

RAM

MISSOURI

May - June 1995

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NEWSLETTER of the BLACKSMITHS ASSOCIATION OF MISSOURI

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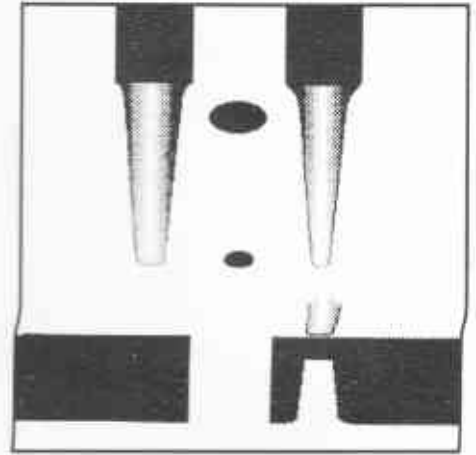
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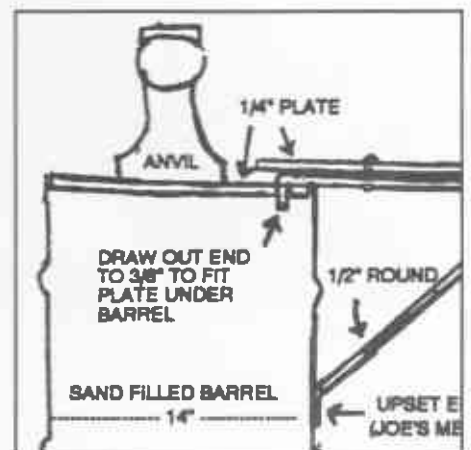
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**Newsletter of the
Blacksmiths
Association
of Missouri**

Volume 12 No. 3

Our cover: Bob Patrick tries to remember where he put his tools as his stock warms up during the Ozark Conference workshop. Photo by Jim McCarty.

Editor

Jim McCarty

Contributing Editors

Bob Patrick
Gena Briggs
Pat McCarty
Jack Andrews

Artist

Jerry Hoffmann

Mailing Labels

Maurice Ellis

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BAM Membership Application

Name: _____

Address: _____

City: _____ State: _____

Phone: () _____ Zip: _____

New Member Renewal

How did you learn about BAM? _____

Memberships are for one year from receipt of dues. Dues are \$20, 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

How did you learn about ABANA? _____

- Regular Member\$35 yr.
- Senior Citizen (Age 65)\$30 yr.
- Fulltime student\$25 yr.
- Overseas airmail\$70 yr.
- Overseas surface mail\$50 yr.
- Contributory\$100 yr.
- Public library\$25 yr.

See reverse

Editor's anvil

Guess what? BAM is officially 10 years old. President Pat was looking through our old archives and found a letter from the Missouri Secretary of State's office informing us of our incorporation as a non-profit organization. It was dated June of 1985 and addressed to Steve Austin, treasurer.

The reason Pat was looking was to see how long Steve had served as BAM's treasurer. Apparently he has been it for the duration. Recently Steve announced his desire to pass the office on to someone else. Barring a lot of write-ins for the election, it will probably be Gary Kobermann.

Thanks Steve for the many years of hard work and thanks too Gary for offering to take on this important task.

On May 18 we were celebrating our son James 5th birthday when I got an interesting call from Tom Clark and Doug Hendrickson, who took turns talking excitedly on Tom's mobil phone. Since it was costing Tom about \$8 a minute, Doug did most of the talking while Tom frantically struggled to hang it up.

I knew the pair was in Georgia for the Southeast Regional Conference so I was surprised to hear from them and halfway expected the call to have something to do with bail money or the need for a lift home after Tim Ryan's anvil landed on Tom's truck or something.

Instead they were calling to tell me I had been picked by a jury of my peers as the winner of ABANA's 2nd Joe Humble Newsletter Award. Doug said I tied in the voting with Donnie Fullwood of the Okmulgee chapter and that the committee broke the tie.

I must say I was pleased and surprised at the news. My own choice had been Bob Thomson, who does the California Blacksmith and was the runner-up last year. I also voted for Walt Hull, who slaved away at the BAM newsletter before I took over.

It's quite an honor and one I won't take lightly as I represent chapter editors at shopping mall ribbon cuttings and in local Homecoming parades.

Anyway, thinking of the other editors (thanks folks for your vote for me and especially for the material you sent my way that ended up in BAM newsletters past present and future) I remembered I had promised someone I would give them a list of other chapters newsletters that would be interesting.

That's a hard thing to do because they all have material that you will find worthwhile in your endeavors. Some chapters have fewer members, less money to spend and that shows in their efforts. In general, all the newsletters have improved greatly in the three years I have been editor.

But since you asked, here's a few of my favorites:

The California Blacksmith, Jack Smith, PO Box 438, Mokelumne Hill, CA 95245. Subscription is \$25 per year. The California Blacksmith is a beautiful publication printed on slick magazine stock. It always has some nice photos of members' work and reprints a lot of stuff from the British Blacksmiths.

