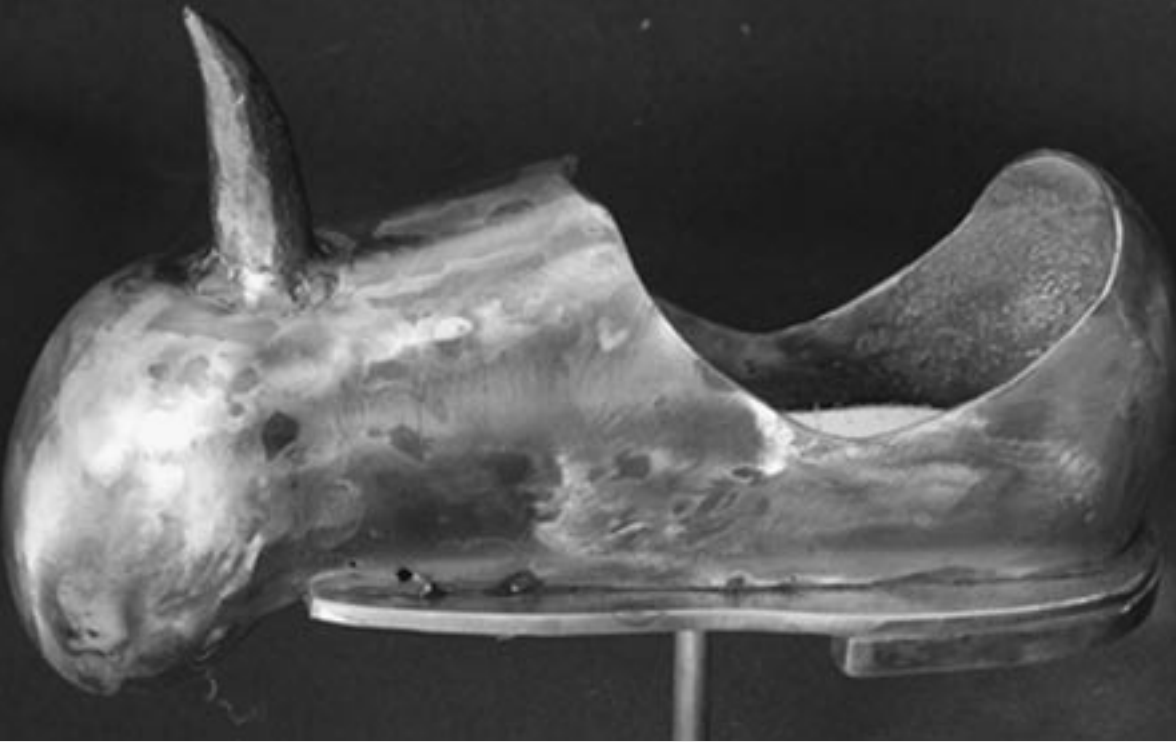


RAM

JULY/AUGUST 2012



Pat McCarty's twist on the trade item

Contents

Editorial	5 From the Editor
Ham's Prairie, MO	6 Minutes from June 2nd meeting
The Prez Says	7 Doug Clemons' President's letter.
Shovel Blank	8 Bernie Tappel shovel blank demo
Shovel Form	9 Bernie Tappel shovel form demo
Pipe Hawk	11 Bernie Tappel makes a pipe hawk from a gun barrel.
Shoe Horns	14 June trade items
Pattern Welding	16 Ron Duncan makes pattern welded steel
Family Project	18 Bill and Jake Briggs make a special knife
Blacksmith news	19 Ned Digh reports on Mid-MO activities
Lesterville, MO	22 Minutes from the July meeting
Stop Tips	23 Three tips to make your shop better.
Classified Ads	24 Ads - Personal / Business
Coal map	26 BAM Coal locations.
Scheduling	27 Upcoming Events and new members.



July Demonstrations Pg 21



July Trade Items Pg 20



No room for ABANA news, sorry



COAL Map pg 26



Meeting Map pg 28

**Newsletter of the
Blacksmiths
Association
of Missouri**

Volume 29 No. 4

July-August 2012

Editor

Bob Ehrenberger

Contributing Writers

Don Anders
Bernie Tappel
Ned Digh
Sean McGrath
Bill Briggs

Photo Contributions

Bob Ehrenberger
Bruce Herzog
Bernie Tappel
Ned Digh
Sean McGrath
Bill Briggs

President's Message

Doug Clemons

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 membership is \$25/year; a portion of this amount is for a subscription to this newsletter for one year. Editorial inquiries should be addressed to: **Bob Ehrenberger 6192 Hwy 168 Shelbyville, Mo 63469; (573)-633-2010 or send e-mail to bameditor@centurytel.net** BAM membership inquiries should be addressed to: **Bruce Herzog, 2212 Aileswick Dr., St. Louis, MO 63129; (314) 892-4690 or send e-mail to bjherzog@att.net.** Occasionally some material will be copyrighted and may not be reproduced without written consent by the author. BAM welcomes the use of any other material printed in this newsletter provided the author and this organization be given credit.

Membership Application

Name: _____
Address: _____
City: _____ State: _____
Phone: () _____ Zip: _____
E-mail: _____

New Member Renewal ABANA member?

Are you interested in taking a class?

How did you learn about BAM? _____

Memberships are for one year from receipt of dues. Dues are \$25, which includes a subscription to the bimonthly BAM newsletter. Please make checks payable to Blacksmith Association of Missouri.

ABANA Membership Application

Primary ABANA Chapter Affiliation: _____

Name: _____
Address: _____
City: _____ State: _____
Phone: () _____ Zip: _____

New Member Renewing Member

Includes a Subscription to the Anvil's Ring and The Hammers' Blow magazines

- Regular Member\$55 yr.
- Senior Citizen (Age 65+)\$50 yr.
- Full time student\$45 yr.
- Overseas airmail\$80 yr.
- Overseas surface mail\$65 yr.
- Contributory\$100 yr.
- Public library\$45 yr.

See reverse

Send this form in an envelope with your payment to:

BAM,
c/o Bruce Herzog
2212 Aileswick Dr.,
St. Louis, MO 63129

I _____ hereby apply for membership in the Artist-Blacksmith's Association of North America and enclose \$ _____ as my annual membership dues for one year.

MasterCard VISA Check/Money Order

Card Number _____
Exp. Date _____
(Required)

Checks must be in U.S. currency
SEND RENEWAL TO:
ABANA Central Office
259 Muddy Fork Rd, Jonesborough, TN 37659
Dues Distribution:
1 year subscription Anvil's Ring: 68.5 % \$24
Adm. offices & other ABANA projects (Conferences, etc.): 31.5% \$11



Officers:

President
Doug Clemons

1st Vice President
Fred Arnhold

2nd Vice President
Phil Cox

Secretary
Don Anders

Treasurer/Membership
Bruce Herzog
Treasurer/Conference
Kent & Deanna Harbit

Web site
www.bamsite.org

Web Master
Bernie Tappel
tappel@embarqmail.com

Scholarship Chair
Larry Hults

Mobile Training Station
Denis Yates

Librarian
Karen Bouckaert

Conference Chair
Mike McLuaghlin

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. BAM's newsletter'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.

The Newsletter of the Blacksmiths' Association of Missouri and its members do not manufacture, distribute, sell, test, warrant, guarantee, or endorse any of the tools, materials, instructions or products contained in articles or features in the Newsletter of the Blacksmiths' Association of Missouri. The Newsletter of the Blacksmiths' Association of Missouri disclaims any responsibility or liability for damages or injuries as a result of any construction, design, use, manufacture or other activity undertaken as a result of the use or application of information contained in any articles or features in the Newsletter of the Blacksmiths' Association of Missouri. The Newsletter of the Blacksmiths' Association of Missouri assumes no responsibility or liability for the accuracy, fitness, proper design, safety or safe use of any information contained in the Newsletter of the Blacksmiths' Association of Missouri.

From the Editor

By Bob Ehrenberger

The weather went from nice to hot way too fast. I think 10 days in a row over 100 qualifies. I've even gone to only working in the shop in the mornings, and working on the newsletter in the afternoon. I'll have a good jump on this issue by the time the weather breaks.

