the one side and the gate hinges on the other. At the other end of the wings are two smaller posts, each a bundle of 3pcs 1" round bars, forged to a stylized blade of grass. The lower, functional part of each bar had to be straightened, and the upper, decorative part had to be curved. We got all of that done and the parts riveted together. There was a little tweaking to attend to yet, and the base plates need to be welded on, but the local crew can tend to that in preparation for our next workday on March 4. BAM was represented by John Sherwood and Don Anders, who made the drive from the East coast of Missouri, and by Walt Hull and Kate Dinneen. Bob Couture, Chelsea Brimer, Jake Jacobs, John Schonfeldt, and Oscar Wheeler were there from the Free State Blacksmith Club, along with Neil Taylor, of Lawrence and Emery Compton from the Black Jack Battlefield Trust.

The next workday is scheduled for March 4 at Walt's shop, where we will be finishing up the wings and making sure that all the attachments work. I have sent out an email to the list I have, but if anyone else is interested, please contact Walt or Kate.







## TUITION ASSISTANCE APPLICATION

Name:

Address:

Phone & Email:

What class or workshop do you wish to attend?

Where:

What is the Cost?

Tuition:

Travel:

Lodging:

Materials / supplies:

Briefly, describe how attending the particular class / workshop will advance your Blacksmithing skills and be helpful in promoting the craft of Blacksmithing. Identify the specific skills you expect to learn during this learning experience. (Additional pages if necessary).

I understand that as a requirement of receiving this assistance, I will be required to submit an article about the education experience attended with appropriate notes and diagrams of the items made or techniques learned in the class to the Tuition Assistance Committee to be reviewed and published in the BAM newsletter no later than 3 months after attending the class.

I will present a demonstration of the newly learned skills at a BAM meeting or complete a video to be placed in the BAM library within 1 year of the class.

One third of the total assistance amount will be awarded before the class, one third on submission of the article to the Tuition Assistance Committee, and one third after presenting the demonstration or video at a BAM event.

**I understand that I am responsible for payment to the school or workshop.**

The assistance is a reimbursement of the approved costs listed above of up to 1000 dollars.

Send tuition assistance applications to: Orry Harbit 217 Phelps Street Windsor, Mo. 65360 660-287-5917

Signature:

Date:



## Missouri Based Schools

**Beginner & Intermediate classes** are being held at Mueller Industries (via Craft Central), 12951 Maurer Industrial Drive, St. Louis, MO 63127

To see class listings or to register for classes, visit our website, [craftstl.com](http://craftstl.com)

For more information call 314-842-0796 or email; [Brendan@muellerstl.com](mailto:Brendan@muellerstl.com)

**Matthias Penn** is offering introductory & beginning blacksmith classes. 417-543-2148  
[Tytheblacksmith@yahoo.com](mailto:Tytheblacksmith@yahoo.com) Ava Mo.

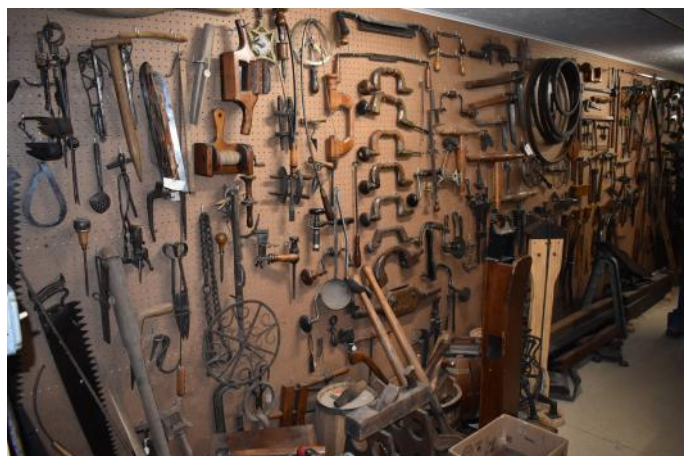
**Tong Making Class**-Weekend Course, 4 people per class - \$125 per person. Contact: Charles Comstock, Rt.1 Box 20, Deerfield, MO. 64741 (417) 927-3499, or (417)-321-2286 cell

**Oldschoolcrafts** Blacksmith School, Joe Davis 12625 Lawrence 1175, Mt Vernon, MO 65712 phone 417-461-0387 on the web [www.oldschoolcrafts.org](http://www.oldschoolcrafts.org) E-Mail [oldschoolcrafts@hotmail.com](mailto:oldschoolcrafts@hotmail.com)

**Classes Offered, The Farrier's Wife Blacksmith Shop.** 17332 EE Hwy. Ste. Genevieve, Mo. 63670  
Lisa Thompson 573-984-9013 See on Facebook.  
Email: [thefarrierswifeblacksmithshop@gmail.com](mailto:thefarrierswifeblacksmithshop@gmail.com)

**Missouri School of Blacksmithing.** Class prices, descriptions, prerequisites, and skill levels are in the catalog. Give us a call for more information, or to receive a catalog.