The Bituminous Bits, Clay Spencer, Rt.2 Box 509-C, Murphy, NC 28906. The bits has long been regarded as the best newsletter for projects, techniques and tips. Save for a couple pages telling about events at the council's many forges, it is all blacksmithing. Clay is gone a lot and there is no set schedule for the Bits but you can count on getting six a year though three may come at once. Clay's back issues are always in demand. He tends to feature single topics, like the Big Hammer or Colonial ironwork.

The Hot Iron News, Northwest Blacksmiths Association, P.O. Box 81041, Seattle, WA 98108, Gene Chapman editor. Cost is \$20 per year. The News is as slick as the California Blacksmith but more folksy. It has the distinction of being the first newsletter to run color on their cover. Always full of projects for beginners up and has a section for bladesmiths that is always interesting. Last issue was 40 pages!

Okmulgee Blacksmiths Guild

Newsletter, c/o Steve Saunders, Rte 2 Box 220, Juliette, Ga. 31046. dues \$15 per year. This is a fairly new ABANA Chapter and their newsletter reflects the fact that their treasury isn't bursting at the seams. It is Xeroxed and stapled together but makes up for its appearance by being full of great stuff. Editor Donnie Fullwood does some nice art and funny cartoons that poke fun at the group's members. His beginners' corner is my favorite part. Past issues have had flowers, animal heads, leaf templates, new twists and more.

If you want the complete list of chapters drop Janelle a note at ABANA's new Washington, Mo. headquarters and I am sure she will fix you right up. I am assuming you already belong to ABANA and get the Anvil's Ring and Hammer's Blow, which under new editor George Dixon is better than ever. The last issue had something I want to try on every page!

My thanks to everyone who agreed to be on the ballot for the next BAM election. Pat wanted to make this as fair as possible and give everyone a chance to vote, so we decided to mail out ballots instead of leaving it up to those who can make the meeting.

It seems to me the ideal organization is the one where every member is willing to serve as an officer but no one minds if they don't get elected. That's the case with BAM.

On the other hand, it occurred to me at the Ozark Conference that we are in danger of losing our older members, the guys who struggled for years to build this group into what it has become. We have an excellent crop of intermediate blacksmiths coming on strong who can take the reins in a few years.

But we're not quite there yet. Please don't give up on us yet, folks. We need more demos from the Stan Winklers, Bernie Tappels, Steve Austins, Don Asbees, Dan Whitmores, Steve Bakers ... and more.

—Jim McCarty

Dear BAM

Hi Jim,
Hope you and yours are doing OK.
My best to your brother Pat and family. Hope to get to one of the meetings soon. Keep up good work. I really appreciate BAM and its members.
Best regards,

Bill Frabotta

Dear BAM,
Thank you for the invitation to the conference. It sounds great. Unfortunately, I have a work obligation that will keep me from attending this year. Please keep me on your mailing list. Thanks for your time,

Vincent Herod, Austin, Texas

No Words. As my wife and I ventured back to Minnesota from our second BAM Conference (700 miles) I tried to put into words how I felt, I could not, overwhelmed came the closest, but really, there were no words. BAM members not only teach us to be better smiths, but also to be better and more giving human beings. You should all pat yourselves on the backs.

Thank you,

Francis Bauer

A sincere thank you is extended to the BAM Chapter of ABANA and to all its members for having me and Helen as your guests at the 1995 Conference. Mentioning names is risky because there is the chance I will miss someone but some of those that deserve special thanks are Tom Clark, Bob Patrick, Steve Austin, Maurice Ellis, Pat McCarty, Lou Mueller, and Jim McCarty. Nothing was spared to make sure we had a pleasant visit, but the thing most outstanding was seeing a group of well-organized and dedicated blacksmiths putting on a conference that was relaxed and entertaining and yet offered learning opportunities for anyone wishing to expand their knowledge of blacksmithing.

I was pleased to see ABANA well represented by the attendance of Janelle Gilbert, executive secretary and three other directors: Clay

Spencer as a demonstrator, Tim Ryan as auctioneer and fund raiser and BAM member Lou Mueller. I was disappointed that former director and BAM member Doug Hendrickson was not able to attend the conference. You were missed Dr. Iron.

Putting on a conference of this caliber following right on the heels of the 1994 ABANA Conference is commendable. Attending was a rewarding experience for me. Again my sincere thanks to everyone that helped make it so.

Joe Harris, ABANA President

Hello Jim,
Enclosed is information about UMBA's summer conference. If you could get it in your next newsletter we would appreciate it. It would be great to get some of your group up here for our mild August weather! Take care,
Nana Showalter, Blanchardville, WI
(Editor's note: See the Happenings section for info on event.)