We had a great meeting at Ned Digh's. Bernie Tappel was the featured demonstrator, and he worked his tail off. He demonstrated both before and after the noon break. We had good participation in the trade item and everyone did a nice job. As they say, we did ourselves proud. Esther put on a nice meal and again they took donations for the local food bank.

The big news this summer is that Bernie Tappel has taken over both the web site (Bamsite.org) and the news group (Around-The-Anvil). He added a sign up link to the web site and we have had a really active news group. Lots of good information and a little humor has been shared. If you don't belong to Around-The-Anvil you are missing out. You can sign up by sending Bernie an e-mail or using the link on Bamsite.org.

I got this correction from Walt on my write up in the last newsletter. Bob, I do have a couple of small notes on handrails. The height of a handrail, according to code in most jurisdictions, needs to be no less than 34" and no more than 38". A guardrail, in residential work, usually has to be no less than 36". So if a handrail is also a guardrail, you'd probably build it at 36". Also, if the handrail is not also a guardrail, that is, if it doesn't have to prevent people from falling off a drop off, it doesn't have to meet the 4" ball rule. All it needs is the top rail and some support (posts, wall brackets, etc.).

I'm glad I was able to keep you busy
May-June 2012

enough to make you miss a couple of small details. (Or maybe I just mumbled!)

Walt

Joe Wilkinson's family had a sale the week after conference and sold most of his blacksmithing equipment. They then had someone come in a couple weeks later and make an offer to buy all the odds and ends that were left.

In a similar vein, Mara Harper has been selling Ed's stuff. If you were on Around-The-Anvil you would have known about it. Bernie posted a list of equipment for sale on Bamsite. The response has been good and most of the bigger items have been sold. Mara is going to



have an auction this fall to sell what is left. The date as of now is October 13th, if there is a change it will be publicized on Around-The-Anvil. So get signed up so you don't miss any important happenings at BAM.

I said it before and nothing has changed, I have only gotten one inquiry on my MTS (Mobile Training Station) class this October. I know that it seems like a long ways away, but this may be the last newsletter between now and then to publicize it. The last time I had an MTS class (almost 10 years ago), I only had one student. It was a bit discouraging. It is my feeling that the MTS program is a service to BAM members and the host shouldn't have to go out

and drum up students outside the group. Since I'm not doing as many demonstration events, I really don't have that much contact with the general public these days. So once again, if you are interested in taking the beginner's class, please contact me.

I have a new project, which you may hear more about in future newsletters. Last winter I stopped at an Amish harness shop to get some neatsfoot oil, (I was tanning a deer hide). I saw this broken anvil sitting next to his driveway. Well, there was a recent thread about anvil repair on Around-the-Anvil and it got me thinking about the broken anvil. After some small talk I was able to get it for \$25. It's a Hay-Budden and about 150 lbs. as it sits. There are no weight marks on it, but the dimensions are very close to the 172lb. Hay-Budden that I use every day. If I can find the right piece of steel I plan on forging a new heal and welding it on. If not, I may have to build it up in sections.

I just got a post card from the Missouri Arts Council and they are taking applications for the next apprenticeship program. There are three ways to get started: call Deb Bailey at 573-882-3653, send an e-mail to BaileyDA@missouri.edu, or go to <http://maa.missouri.edu/mfap>.

The Blacksmiths Of Arkansas (BOA) want to do a Tire Hammer Build. They thought that if the joined forces with BAM it would help to keep the price down. If you are interested in a Tire Hammer Build, get in touch with: Joe Doster, jdoster@windstream.net, (870) 688-7630

The next Newsletter submission deadline is September 15th.

BAM MEETING FOR MAY 2012

hosted by Ned and Esther Digh

Minutes by Don Anders

Treasurer's Report given by Bruce Herzog, current membership 528, we made some money on the conference, final figures are not in yet.

Boy Scout camp volunteers needed, please contact Dennis Yates at 573-480-7737.

Bernie Tappel has added a link on the BAM website to join BAM's AROUND THE ANVIL NEWS GROUP.

A motion was entered and passed to increase the price of BAM coal to nonmembers to \$5 above member price.

Karen gave a report on the BAM Library, new books were purchased at the conference and added to the library. There have also been donations of books to the library. Everyone please thank Jerry Hoffman for his donation of Black Smith Journals, they are in binders and in the library now.

Phil Cox has stepped up to cover the position of 2nd Vice President.

Mike Gentsch gave a report on the MTS trailer, he put several days work into it and has it up to speed again. Please if you pull the trailer, check the tire pressure and such, please if any problems are noticed, report them to the MTS committee or a BAM officer so that we can keep the trailer safe.

A Note from Ned & Esther;

Thanks to all that helped restore order today, the shop and eating area was left in the best condition of any previous meeting.

Good demo, good crowd, and lots of fun. Same time next year!

Ned & Esther

P.S. Esther says thanks to all the ladies that helped with the food and cleanup.

IRON IN THE HAT

DONATED BY

Mike Gentsch
Ned Digh
Mike Gentsch
Scott Stager
Don/Karen
Bernie Tappel
Chris Miller
Don Birdsall
Karen Bouckaert book
Randy Hughes
Fred Arnold
Jeremiah Strode
Esther Digh
Colin Ward
Matthew Burnett
Bob Alexander
Don Anders
Bernie Tappel
Bob Alexander
Don/Karen
Bob Alexander
Don/Karen
Bernie Tappel
Mark Lawson
Don Nichols
Don A

ITEM

sander brush Bernie Tappel
? Bernie Tappel
wire brush Mark Clifford
my grip Don Nichols
Copy 149 BJ Chris Miller
Shovel Blank Dennis Quinn
Harrow Spikes Tom Lutz
Layout Tape Don Anders
New Edge Anvil Mark Clifford
Jack hammer pt Jeremiah Strode
Ass. screws Tom Lutz
? Chris Miller
? Chris Miller
spring Don Anders
RR spikes Tom Lutz
hammer Dennis Quinn
weekly planner ?
dogwood flower Mike McLaughlin
Scroll Jig Mike Gentsch
copy 132 BJ Fred Arnold
Tongs George Rexsis
copy 134 BJ Don KA
Tomahawk Karen Bouckaert
? Don Nichols
cowboy comm. Karen Bouckaert
Garden Mushrooms Rick Meyer

TRADE ITEM: SHOE HORN

MADE BY

Doug Clemons
Chris Miller
Bernie Tappel
Dennis Quinn
Mike McLaughlin
Don Nichols
George Rousis
Mike Maddox
Larry Lutz
Phil Cox
Colin Ward
Jack Nettleton
Tom Patterson
Steve McCarthy
Bob Ehrenberger
Bob Stormer
Pat McCarty

WON BY

Steve McCarthy
Pat McCarty
Phil Cox
Mike McLaughlin
Mike Maddox
Mark Lawson
Dennis Quinn
Doug Clemons
Bob Ehrenberger
Bernie Tappel
Chris Miller
Colin Ward
Jack Nettleton
George Rousis
Larry Lutz
Tom Patterson
Bob Stormer

President's Letter

Greetings again.

I just returned from the July meeting in Lesterville, MO. Thanks again to our host, Bonnie Hendrickson. There was a really good turn out. I didn't get a head count but there was a good crowd. There will be more about the meeting in another part of the newsletter.

It is now mid-late July in the heartland. Lately the big topic is the heat. We have had several days above 100 degrees and many more in the upper 90's. It really has been uncomfortable to work in. I know some of you have been demonstrating at fairs and shows in this heat and that can really be a challenge. I do hope everyone is careful and trying to stay hydrated.

Our e-mail group has grown a lot in the last couple of months. We have had a lot of new members to the group. It has been a lot more active lately and serves as a forum for mostly blacksmith related issues or gossip or just picking on someone, good naturedly, of course. If you are not aware of what it is or how to join check it out on our website. Just click the tab about the 'Around the Anvil' news group. Bernie Tappel is our new administrator and can help you sign up.

I just got an update from Denis Yates about the Boy Scout blacksmithing project at Camp Hohn. During the first week 12 scouts earned a merit badge with 3 advance scouts and 2 adults in the afternoon. The second week 21 scouts earned a merit badge with 3 advance scouts and 2 adults in the afternoon. I understand that the camp is planning to build a blacksmith shop on site in the future. A lot of work goes into a project like this and they can use some help. If you are interested in helping, contact Denis Yates.