Matthew Burnett 3100 NW Winchester Road Cameron, Mo. 64429 816-575-2798 [mo-schools.com](http://mo-schools.com)



# Upcoming EVENTS

March 25th.2023-Meeting- Tom Kennon Blacksmith Shop. Doniphan Mo.  
Lunch Available. Trade Item: Anything with a Scroll

April 15th. and April 22nd 2023. MTS Classes day 1 & 2. Eminence, Mo.  
Contact Don Anders for info.

April 27th. - 30th. 2023 31st. Annual Ozark Conference. Sedalia, Mo.  
Demonstrators: Nick Rossi, Glenn Horr, Lisa Elias. Special appearance by Vernon Mesler on  
Thursday night.. See the BAM website for more info. Don't forget to send in your registration.

June 24th, 2023-Meeting- Meramec State Park Shelter 1  
Bring Lunch and Chairs. Trade Item: Without using an Arc Welder or Torch make a small  
metal container with a lid.

July 27th. Old Retired Guys and Anyone Who Wants to Take a Vacation Day Hammer In.  
Bernie and Patti Tappel hosts. 204 Hidden Valley Rd. Jefferson City, Mo. 65101 8:00am. To  
4:30pm. Bring a chair. You can bring a project to work on, or something to demonstrate if you  
can.

August 26th, 2023 - Meeting- Tami and Willey Bagley 9940 Rd. 2302, Chillicothe, Mo. 64601  
Lunch Available. Trade Item TBD

November 11th. 2023-Meeting- Green Welding and Sales 1464 SE County Rd. 15305, Apple-  
ton City, Mo. 64724 Lunch TBD Trade Item: TBD

Meetings start at about 8:30am. and go to about 2pm.





# Coal Stations

## Coal Captain: Mike Lanham

### Price per bag:

BAM Members \$18.00

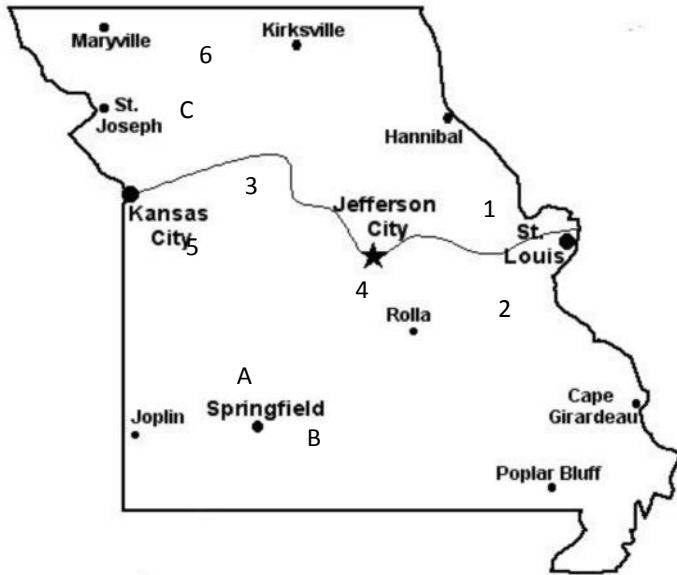
Non Members \$23.00

Member's pickup at Mike Lanham's- \$16.00

Non-Members pickup at Mike Lanham's \$21.00

Coal keepers earn \$5.00 per bag

Bags are approximately 50lbs. each



## BAM COAL

1. Mike Lanham (636) 614-5095  
2230 St. Paul Rd.  
St. Paul MO 63366  
After 5:00 pm M-F call for weekends  
and before you come. You can text also.
2. Bob Alexander (314) 708-0469  
14009 Hardin Rd.  
DeSoto, MO 63020
3. Doug Clemons (660) 631-1257  
29377 Durango Ave.  
Malta Bend, MO 65339
4. Bernie Tappel (573) 496-3793  
204 Hidden Valley Road  
Jefferson City, MO 65101
5. Bryan Lillibridge (660) 638-4536  
1545 NW 300  
Urich, MO 64788
6. Bill George (660) 247-0426  
19133 LIV 355  
Chillicothe, MO 64601

A few notes on our coal:

1) Not all coal is created equal. The coal we buy is from the West Virginia to Pennsylvania vein and is a high metallurgy grade unlike coal from other areas.

2) Raw coal from the bagging company is stored outside which allows it to get rained on, (rain is water which weighs 8.4 pounds to the gallon). If the coal is bagged wet and then dries out the weight will change.

3) The coal fines which when mixed with water to form a paste burns along with the chunks of coal but during shipping and handling may sift out of the bags causing a weight loss.

So, the bottom line to all of this is we are selling coal in approximately 50 pound bags.