Dear Jim:

Intros first, my name is Drew Johnson. I have been playing around with blacksmithing for about 7 years. The bulk of my education has been based on what tips I could pick up from blacksmith demos at various threshing and craft shows, in other words, limited. I built my first forge in '88 out of 1/4" steel with a blower from a piece of electronics. I now have a champion blower on a buffalo firepot. I found it at the far back of a farmer's junk pile in eastern Montana. When I asked him for it, he didn't even know he had it, and said as long as I was going to use it, help myself. Tongs and tools I have been picking up piecemeal at flea markets and antique shops. I had heard of BAM about a year ago from Dan Hart of St. Louis but hadn't done anything with it. About 2 weeks ago I walked over to meet my neighbor, and was pleasantly surprised when I found out Scott Stager was interested in Blacksmithing and a BAM member. He gave me a binder full of old BAM newsletters, and I am once again very enthusiastic about an old art. I just finished finals, and have had a little time to look through the letters,

which is actually what this is about. In the Jan-Feb 95 issue, Steve Willsie asked about getting equipment for his Boy Scouts. While much of the equipment I can't help with, I do know of a continuous (more or less) source of anvils for beginners. Henry's Tools in Old St. Charles sells anvils. These are Chinese made, which always arouses my suspicions on quality, but they sell for a little under \$1/lb, if I remember correctly. They carry a 55# and a 120#, plus some little 10-15# critters. I think I paid about \$50 for my 55#. Anyway, all this writing to tell ya that little bit. I would have E-mailed Steve directly, but you didn't include his email address. I am looking forward to the next meeting (my first) where I will get to watch the masters in action. My membership dues are in the mail, and I'm desperately searching for my hammer, which is missing.
Sincerely,

Drew Johnson
c651336@showme.missouri.edu
(via Internet)

G'day.

I just spent several enjoyable hours perusing the ArtMetal files. I particularly enjoyed the BAM section — my first seven years of life were in KC MO, and many of my aunts, uncles and cousins still live in the area. (Wonder if Steve Austin lives anywhere near where my Grandparents lived? My curiosity was tweaked: what are the membership fees for an out of country member? I searched the net some eight months ago for any references to blacksmithing and came up with nothing except "The Village Blacksmith" (Wordsworth?) — decidedly disappointing. I have put together a small start (to match my small amount of experience) on
<http://ml.csiro.au/~gray/Blacksmithing.html>
Best regards,

Randall Gray, Tasmania
Randall.Gray@ml.csiro.au
(via Internet)

Editor's note: If Randall comes through he will be our first member signed up via the Internet where these pages reside electronically.

Pat's place

Something strange happened this spring: We actually had nice weather for the Ozark Conference. In case you didn't get the word yet our conference next year will be on May 3, 4 & 5. Maurice Ellis will be our conference chairman, so get in touch with him with your ideas for next year.

I'd like to thank everyone who helped with this year's conference, especially our chairman, Tom Clark, and all of the out of state members who did so much to make our conference a success.

We raised more than \$7,000 at our auction. Tom Clark's leaf was sold and resold to raise \$700 for the Tom Clark Fellowship Fund. Tom was also the recipient of the Bob Patrick Award.

Other highlights included a slide show by Jack Andrews on the El Salvador project and the awarding of the Bealer Award to Jack Andrews.

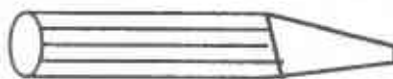
ABANA President, Joe Harris, was on hand to introduce the committee and the award was presented by committee chairman, Bob Bergman. All in all we had an enjoyable and very successful conference.

Mother Nature made up for the nice weather at conference time by raining 19 out of 25 days this May (more or less) as a result my employer, Southwestern Bell Telephone Company declared an emergency due to 7,000 'out of service' reports. All days off were cancelled and as a result I had to miss the May meeting at Walt Hulls. Vice President, Maurice was there to run the meeting. Nominations for our upcoming election were accepted and \$88 was raised from Iron in the Hat.

Make plans now to attend our summer meeting! This is an important meeting as we will hold our elections and go on our famous float trip on the Black River. The date is June 17 and Doug has a big hands on program planned. See ya all in Lesterville.

— Pat McCarty, BAM President

How to forge an eye punch



You can use this to make animal heads or whatever you want. I use a piece of coil spring from a car.

1. Draw a taper to the size you want.
2. Take a short heat, about 1/4 inch. Use a light hammer, and with quick light blows upset the end. You want it to mushroom or rivet over until the end is upset to double the diameter you started out with.
3. Now just take the punch to a light red heat. You do not want it too hot. On the anvil, with a light hammer, tap and roll the upset end. You want the end to come down and out. Be sure to hit evenly. You want the hole in the middle. The end will be a little ragged, so clean it up with a file.

— Steve Parker, Illinois Valley Blacksmith Association

Welcome new members

William Hensley
2606 Callahan
Muskogee, OK 74403
(918) 682-8121

Christina Schmigel
Penland School
Penland, NC 28765
(704) 765-1871

Paul Keasler
4199 Hwy 64

Cleveland, TN 37323

Kendall Miller
7439 Wellington Ave.
University City, MO
63130

(314) 727-9105

Howard Patterson
475 Thornmeadow Rd.
Riverwoods, IL 60013
(708) 945-9281

New address:
Robert A. Maes
RR1, Box 197
Patton, MO 63662

Iron in the hat: \$216
Coal money: \$370
Newsletter sales: \$21
Member dues: \$600
Treasury balance
(4/6/95): \$6,898.45

BAM MAY MEETING

by Jim McCarty

With more floods threatening and the uncertain prospect of a long drive to Kansas, the attendance at BAM's May meeting was understandably low.