A lot of BAM members were able to attend the ABANA conference in Rapid City, S.D. recently. It sounds like everyone has made it home safely. I wasn't able to go, but it sounds like we were well represented. I understand that there may have been as many as 30 BAM members there. Some information was passed around via our e-mail group from those that were there. It would have been a good time. I'm sorry I missed it.

The Missouri State Fair is coming up as I write this. It may be over by the time you read it, but it is always a good time. For those who may not know, BAM has a tent there and volunteers demonstrate during the day. It's a casual atmosphere. If enough members are there it's a pretty leisurely pace and you get to work with other members one on one while you're demonstrating. Our State Fair coordinator is Kent Harbit.

Our next meeting is at Fred Arnhold's shop just outside of Bates City, MO. Bates City is located right on Interstate 70 East of Kansas City. I hope to see you there.

Be careful working and playing.

Doug Clemons

Bernie Tappel shapes a Shovel By Bob Ehrenberger

When I got to Ned's, Bernie was already hard at it making the working end of a shovel. The straight bends had been done cold so Bernie had clamped the blank to his form in the vice and was heating and bending the curved section of the shovel. To do this he heated the 16 ga. sheet metal with an O/A torch, when it was hot, he would hammer it down to conform to his form. He had to go over the whole surface a couple times to get all the wrinkles and puckers out, but the process only took about 5-10 minutes.

Bernie said that because the form is made from much heavier stock, if you like you can clamp the sheet metal to the form and put the whole thing in the forge to heat. Just make sure that you take it out as soon as the sheet metal is hot to avoid excess heat on the form.



Left, the finished shovel blank.

Right, the shovel form Bernie brought from home.



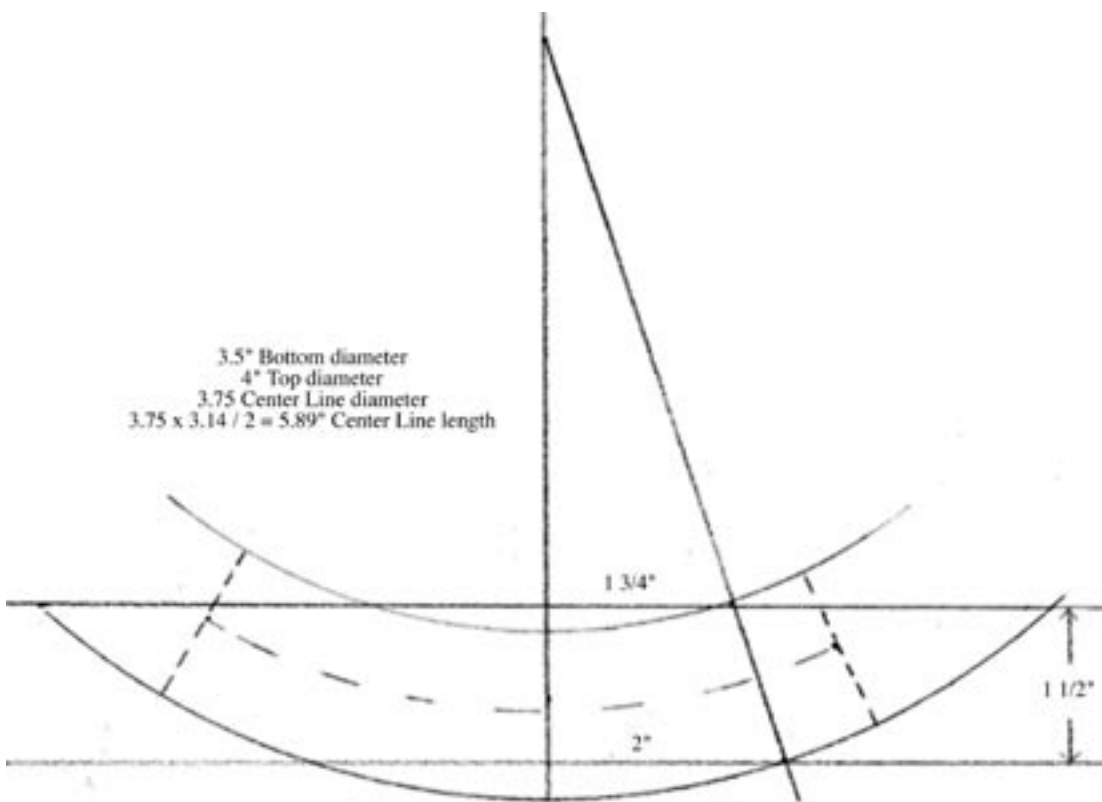
Making a Shovel Form

by Bob Ehrenberger & Bernie Tappel

I didn't catch all the details at the meeting so Bernie was kind enough to explain it to me again later. The shovel form has a compound bend so you have to bend it twice. First, you bend it the hard way to match a pattern, which we will explain shortly. Then you bend it the easy way around a pipe form.

Assuming a 4 inch bottom and 4 1/2 inch top on the form with 5 inch straight sides, this would be the form to use. Note that these measurements are on the outside of the form as that will be the inside dimensions of the finished shovel. Bernie used a 3 1/2 inch round jig to bend the shovel form around, so 3 1/2 inches plus two thicknesses of the stock equals the 4 inch diameter of the bottom of the form. Since we are bending around the 3 1/2 inch jig, we used the inside measurements of the shovel form to calculate the curve (3 1/2 inch bottom, 4 inch top).

Developing the pattern is the hardest part of the process. You start with a horizontal line with an vertical line intersecting it in the middle at a right angle. A second horizontal line is drawn up the width of your stock, Bernie used 1/4 x 1 1/2, so go up 1 1/2. On the top line, mark a point equal to the smaller radius. On the lower line mark a point equal to the largest radius. Then draw a line through these points, it should intersect the vertical line. This intersection



is the pivot point used to draw an arc of the bend. You need to use a compass or a string to draw your arcs. To figure how far the curve goes you have to figure the circumference of center line and mark 1/2 on the center line. Since the small diameter is 3.5" and the large diameter is 4", the diameter of the center line would be 3.75". So your calculation would be, $(\pi \cdot 3.75) / 2 = 5.89$ " of material in the curve. Measure out this distances on a string or a wire and then bend it to match the curve and mark where it ends on each side. This completes the curved part of the pattern.



The pattern is not complete until you add in the straight section that would go down the sides of the shovel blank. In this case you need to add a 5" straight section to each side. The final pattern will look like the bottom diagram.

To calculate the length of the bar, add all the segments together. $5+5+5.89=15.89$ "

Continued on page 10

Making a shovel form, *continued from page 9*

Notes from Bernie: I forgot to add that I do the length calculations on the straight piece and mark everything with a center punch before I start bending the arc. Also, mark the center of the stock, so you have a reference point when you bend the form the second direction around the round form. So I have 3 sets of punch marks to watch while I am making the bends.

Note, that I did not weld the cross pieces on the demo piece, as I didn't think that was important to the demo and form that I used to make the shovel already showed that. But I always weld a piece across both sides of the bottom so it can be clamped in a vise when you are using it. I use the same size stock 1 1/2 x 1/4 for the cross pieces.



Above, bending the bar on edge to match your pattern.



Bending the bar the easy way around the round form. The taper on the back, and slant on the sides just happens naturally because of the first bend.

Below, the finished form. Make sure the slant on the sides have the same angle. A brace between the legs will be added later.



Bernie Tappel makes a Pipe Hawk By Bob Ehrenberger

Something that is always a good seller at rendezvous and black powder events is a tomahawk made from a black powder gun barrel. Bernie got a bunch of old barrels at an auction, but said they can be found for sale at most black powder events or swap meets.

You need to slit the first 4" to 4.5" of the barrel. Bernie said that he has tried to do this with a hot cut but the barrel tends to collapse making the process harder. So he now cuts them on a band saw before he starts.

The barrel is fullered about an inch past where the cut ends. Don't worry about closing up the hole completely, as you will probably have to drill it out at the end anyway. The hawk is kept connected to the barrel through the

whole process, so he can use the barrel as a handle and not have to use tongs. Make sure you plug the open end of the barrel to keep the heat down at the working end.