## Non BAM Coal

- A. Tim Johnson @ Advanced Welding, Springfield, MO. 417-886-8032 - Pocahontas Coal \$.40/lb. cash, \$.50/lb. check/debit. Bring your own containers.
- B. Blacksmithing Coal for sale \$15 per approximate 50 lb. bag with bulk delivery available. Matthias Penn, Rt. 1 Box 479, Ava, MO. 65608. 417-543-2148. Or e-mail tytheblacksmith@yahoo.com.
- C. Coal for sale \$18 per approximate 50 lb. bag. Missouri School of Blacksmithing Matthew Burnett 816-575-2798, 3100 NW Winchester Rd., Cameron, MO. 64649

# BAM Tailgate

## Buy, Sell, Trade

### Individual Classified ads:

**WANTED:** A and P coal/coke firepot. If you have one or know where to get one contact Ray Scott, 417-255-5266 Eminence Mo.

**For Sale:** 200# Hay-Budden, 1-1/8" Hardy, Substantial tripod stand. Some hardy tools. Pics on website under tailgate. \$900.00 Rob Ahrens 573-221-7556 New London Mo.

### Commercial / Resource ads:

**Roller Blade Treadle Hammers** (Clay Spencer design) for Sale or Workshops led to build hammers. Bob Alexander, e-mail to [scruboak4@netzero.com](mailto:scruboak4@netzero.com), or call 314-708-0469.

**Tire Hammer Plans** by Clay Spencer Send Paypal for \$30 to [clay@tirehammer.com](mailto:clay@tirehammer.com) Or check/money order to 73 Penniston Pvt. Dr. Somerville AL 35670. I can mail a copy or email PDFs.

**Beverly Shear Blades Sharpened.** Remove blades and mail to Scott Kretschmer 196 Mule Deer Drive, Loveland, CO 80537. Include check for \$50 + \$10 shipping. Deep scratches and wrong sharpening may cost extra. [scott@kretschmershops.com](mailto:scott@kretschmershops.com), 970-567-2609

### Information / Education:

**Missouri School of Blacksmithing** Cameron, MO Instruction by Matthew Burnett Group and Individual classes offered. 816-575-2798

**Beginner & Intermediate classes** are being held at Mueller Industries (via Craft Central), 12951 Maurer Industrial Drive, St. Louis, MO 63127 To see class listings or to register for classes, visit our website, [craftstl.com](http://craftstl.com) For more information call 314-842-0796 or email; [Brendan@muellerstl.com](mailto:Brendan@muellerstl.com)

**Classes Offered, The Farrier's Wife Blacksmith Shop.** 17332 EE Hwy. Ste. Genevieve, Mo. 63670 Lisa Thompson 573-984-9013 See on Facebook. Email: [thefarrierswifeblacksmithshop@gmail.com](mailto:thefarrierswifeblacksmithshop@gmail.com)

**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

**Blacksmith's Journal**, Instructional back issues by Jerry Hoffman are available online at [www.blacksmithsjournal.com](http://www.blacksmithsjournal.com)

**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** Call for more information and to enroll: (928) 554-0700 or (888) 743-4866. [www.piehtoolco.com](http://www.piehtoolco.com).

**Matthias Penn** is offering introductory & beginning blacksmith classes. 417-543-2148 [Tytheblacksmith@yahoo.com](mailto: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](http://www.oldschoolcrafts.org) E-Mail [oldschoolcrafts@hotmail.com](mailto:oldschoolcrafts@hotmail.com)

**David Norrie blacksmithing school** in Colorado David Norrie 970-215-4666 [www.davidnorrie.com](http://www.davidnorrie.com) [www.forgewithintention.com](http://www.forgewithintention.com)

### 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>



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**Rochester Arc & Flame Center!** Featuring Blacksmithing, Welding & Glass Blowing, over 30 classes available for all levels of interest, [www.rocafc.com](http://www.rocafc.com) 585-349-7110

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US mail: 48182 SW 32nd Rd. Odell, NE 68415

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

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Dick Nietfeld [www.blksmith.com](http://www.blksmith.com) Phone (308) 384 1088

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**Holland Anvil**

Anvils, Swage Blocks, and more.  
[www.hollandanvil.com](http://www.hollandanvil.com)

**Atlas Knife & Tool**

Anvils, Forges, Supplies. <http://www.atlasknife.com>

**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. 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](mailto: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](http://bamsite.org) or send an E-Mail to Terry Humphries at [thumphr@south40.org](mailto:thumphr@south40.org) and he will get you signed up.

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](mailto:BAMeditor2015@gmail.com), or call 816-296-3935

**BAM**  
P.O. BOX 127  
DONIPHAN, MO. 63935

Please send changes to Chris Miller, P.O. BOX 127 Doniphan, MO 63935

## Next Meeting: Saturday March 25th, 2023

**Hosted By:** Chris Miller at The Tom Kennon Blacksmith Shop  
200 Franklin St., Doniphan, Mo. 63935

Lunch available. Trade Item: Anything with a Scroll