That's too bad because Walt Hull put on a good show for the 30 or so who made it.

Ken Markely, who drove all the way from Sparta Ill and I were the first to arrive. That gave us the first crack at the junk yard that is Walt's neighbor. BAM members hauled off all kinds of good junk, including iron wheels (Jim Kendzora), hammer heads, shafting and much more.

Walt had a good supply of stuff for sale as did yours truly. I went home with a chop saw kit, thanks Walt.

For demos we had Dan Siglar, who showed his brand of repousse.

You all know Dan. He usually

comes to the meetings with a truck-load of iron to sell but generally stays out of the spotlight. This time Dan made up for lost time.

At Maurice's in March we saw Lou Mueller do some copper work. Lou comes from a machinest background and his work was done using plywood forms that give predictable results, the way you would expect a machinest to do it.

Dan went to the other extreme. He began by coating a sheet of copper with blue marking fluid to make it easier to see his lines. Then he "sketched" a leaf shape using a sharpened piece of steel.

Dan draws on nature to get his forms, something he encouraged us to try. He also uses an old book on iron-work from the turn of the century that he found at a yard sale.

Once he had the leaf shape to his satisfaction, he roughed it out with tin

Below: Walt Hull, who hosted the May meeting, showed us how he puts a diamond on the inside of a piece of stock for a railing. Walt did the job with two pieces using an upset square corner. Kate Dineen, who has been working with Walt, is in the background.



snips. He uses leather punching tools to cut the round corners. He recommends round shapes over sharp corners because they are more inviting to people (that's why fences have pointed tops, to keep people out.)

With the shape in hand Dan used a variety of mushroom hardy tools, dull chisels and long necked hammers to achieve the shape he wanted.

As the piece work hardened he heated it to just below red heat and quenched to anneal the copper. If you don't do this it will crack!

He backed the work up with sand bags, but otherwise used no form save for the one in his head.

When the shape was about right he veined it using a top and bottom chisel

he forged from coil springs.

The bottom tool looked like a dull chisel and is clamped in a vise. The top tool was a curved, handled tool with two chisel shapes to match the bottom tool, one being wider than the other. Once again this tool had a long reach to get into tight places.

To do the veining hold the work over the top of the bottom tool and strike with the top tool on either side of the bottom tool moving the piece as you go. No doubt this takes practice.

Walt was working on a railing and he showed how he uses two upset square corners to form a diamond shape in the middle of a bar.

To do this he carefully forms the corner, keeping it from going to 90 degrees until enough stock has been upset into the corner to keep a cold shut from forming.

Walt reminded us that you don't want to hit directly on the corner. Instead you hit just below it to force metal into the corner. Good advice, Walt.

When the 90 is complete he bends it to a rough diamond on the horn and

then completes each piece on a jig for accuracy.

Then they meet in the middle and he arc welds them together to get a perfect diamond.

Somehow the editor found the anvil and to the amazement of all present forged a heart hook by forge welding two pieces of 1/4 inch round for the hook end and bending the top into a heart shape.

The trade item was a bust with only Maurice Ellis participating. We did have a good turnout for the Iron in the Hat, which brought in \$88. Maurice Ellis, Jim McCarty, Dick Nietfeld, Dan Stiglar, Walt Hull, Jim Waller, and Phil Williamson all pitched in items for the Iron in the Hat.

Many thanks to Walt and his "harem" for the incredible ham-highlighted feast and the keg o' Free State Beer. A good time was had by all.

Minutes

Vice president Maurice Ellis called the meeting to order.

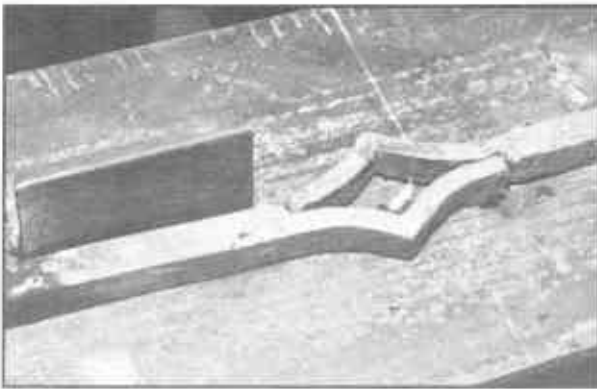
The only item of business on the agenda was nomination of officers. Maurice presented a slate of candidates as follows:

Pat McCarty, president
Todd Kinnikin, first vice president
Joe Wilkerson, second vice president
John Murray, secretary

Gary Kolberman, treasurer.

Maurice asked for additional nominations. There being none, he called for more new business.