The split part is now opened up and flattened out. It is tapered at the very end so that it blends in with the cutting bit. You also start to pull the blade down at this point to make it easier to have a bearded blade at the end.

Once it is flattened, start the eye over the end of the horn. Try to get a curve that matches the fat side of the handle drift.



Continued on page 12

Making a pipe hawk, continued from page 11

Shape the eye by wrapping it around your handle drift. You need to mark your drift ahead of time so you know how to position it in the hawk. There are several places to buy hawk handle drifts or you can make your own.

Try to close the eye up as close to the drift as you can by using the edge of your hammer and placing the hawk at the edge of the anvil.



Once the eye is closed up tight on the drift, clamp it in the vice with the open end up and pry open the end to ready it for the cutting bit.

The hawk can be set aside for now while you prepare the cutting bit. Because the barrel is made from mild steel or even wrought iron, it will not hold an edge. In order to improve the quality of the edge you need to weld in some good steel. A piece of a farrier's rasp is a common choice for this.



1 1/2" to 2" of the rasp as cut off and tapered on one end so that it fits up inside the open end of the hawk.

Bernie left this bit pretty square, but said that he would normally forge or trim it to match the curve of the hawk body. The bit is now set aside to cool while the hawk is reheated.



The cold bit is inserted in the hot hawk and the hawk is hammered to close it on the bit. Because the bit is cold, its file teeth will dig into the surface of the hawk, making it a better, stronger joint.

Continued on page 13

Making a pipe hawk, continued from page 12

Now that the bit is physically attached to the hawk, it needs to be welded. The whole thing is put in the fire and brought up to welding heat.

The bit is welded first to make sure there is no chance for it to move.

Once the bit is welded it's corners are forged back to the contour of the hawk body.



Now that the bit is welded and shaped, the rest of the hawk body is welded. Bernie uses a set hammer and the edge of the anvil to get it welded right up to the eye. Terry Smith strikes while Bernie holds the set hammer.



The blade is now spread and thinned to its final shape. Note, all work is done at a welding heat, to reduce the chance of damaging the weld.



Once the blade is shaped it is straightened. The whole hawk is heated, the blade is clamped in the vice and the drift is inserted to make sure that the eye has not been distorted and is straight with the blade.

The hawk can now be cut off of the barrel, leaving enough barrel to make the pipe bowl. The hole is drilled out and the blade is cleaned up with files or a grinder.