There was no further business so we adjourned to Kate's rolls and Walt's keg of beer.



Above: Walt's demo piece. He's making these by the boatload for a railing project. Below: Dan Siglar did a nice demo on forging leaves from copper sheet. He draws on nature for many of his ideas. Dan promised we would see more of him, so let's take him up on the offer.





President's Message June 1995

Spring is here as are the many spring regional conferences. I hope everyone has or will attend at least one of them, more if possible. I have attended the Ozark Conference at Potosi, Mo. and the ABA conference (my home chapter) at Cedar Lakes in Ripley WV —the site of the 1982 ABANA conference.

Many of us are already looking forward to the 1996 ABANA conference at Alfred, N.Y. The 1990 Conference there was a great one but I am willing to wager that the one in 1996 will be even better. The ABANA Conferences, held on the even numbered years, are just one of many ABANA benefits. Other benefits include the *Anvil's Ring*, the *Hammer's Blow*, workshops, lists of suppliers and schools, Registry of Blacksmiths, Guidelines for Demonstrators, discount on sales items, ABANA Library VHS & slide rentals, the ABANA liability insurance program and others.

An ABANA membership is a real bargain. It costs less than 10 cents a day. The way you use the benefits of an ABANA membership is up to you, but I can't imagine a day that you could not find more than a dime's worth of benefit from your membership. To those of you who are ABANA members, my sincere thanks. For those of you who are not — think it over. We would like to have you join us. We are 4,000+ and growing. With added membership comes added benefits for all of us. A better bargain for a blacksmith will be hard to find.

George Dixon has agreed to chair the Electronic Forum Committee. The committee was chaired by Clayton Carr prior to his resignation. We are working toward electing a director to fill Clayton's unexpired term. Clayton's resignation also left us without a secretary. That office too will be filled very soon. I will bring you up to date next month.

Janelle Gilbert has settled into her new office space at Washington, Missouri with no interruptions of ABANA services and still found time to go to a couple of regional conferences —one in Potosi, Missouri and one in Madison, Georgia. Thanks Janelle.

Many blacksmithing books that I have read have very little or nothing to say about safety. It is refreshing and reassuring to see the subject adequately addressed in Jack Andrews' *New Edge of the Anvil*. If you have an opportunity to read the book, perhaps you should read that part first.

Jack Andrews is the 1995 recipient of the Alex Bealer Award. The award was presented to him at the Ozark Conference May 6, 1995. Read more about that in the next issue of the *Anvil's Ring*.

Sincerely,

Joe Harris
ABANA President

Tools from axles

A handy source for low cost tool steel, when you know what to do

Editor's note: This piece was prepared as a handout by Bob Patrick, BAM's founder, who taught us how to make hammer heads and forge weld at an Ozark Conference workshop. The job went a lot easier with a striker swinging a sledge hammer to help draw out the tough steel. Everyone who took the class learned a lot about working iron. Thanks Bob!

by Bob Patrick

Vehicle axles are a handy source of steel for many tools that blacksmiths use. They can be used to make punches, chisels, hammer heads, hardy's, and many other tools. There are tool steels available that yield superior tools, it is true, but they are expensive and often they are harder for a person to use in a small shop. The steel in axles make tools that need no apology, tools you can do top quality work with and which can last a lifetime.

If you don't know where to get axles, don't go to a junk yard and say you want to buy axles, because they will sell them to you, and they need to make a living. Talk to your friends that overhaul old cars and ask where you can get some axles that are shot. Rear axles on rear drive vehicles are easy to use because of the long length of metal. You can get a variety of sizes, from tractor and bulldozer to foreign car axles. Little axles can be upset to make bigger tools, but this is more work than finding a larger axle and working it down. Transmission shafts are often the same material.

The steel in modern axles is close to 4140 in analysis. Some old axles are different, but cheer up. They can be worked in exactly the same manner. Some people say this steel should be hardened in oil, but for many applications the steel can be water hardened just fine, and with much less hassle and problem than using oil, which is a

fire hazard and smokes a lot.

The method used is to first forge the tool. Next, reheat it and let it cool slowly. Then heat treat it. This method is used with most tool steels.

First steps

Select an axle which has a large enough cross section for the tool you wish to make. If you don't need the flanged end, cut it off with a torch or heat the shaft and cut it off with chisels or use a chop saw. Keep this as handy material for the future. If the tool is to have a square or rectangular cross section the material can be forged down into this shape, or alternatively can be upset and forged to this shape. It is easier to forge material down than upset it, so if possible locate an axle large enough to forge down. Determine how much steel will be needed to make the tool. If you are punching an eye in the tool it is necessary to locate this properly. It is better to leave extra material if you are not sure and cut it down after the eye is formed. If you need to figure the exact amount of material and don't have the experience to figure it out, make a full sized tool from modeling clay. The clay can be reshaped to show exactly how much material will be in the finished tool. Remember, you will lose some material in forging and finishing. The more skilled you are the less you will use. A skilled blacksmith loses far less material and gets a better tool than a beginner, unless the beginner has natural skill. Make as many tools as you can on a regular basis and you can develop this ability. It helps to make drawings and models.

Making an eye

There are two basic methods, and many variations. The basic methods are punching and piercing. In punching a relatively blunt punch is

forced through the material and a slug is removed. The material is distorted a little more than by piercing, where by a piercing tool cuts a slit and the slit is then shaped to the final configuration.

They each have their place. Piercing does not distort round material as much as punching when using simple tools on the anvil. There is a bulge when an eye is pierced, and this can be forged down over a drift, or form shaped like the eye. Some smiths use the piercing tool for this, some a separate tool. This bulge may or may not be objectionable. Properly done piercing can sometimes make a tool without upsetting out of a smaller bar of material than punching. If you learn to do both methods you can then choose which you like better for the application you have in mind.

Punching an eye

To do this you need an eye punch, or you can punch a round hole and forge it to the eye shape. We'll assume you have an eye punch as in figure 1. One eye punch can punch a variety of sized holes, depending upon how far the punch is driven into the metal. However, it is a good practice to have a variety of punches to make everything from a small eye to the largest eyes you may need. It pays to look at hammer eyes to help you determine the size and shape you need for the hammer you will use.

While most people today use an elliptical shaped hole, a rectangular hole will serve just as well, and one with rounded corners doesn't tend to make the corners of the hole crack as a perfectly square punch might. Unless you want to make your own handles each time it is a good idea to select an eye that suits the best handles you have available.

Continues on next page

The better the handle material the more slender the eye can be and the springier the handle can be. Some smiths favor more slender handles than others. Everyone thinks theirs is best. It is wise to choose a moderate handle shape and not get too extreme when you first start. But making your own tools lets you decide what you like best.

Decide where you want to punch the hole in the stock. It is hard to mark on the metal where you want the hole punched. Before heating the metal, lay it on the anvil where you will be punching it, and make some marks with soapstone or magic marker on the anvil where the metal will be and where the punch should be placed. By doing this you can quickly place the punch on the metal. This needs to be done very accurately.

Hit the punch when you have it properly place with one good hammer blow. Then remove the punch. Make sure the hole is where you want it side to side and lengthwise in the metal. Make sure the eye of the hole will be lengthwise in the metal and not cock-eyed. If everything is just right and the metal is still hot, replace the punch accurately in the first mark and strike about 6 accurate blows. Then remove the punch and cool it in water.

The punch will tend to jump out of the hole unless the blows are firm and the punch is well held. After the first punching place a small piece of coal in the hole. If you don't have coal, use charcoal or a small wad of paper soaked in oil. These will lubricate the punch with carbon and keep it cooler as well.

Don't strike more than 6 blows without removing the punch and cooling it, and constantly put a little more coal or whatever in the hole to keep the punch from sticking. Reheat the bar of metal you are punching. How hot? It depends upon the steel. The steel is softer when hot, but you also damage the structure of the steel if you get it too hot.

Axles are pretty simple to work with. If the axle doesn't sparkle and burn it probably isn't too hot. If the steel has cracks upon cooling or fractures easily after the tool is finished you probably overheated or burned the

steel.

Some steels are easily overheated. Only experience will give you the judgment that you need. It helps to be talked through it. Working in bright sunshine can make this difficult. A gloomy shop is the easiest to tell temperature in, but a reasonably well lit shop is the easiest to work in and is OK for judging heat as well.

Whenever the metal cools beyond a bright red it needs to be heated again. This judgment of color is individual and needs to be learned. In bright sunlight the color may never apply. It is best to judge color in a gloomy shop, but modern smiths like a well lit area, so best experiment and learn the colors that work for you. Books and advice are guides. They are not meant to be rigid things that keep you from doing your work.

When you have hammered the punch about 3/4 of the way through the metal it will seem to hit something hard. That is because of the metal chill from the anvil. Even if you don't notice this, when the punch is about 3/4 through, turn the metal over.

The metal will have a swelling from the punching and a noticeable spot. If the metal is hot enough, place the punch over this spot, make sure it is centered properly, and strike a hard blow.

Remove the punch and make sure this is right. Then drive the punch through. This all should have been done on the flat of the anvil. When the punch encounters the resistance of the anvil, move over the hardy hole or if you are using an anvil without a hardy hole move over a block of steel with a hole big enough for the punch to go through. This is called a bolster. Drive the punch through, but not too far in.

Notice that the metal has been squashed from the punching. With the punch barely through the metal, turn the metal on its side and hammer the bulge. Flip the metal while you do this, as the side towards the anvil will chill and not move much. Don't go to extremes. Remove the punch and do this from the other side as well. Properly done this will result in a nice hole with an hour glass shape.

Drive the punch in from both directions to true up the hole. If the hole is

too large you either used too big of a punch or hammered too much. If the punch looks really beat up and bent you didn't cool it enough or hit the edge of the hardy hole as you drove it through.