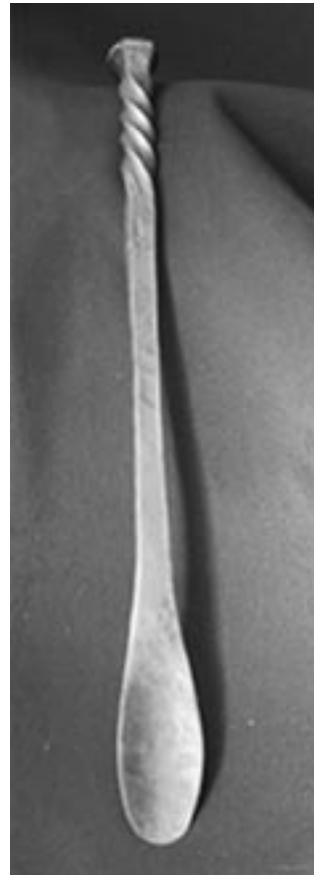
June Meeting Trade Items



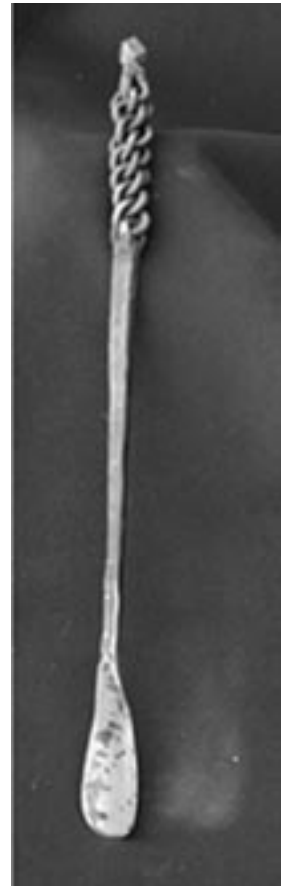
Bernie Tappel



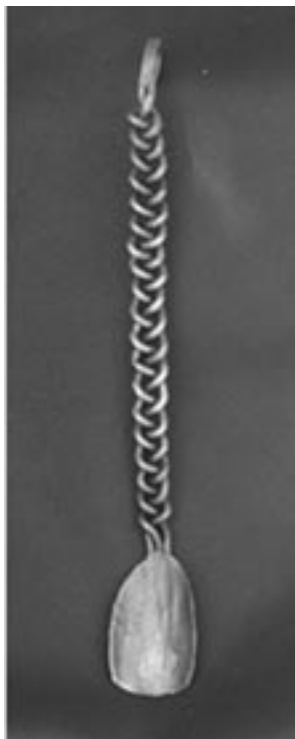
Mike McLaughlin



Doug Clemons



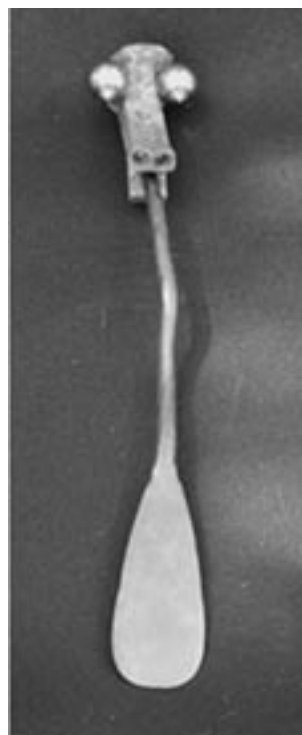
Don Nichols



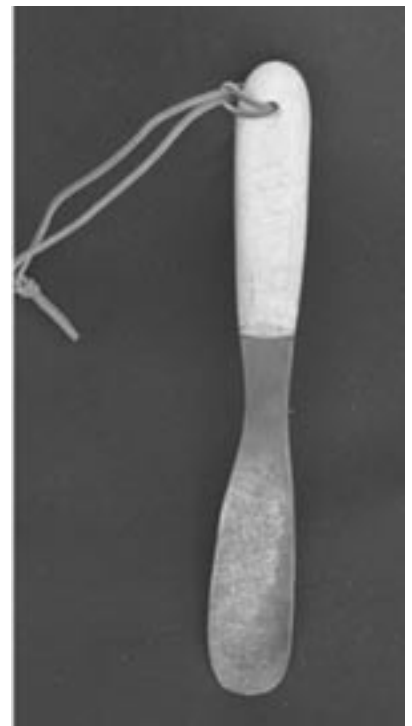
Jack Nettelton



Steve McCarthy



Larry Lutz

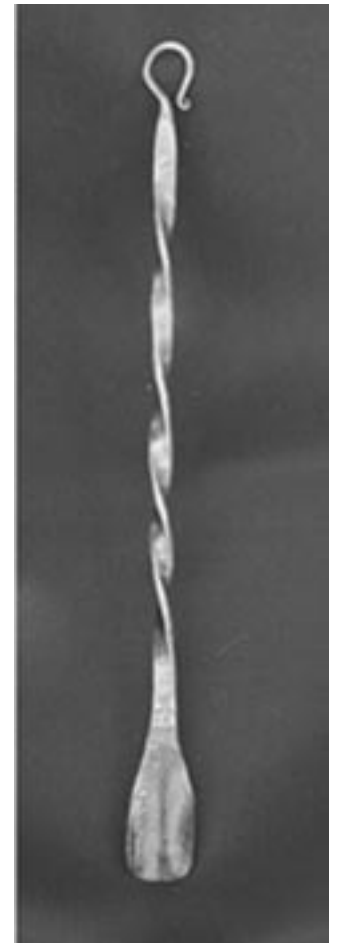


Colin Ward

June Meeting Trade Items



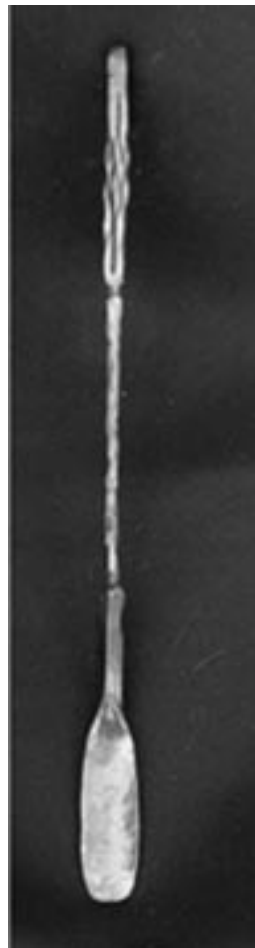
Pat McCarty



Bob Stormer



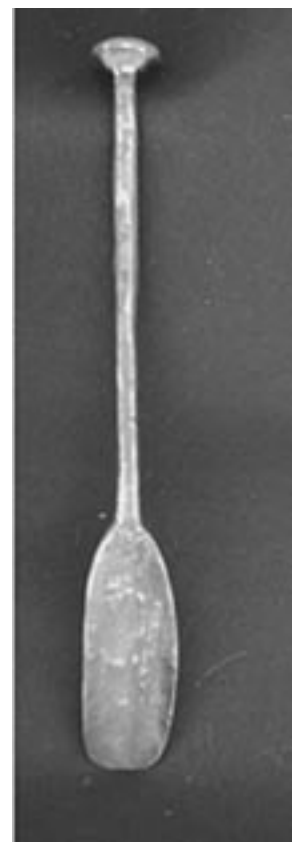
Mark Lawson



Chris Miller



Phil Cox



Bob Ehrenberger

Pattern Welding, with Ron Duncan

By Sean McGrath

At Corbin Newcomb, and Ron Duncan's recent Hammer-In, I photographed Ron's process as he walked a young man through his first pattern welded billet. I had thought that Ron might want to do a story on the process for the BAM newsletter, but he declined, and asked me to write it up instead.

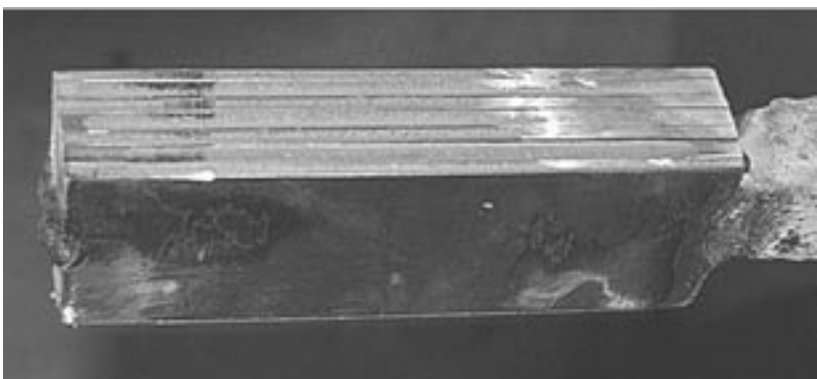
I would like to start with a common misconception here in the US. Pattern welded steel, and Damascus steel are not the same thing. True Damascus steel originated in India where it was known as Wootz. The more well known name for Wootz, "Damascus", is thought to have originated in the Middle East. Regardless, the exact formulation and production methods for this material has been lost to time, although modern research is ongoing, and coming very close to the appearance and performance of the original.

Pattern welding can look somewhat like Wootz/Damascus, if it is manipulated correctly. Because of that visual similarity, it has become widely known by the name "Damascus Steel" in the western world. In reality, they are two completely different processes. Wootz acquires its pattern through carbide banding, where pattern welded steel acquires its patterns through manipulation of a layered billet composed of differing steels.

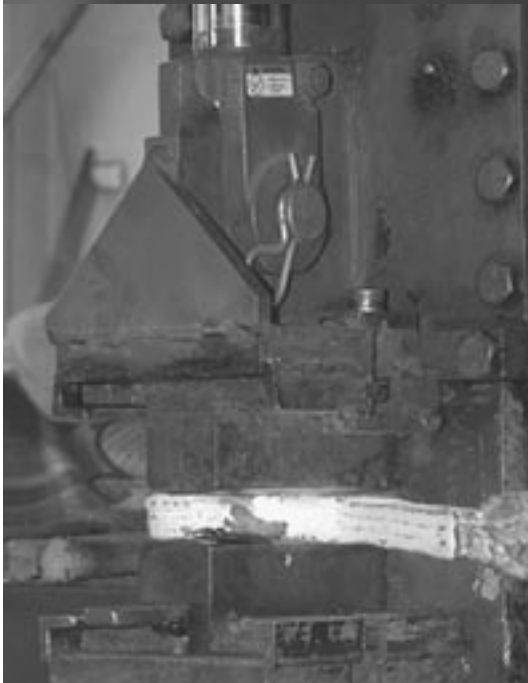
Pattern welding is certainly nothing new, however, both the Celts, and the Vikings used pattern welding methods in antiquity. Pattern welding was born of necessity by the lack of good quality, homogeneous steel with enough carbon to hold a useful edge, but still be able to absorb the shock of battle without breaking.

The modern method employed by Ron Duncan involves a "stack" composed of steels with differing compositions. This stack is generally welded to a re-bar handle so you don't have to mess around with tongs. The stack is pre-heated, fluxed with Borax, then inserted back into the forge until it reaches welding temperatures.

At this point, the stack is either welded together by hammering, or in Ron and Corbin's case, the use of a custom built hydraulic press. After the initial weld is made, Ron then draws the billet out with the press. Once he has reached the desired length, he finds the center of the billet, then hot cuts it, leaving just enough thickness to act as a "hinge". The billet is then folded in half on the anvil, and the welding process is repeated. Ron continues this weld/fold/weld process until he reaches his desired layer count, then the billet is drawn out to the desired final thickness.



*Above:
The initial stack of
steel bars*



*Left:
Welding and drawing
out the billet under
the press*

Pattern Welding, with Ron Duncan Continued...

There are many methods of pattern manipulation, some of which are performed during the welding process, like star-twists, or feather patterns; while others are done during the forging phase of the blade itself, like rain drop, or ladder patterns. Sometimes there is no manipulation used at all, and a random pattern appears during the forging/grinding process by exposing the different layers. After the blade reaches its final form, it is etched, usually in ferric chloride, which exposes and accentuates the final appearance of the pattern.

Corbin and Ron have taught a lot of people the art of pattern welding over the years. They are both excellent instructors, as well as true masters of the Bladesmithing trade. While the information that they teach can be found on the web, you can't beat hands-on instruction and experience, and their efforts have been greatly appreciated.

-Sean McGrath



Folding over the steel to increase the layer count



Rewelding after the fold



Ron working with a beginner

Father and Son working together

by Bill Briggs

Bob,
I had sent this story to you earlier in the year, about my son, Guy McConnell, and I forging a knife for one of my son's friends. This is the happy ending to a good story, and with pictures! Here goes:

Jake, my son, called and asked what my plans were for the weekend. When I replied that I had nothing special planned, he asked, "Well, how do you feel about helping me make a knife?" He explained further that his good friend and mentor will be retiring from work soon. Jake thought that his friend might enjoy a custom knife as a gift, and might even USE it, since the friend hunts and participates in fur trade period reenactments. I eagerly agreed, and called Guy McConnell to beg use of his shop and assistance!

Jake, Guy and I started bright and early Saturday morning (about 11:00) forging a 96 layered billet of 1095 and 15N20. Jake had insisted on helping as much as he could, and being the gentlemen we are, we let him! He turned out to be an apt pupil, taking all kinds of heat well. He finished Saturday with a completed billet.

We returned to Guy's shop Sunday and Jake flat ground the billet and started shaping it into a knife blank. None of us could stand the suspense of not knowing how the blank was patterned; we dipped it in acid and are pleased with the result.