Now make sure you have the metal straight and that the hole is ok. Then forge the ends of the tool to the shape you want them. Be sure and not deform the eye. The best way to do this is to keep the area with the eye off the anvil while forging. If you do squash the eye straighten it by hammering the punch in and then straighten the tool with the punch in the hole.

Finishing the tool

When the tool is forged close enough to the final form for you to finish it by grinding, and hopefully not too much of that, heat it to a bright red and either bury it in vermiculite, lime or wood ashes, or let it cool in the forge fire slowly with the forge shut off. This relieves the stress in the tool, keeps it from warping when heat treated, keeps the steel from cracking, and makes a tool that lasts long.

With axles you can get away with heating it and letting it air cool in most cases, but it is not recommended practice. Grind the tool or file it when cold. It is best to remove all scale, whether by wire brushing or grinding or using an old file before heat treating, as the scale will be of varying thicknesses or absent after grinding some sections, and if the steel cools unevenly during heat treating you may have problems.

Heat treating

Heat the part of the steel you want to harden in the forge. It is recommended to not heat the eye to hardening temperature if possible, as this will keep the tool from breaking at the eye later on.

Heat the metal to a cherry red. Just kidding. This is what they always told me. Heat the metal until it loses its magnetism. Then just a tad hotter. Cool the end of the punch or chisel in water that is at room temperature by dipping the front of the tool in the water and then moving it up and down,

this best learned by watching it done and experience.

If you just hold the tool at one point in the water the tool may crack at that point due to the stress induced during the heat treatment. Keep doing this until the end of the tool is cool. For punches and chisels the end struck by the hammer is best left soft. While I have seen some people recommend hardening this end, the pieces of steel I still carry in my body from shattered tools tell me otherwise.

A hardened piece of steel that is struck by another can shatter, and the pieces travel like bullets. I have had pieces of steel travel 10 feet through the air and go through a leather jacket and then 2-3 inches into a persons body.

An eye can be ruined with much less. Wear safety glasses when working, and better a mushroom topped tool than a ruined body. Always grind these mushroomed tops off, as they become work hardened and can fly off as well.

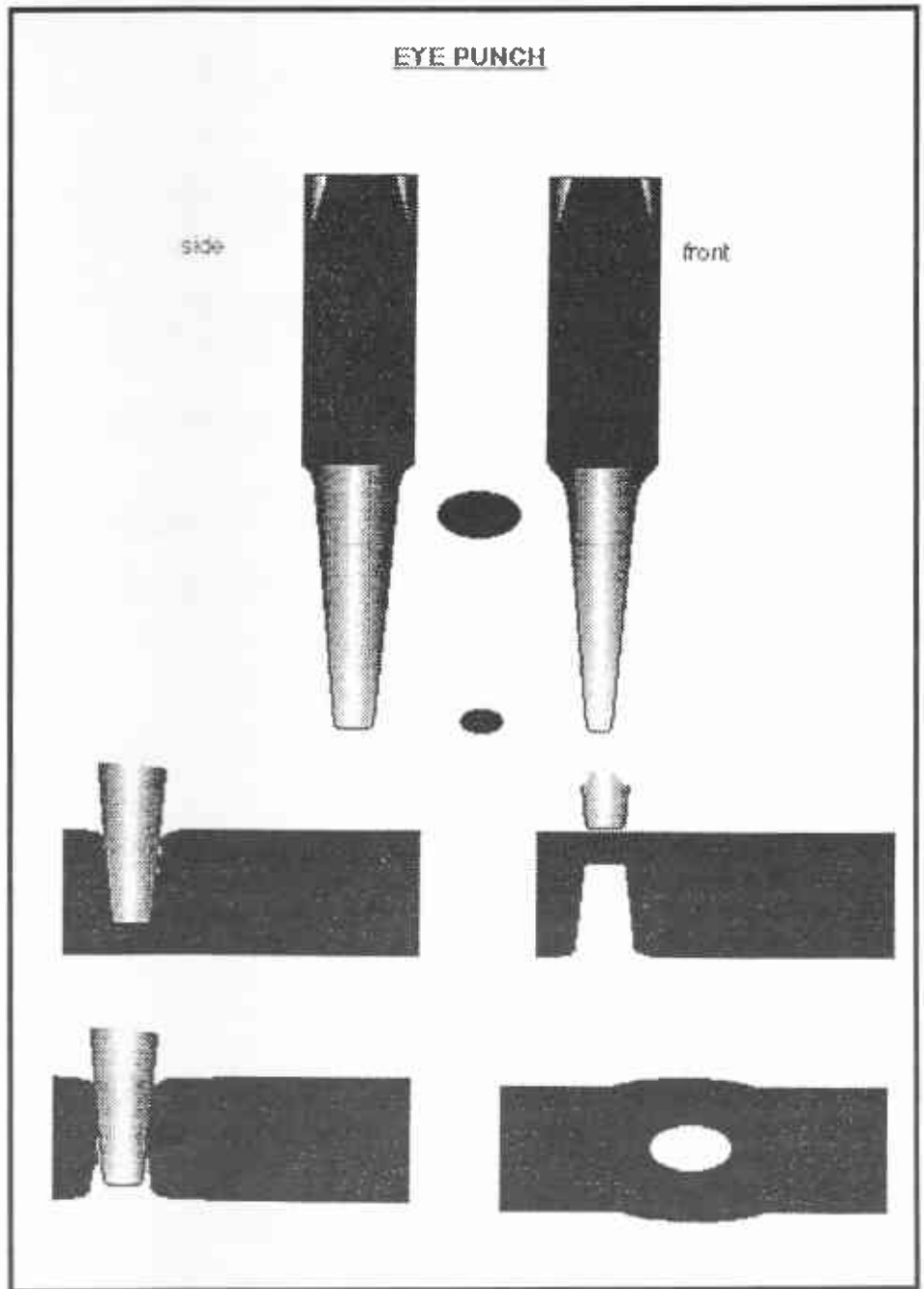
When the tool has been cooled in the water, never cooling the eye, the tool is polished a little so it is shiny, and the tool, now hardened, is tempered. The tempering will remove some of the brittleness in the tool. If the tool breaks in use it has not been stress relieved or has gotten too hot and the crystal structure is ruined or the tempering is improper.