At the end of the visit, Jake had a ground knife blank and plans for completion. He wants "ivory" slabs for the handle, with scrimshawed embellishments. --Bill Briggs

Jake's knife is finished. The blade has a bold, beautiful random pattern. The handle is Corian counter top material (that imitates ivory splendidly) with brass bolsters and pins. The knife is about 9-1/2" in length. I thoroughly enjoyed the opportunity to spend "shop time" with Jake and Guy. --BJB



July Notes from Ham's Prairie

By Ned Digh

Heart of MO Smiths at Fulton Street Fair June 15th & 16th

Our annual demo at the Fulton Street Fair for 2012 had a guest blacksmith; Don Nichols joined us for the two-day demo. For those of that know Don, he is equally adept at forging, entertaining the observers, and maybe even selling a few of his blacksmith creations. Several of our regular demo guys were missing this year due to other commitments but Mike Gentzsch, Tom Patterson, Terry Smith, John Huff, and Jeremiah Strode were there with plenty of banter and hammering zeal to demo their blacksmithing expertise. Don and Joyce Nichols camped at our farm for the weekend, giving Joyce and Esther an opportunity to visit and shop at some quilt stores in the area. Our next demo will be at the Callaway County Fair on August 3rd & 4th.



Leadership Callaway Comes to NEDCO Forge

The Callaway County Chamber of Commerce annually conducts a seminar for upcoming business leaders, one day each week for 10 weeks. The 2012 class director asked for a session at NEDCO Forge on our craft changes. The class consisted of 10 members plus the director. The blacksmith session covered how the industrial revolution changed blacksmithing, followed by a forging demo. Esther then did a demo of enameling on copper, with explanation that only the heat source had changed in modern times. While in the shop, several members saw the bee keeping supplies and asked about beekeeping. The group walked to the bee yard, several stood close by and with no fear while top bars with lots of bees were pulled and observed. Most of the group stood back a ways but had lots of questions. An unexpected result of the visit was that BAM gained a new member named Jeremiah Strode who participated in the Fulton Street Fair Demo.



It Could Never Happen to Me, Surprise, it Did

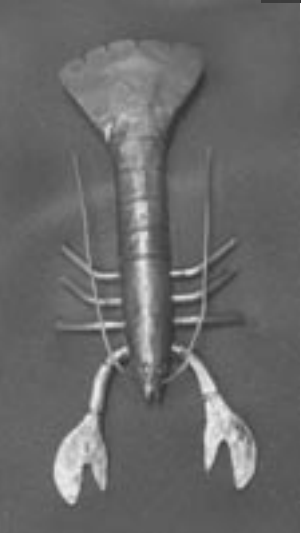
I have always stood in awe of the skills of Bob Patrick, one of BAM founders, life member and donor of the Founder's Award. In addition to Bob Patrick, we BAM members have been fortunate to be exposed to the blacksmith skills of so many. It is an honor and humbling experience to be selected as the recipient of the 2012 Founders Award. BAM has been a large family of friends, all interested in the craft. Any contributions that I have made to BAM have occurred because of the full support of my wife and partner, Esther.

Orry Harbit from Age 7 to Marriage

In 1990, a 7 year old, named Orry Harbit became interested in blacksmithing and started coming to BAM meetings. His parents always brought their camping trailer to the MO State Fair and Orry was at the BAM demo tent everyday. As the kid at the demo site and a limited number of anvils, Orry often got irritated that he did not get equal time with the adults at the anvils. He attended BAM meetings so we have watched him grow up and become a talented blacksmith. Along the way, an attractive young lady named Allyssa (Allie) Evans started coming to BAM meetings with Orry and on July 7th, they got married. Orry is now a full time farmer and the wedding was held outside in 110-degree weather, along the edge of a hay field and in front of two huge Case IH tractors. The reception was in the air conditioned Green Ridge Rec Center. Congratulations to Orry and Allie, our newest BAM couple.



July Trade Items



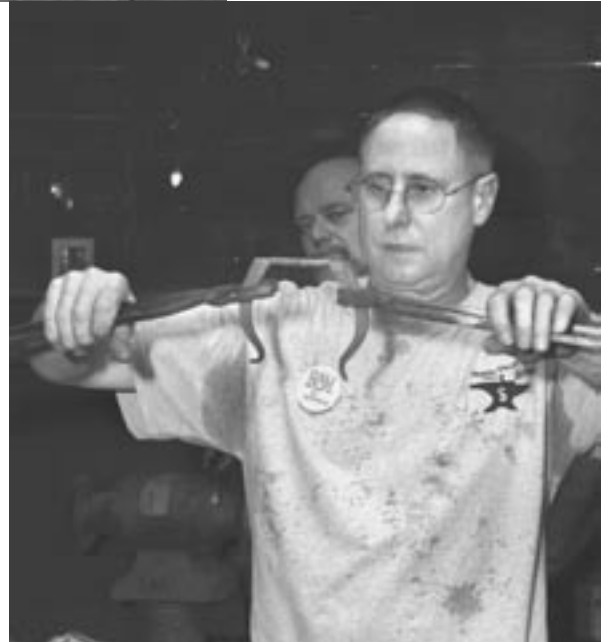
July Meeting Demonstrators



Above: Bob Alexander makes a frying pan blank and Pat's finished leaf.



Left: Pat McCarty making a leaf



Right: Al Stephens demonstrated one of Doug's motifs

Below: Al's finished demo piece



Bernie Tappel and his finished veggie chopper

July 28, 2012 BAM meeting

By Bernie Tappel

Old Business:

Boy Scout sessions were very successful. Approximately 50 scouts went through the program.

Bruce Herzog reported 519 current members.

Kent Harbit has the tickets and the gate passes for anyone wanting to demonstrate at State Fair. Contact him for the tickets.

Abana conference was attended by approximately 30 BAM members. The trailer was used for 10 classes during the conference. Thanks to Mike Gentzsch for transporting the trailer to and from the conference. Denny Quinn reported that the effort put forth for our annual conference compares very favorably to the ABANA conference.

New Business:

Dr. Joe Cangelosi (Doug Hendrickson's dentist and friend) made a generous donation to the BAM scholarship fund in Doug's name. The donation was the proceeds from an annual local Kentucky Derby event. It was an event that Doug Hendrickson had always participated in prior to his death.

Mike McLaughlin reported that the conference dates are May 2nd thru 5th, 2013. Volunteers should contact him. His contact details are on the website.

Bob Alexander reported that he has been contacted by the group in Arkansas concerning a combined tire hammer build workshop. Logistics would have to be worked out for the locations for workshops.

Editor's Notes: Bob Stormer is doing a write up on the demonstrations. It will show up in the September newsletter.

Sorry, I didn't get the names to go with the trade items on page 20. But you know which one you made.

After seeing the pictures of Bob's Frying pan fixture, it occurred to me that the English wheel frame could be used, if you made special dies for it. Bob

Iron in the hat

Item	Donated by	won by
Cylinder	Jim Mann	Kent Harbi
Poster	Bonnie Hendrickson	Chris Miller
John Deere prints	Chris Miller	Kent Harbit
Anvils Ring	Bonnie Hendrickson	Chris Miller
Bolt Cutters	Mark Clifford	Bobby Chanbe
Leaf (demo item)	Pat McCarty	Nancy Gentzsch
Posters	Bonnie Hendrickson	Denny Quinn
Frying pan	Maurice Ellis	Joe Franklin
Frog and soap	Bess Ellis	John Sherwood
Large Veggie chopper (demo)	Bernie Tappel	Bess Ellis
Metalworking book	Ray Scott	Don Birdsall
Blacksmith Journal	Bernie Tappel	Mike Gentzsch
Blacksmith Journal	Bernie Tappel	Don Birdsall
Screw drivers & water heater	Chuck Schumann	Denny Quinn
Bearing race	Don Birdsall	Mike Gentzsch
Blacksmith Journal	Bernie Tappel	Doug Knight
Screws	Fred Arnhold	Denny Quinn
Small Veggie Chopper (demo)	Bernie Tappel	Ryan Shelby
Forged skillet (demo item)	Bob Alexander	Joe Franklin

Trade items

Made by	won by
Mark Clifford	Bob Alexander
Bob Stormer	Walt Hull
Bob Triphahn	Mark Clifford
Bob Maes	Pat McCarty
Bob Alexander	Mike McLaughlin
Pat McCarty	Jim Mann
Terry Smith	Bob Maes
Steve McCarthy	Terry Smith
Bernie Tappel	Don Birdsall
Denny Quinn	Steve McCarthy
Walt Hull	Denny Quinn
Jim Mann	Bob Triphahn
Don Birdsall	Bob Stormer
Mike McLaughlin	Bernie Tappel

SHOP TIPS

Nathan Robertson's Hammer drift gauge by Bob Ehrenberger

At conference while hanging around the MTS area, I noticed an interesting device on Nathan's table. When I asked him about it he said it was used to check his drifts while dressing them to make sure they are the right angle and size. Such a simple idea, yet so useful. The drifts need a 7deg. taper in one direction and a 5deg. taper in the other. The opening at the larger end of the gauge needs to be the same as your finished hole, on this gauge it looks like they are 1.25" and .75". When I got home I checked my hammer eye drift and found it wasn't even close, like 2 and 3deg. I will have to fix or replace it before my next hammer making session. After I make myself a gauge.



I Thought Everybody Already Knew this!

Figure out how to cut a piece of flat material to make into a complex shape.

From Tony Swatton at Wayne's World 2012:

Drape aluminum foil over the complex piece. Mark the edges with a sharpie.

Then flatten to get a cutting pattern.

Reprinted from the California Blacksmith July/August 2012

Blacksmith chalk board

One of the requests that Walt made for his conference demonstration was a piece of rusty sheetmetal to use as a chalk board. I brought a piece and other than it was a pain to hang, it really worked well. So when I got home, I thought I would rig up a board in my shop. The piece I had taken to conference was way too big, about 4 foot square.

I looked through my resource center and came up with a piece that is about 20" x 30", a side panel off of an AC unit. It was painted and I considered grinding or burning the paint off, but thought I'd try it first. The paint is rough and weathered, so not at all smooth. It works great, the soap stone writes on it easily and a scotch bright pad works as an eraser. It even has a shelf to put the soapstone and eraser on. I have it mounted on top of my forge hood at an angle so I can use it and it can be seen by the audience when I demonstrate or teach. Bob Ehrenberger



Buy, Sell, Trade

Individual Classified ads

For sale: Hand made coal forge with overhead hood, electric blower and a supply of coal \$175; Canedy Otto manual blower \$60; Henry Wright english made anvil 205lb (edges chipped) \$200; Post vice 4" jaws complete with spring \$50; Vogelzang Box Wood stove with 6' of stove pipe \$175; 2 manual scrolling machines \$100 for both. For details on all items call me at 636-477-1404 or e-mail me at roylu@sbcglobal.net, I will send descriptions and pictures. Reasonable offers will be considered. In St Charles, MO - Roy Gallagher.

For sale: Leg vice 4 1/2" jaws, superb condition \$225. Wrought Iron bars, pre-civil war \$2.50/pound. 1" & 3/4" sq. 5/8" & 1/2" rd. Call Bob Woodard (618) 692-6508.

For sale: Spare Tire Power Hammer - \$2500.00
Call Jeffrey Sainz 636-586-5350 for information
jeffsainz@sbcglobal.net

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 at angle.

Little Giant-- We can do repairs on any or all components of your Little Giant front assembly. Contact H. "Sid" Suedmeier 420 4th Corso, Nebraska City, NE. 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

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.

Blacksmithing E-books on CD

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 Blacksmithing, 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:

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

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

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 LBrandForgeCoke@aol.com.

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

Buy, Sell, Trade, Continued ...

Kayne and Son Custom Hardware, 100 Daniel Ridge Road, Candler, NC 28715. (828) 667-8868 fax (828) 665-8303, e-mail: 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

Persimmon Forge **PEDAL HAMMER** sit down treadle hammers for sale. Contact Dave or Betty Edwards by e-mail at djedwards@cableone.net, or write us at 3008 Hacienda Ct., Emporia, Ks., 66801, or call us at (620) 343-1947. For more information, go to www.persimmonforge.com and click on both "Pedal Hammer" and "Video Demo of Pedal Hammer."

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.blksmith.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 it's 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 tappel@embarqmail.com and he will get you signed up.

Check out back issues of BAM newsletter on
www.bamsite.org

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 bameditor@centurytel.net, or call 573-633-2010

Finding articles in old newsletters

Bob Ehrenberger and I had been talking about an index of tips, etc. that had appeared in past newsletters so I had been doing some experimenting with searching items on the BAM site.

I found out that if you use the site function of the Google search, it will limit the search to the BAM site only and will search all pages, including the archived newsletters. For instance, if I was wanting to look up any references to wizards on the site or in the old newsletters just use the following search parameters in the Google search field - - **wizard site:bamsite.org**

So, anyway, if you are looking for something specific, just go to <http://www.google.com/> and key in the above info, substituting whatever it is you are looking for in place of the word **wizard**.

Bernard Tappel

Editor's note: Bernie is doing a great job expanding the usefulness of our web site. He has created a special e-mail address just for bamsite business, so if you want to contact Bernie about the web site please use:

bamweb@embarqmail.com

If you have an idea for something that should be on the web site send it to Bernie. If you know of an easier way to add a search feature to the web site, I'm sure Bernie would like to know about it.

Bob

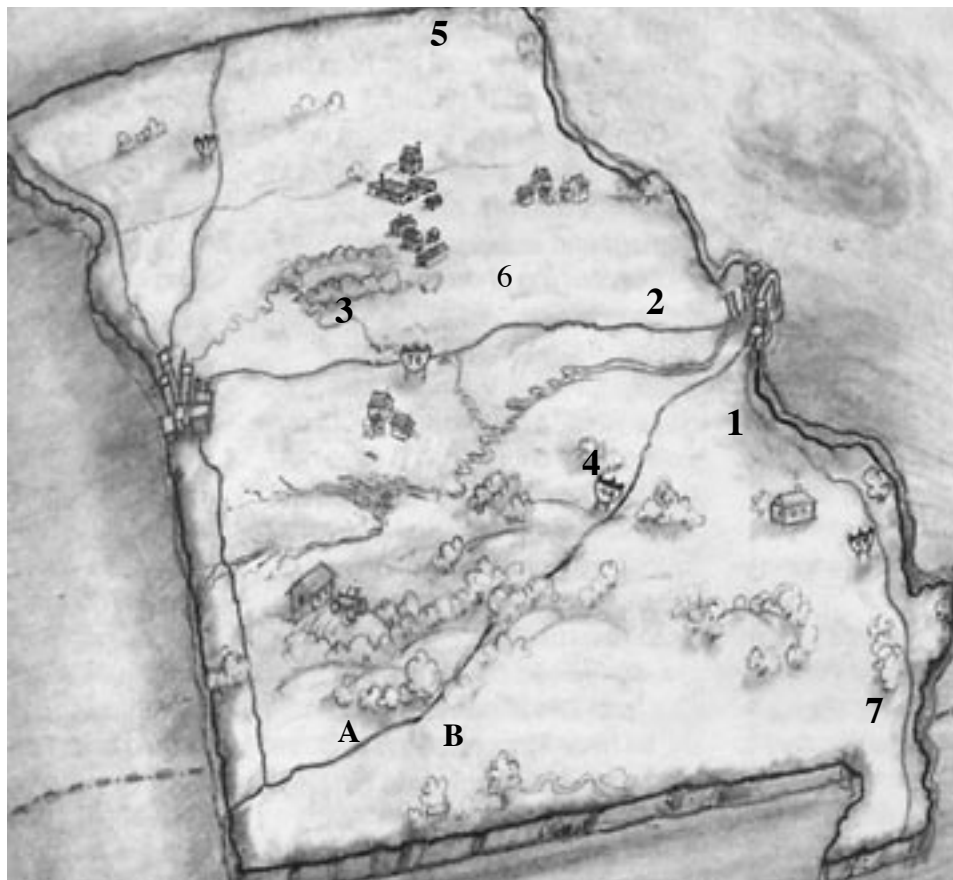
Harper Auction Oct. 13th Browning, MO.

Mara Harper wants to put all of Ed's stuff back into circulation. A lot of the bigger items have been sold, but there is still a lot left. Ed liked to go to auctions, and if something was selling cheap, he bought it. The problem was, he never sold anything. Ed's shop is a treasure hunt, you will find something that you have to have.

Need Coal ?

Check on Availability

Coal Captain: Bob Alexander



1. Bob Alexander (636) 586-6938
14009 Hardin Rd,
DeSoto, MO. 63020

2. Ken Jansen, (636) 366-4353
2257 Carter Rd.,
Moscow Mill, MO. 63362

3. Doug Clemons, (660) 595-2257
RR1 Box 124,
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
Rt1 Box 50
Downing, MO. 63536

6 Paul Lankford, 573-473-7082
25849 Audrain Co. Road 820,
Mexico, MO 65265

7. Bob Maes, 573-866-3811
Rt. 1 Box 106 K
Millersville, MO. 63766

Note: Jeff Willard is no longer carrying coal.

Price \$14.00 per bag BAM members, \$19.00 per bag Non-members, \$12.00 per bag at Bob Alexander's
Coal keepers earn \$3.00 a bag. NOTE: PRICE CHANGE

A. Non BAM coal \$.40/lb check \$.35/lb cash bring your own containers. Tim Johnson Springfield, MO 417-886-8032
B. Matthias Penn Oklahoma coal Price, 25cents/pound for any amount. Located in Ava, MO. 417-683-9000
E-mail: tytheblacksmith@yahoo.com

Upcoming Events:

- August 9-19-2012 Missouri State Fair Sedalia, MO contact Kent Harbit (660)-647-2349 to volunteer
August 31-Sept 3, North Texas BS Association Hammerfest Dallas TX. Patrick Thaden <http://www.thadenarmory.com>
September 8 - **BAM** meeting Fred Arnhold, Bates City, MO. 816-230-4443
Trade item: a wood working gouge, food provided
September 15th Newsletter submission deadline
October 1 - Application deadline for November Scholarship awards.
October 6, 13 - MTS beginner workshop At Bob Ehrenberger's in Shelbyville, MO. 573-633-2010
October 13 - Ed Harper auction, Browning MO.
November 3 - **BAM** meeting Phil Cox, Hamilton, MO. 816-583-4337
November 23 - Black Friday Hammer-in at Ken Jansen's shop Moscow Mills, MO Theme: punches & drifts
January 1 - Application deadline for February Scholarship awards.
January 12th, - BAM Meeting A & K Cooperage, Higbee, MO 660-456-7561 trade: corkscrew Food will be available
March 2013 - BAM meeting Martin sale barn, Excelsior, MO, Don Nichols host 660-826-9252
April 1 - Application deadline for May Scholarship awards
May 2nd-5th -**BAM Ozark Conference**, Sedalia, MO contact Mike McLaughlin cowpie42@hotmail.com
May 2013 - BAM meeting Ned Digh, Ham's Prairie 573-642-9502
July 2013 - BAM meeting Doug Clemons, Malta Bend, MO 660-595-2257
September 2013 - BAM meeting Matthew Burnett, Cameron, MO. 816-575-2798
November 2013 - BAM meeting Bob Evans, Liberty, MO. 816-792-0693
March 2014 - BAM meeting Chris Miller, Doniphan, MO 573-996-4931
September 2014 - BAM meeting Bob Ehrenberger, Shelbyville, MO 573-633-2010

MTS (Mobile Training Station) Beginner's Class

October 6, Part One

October 13, Part Two.

Location: Ehrenberger Forge Shelbyville, MO

Contact Bob Ehrenberger (573)-633-2010 or bameditor@centurytel.net

New Members

If you have a new member near you, welcome him to the group and show him the ropes.

Bales, Jared
202 A South Vine
Chamois, MO 65024
balesjared@gmail.com
573-644-4493

Chambers III, Robert
220 NW Parker Drive
Grain Valley, MO 64029
rtchambers83@gmail.com
913-256-9536

Dunaway, Brandon
3504 NW 78th Street
Kansas City, MO 64119
gdtwinky42@yahoo.com

Masters, Dustin
10274 Gateway Drive
Neosho, MO 64850
mastersdlm@yahoo.com
417-592-8139

Brunner, Jesse
208 Bellevue
Eskridge, KS 66423-9611
bobbibrunner@yahoo.com
785-449-2553

Clemens, Jim
11598 Hwy K
Norborne, MO 64668
jclemens@greenhills.net
816-719-9975

Engle, David
1461 Plantation Manor Court
St Peters, MO 63303
david@newroadenter.ses
314-359-1778

Overton, Ben
HC-02 Box 520
Zalma, MO 63787
dove@semo.net
573-225-1012

Cernetisch, Damon
1793 County Road 2530
Mountain View, MO 65548
dcbambam@yahoo.com
417-247-2359

Coplin, Richard
32 Church Street
Bonne Terre, MO 63628
573-358-3618

French, Dan
3175 Quiet Forest Drive
Imperial, MO 63052
dfrenchy47@yahoo.com
314-265-9083

Poeverlein, David
25700 NE 2350 Road
Garnett, KS 63032
dadwpo.233@gmail.com
785-204-1240

BAM

2212 Aileswick Dr.,
St. Louis, MO 63129

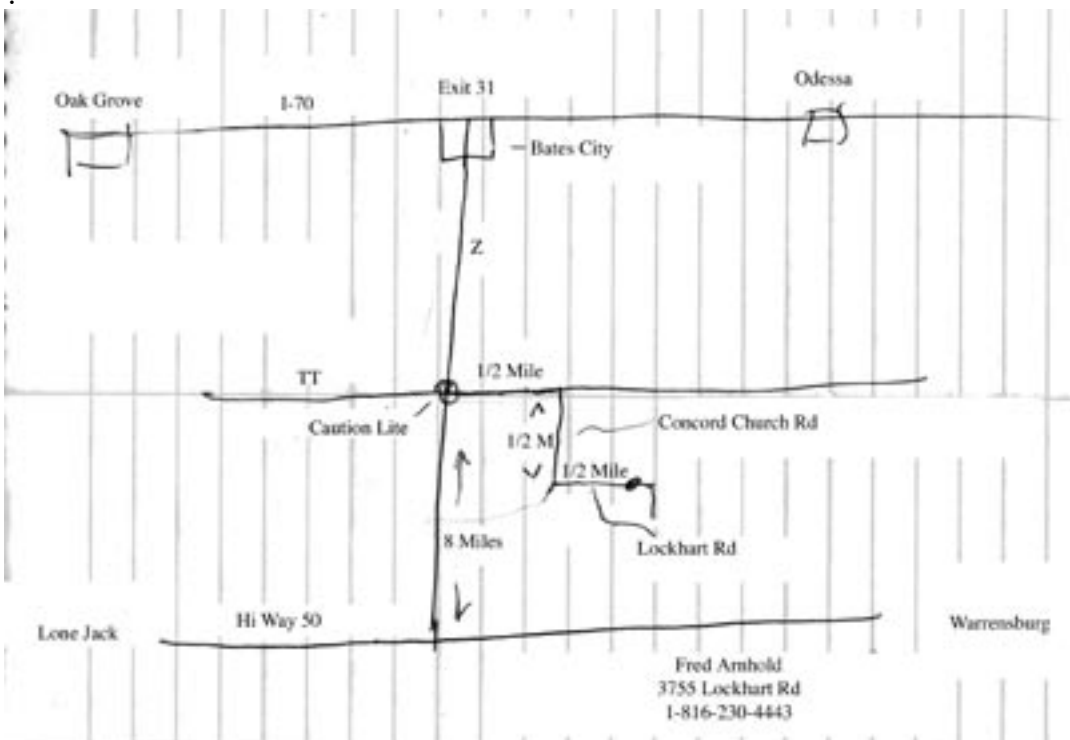
Please send changes to Bruce Herzog, 2212 Aileswick Dr., St. Louis, MO 63129 or e-mail to bjherzog@att.net

Next Meeting: September 8th, Bates City, MO.

Host: Fred Arnhold

Location: Bates City, MO.

Directions: Go South from Bates City on Hwy Z, the only caution lite on Z is where it crosses TT, Turn left (east) on TT, go 1/2 Mile to Concord Church Rd, go South 1/2 mile to Lockhart Rd, go East 1/2 mile to shop.



Phone: 816 230-4443

Trade Item:
Wood Working Gouge

Food: provided