But you will have to have all these bad things happen to you to become truly experienced! Heat the tool, unhardened end first, in the fire, and when the metal gets hot you will notice a color on the shinny metal.

First gold, then yellow, then bronze, purple, dark blue, light blue, then gray. For hot metal you want the metal tempered to a light blue. You may want to vary this later on, but start with that. You should have a good punch or chisel.

I have to get to the conference, so that is all in this note. Hammers are done somewhat differently. Some steels are cooled in oil, some in hot *salt water, and some in the air,* depending on the steel and the use. Some are not hardened at all.

Good Luck!

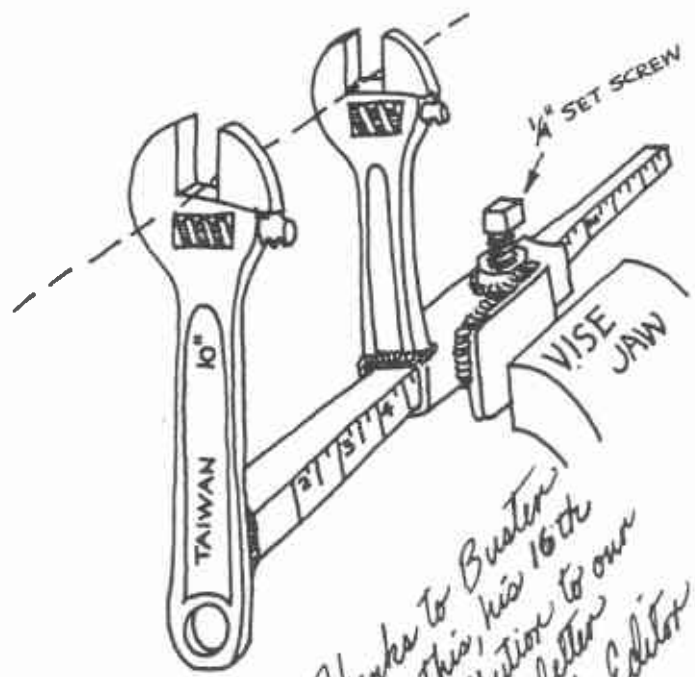


SUBMITTED TO THE OCMULGEE
 BLACKSMITH'S GUILD NEWSLETTER
 BY: BUSTER GRUBBS
 AN ADJUSTABLE REVERSE TWIST JIG

YOU WILL NEED 12" OF $\frac{3}{4}$ " SQUARE STOCK
 4" OF .090-.100 WALL THICKNESS SQUARE TUBE
 2 - 10" ADJUSTABLE WRENCHES, 1- SET SCREW WITH
 A NUT TO FIT, 1-PIECE OF $\frac{1}{4}$ " x 2" x 4" LONG FLAT STOCK
 AND ACCESS TO A WELDER, A DRILL, AND A METAL SAW.

- ① WELD AN OLD ADJUSTABLE WRENCH TO ONE END OF THE SQUARE STOCK.
- ② CUT HANDLE OFF OF SECOND WRENCH SO THAT WHEN IT IS WELDED TO THE TOP SIDE OF THE SQUARE TUBING, IT WILL BE THE SAME HEIGHT AS THE FIRST ONE. (SEE DRAWING BELOW)
- ③ DRILL A $\frac{5}{16}$ " HOLE IN THE TUBING AND WELD THE NUT OVER THE HOLE.
- ④ WELD THE FLAT STOCK PLATE TO THE TUBING.
- ⑤ INSTALL THE SET SCREW IN THE NUT.
- ⑥ MARK SQUARE STOCK WITH 1", $\frac{1}{2}$ " AND $\frac{1}{4}$ " INCREMENT LINES.

TOOL IS CLAMPED IN VISE ON FLAT STOCK PLATE.



Thanks to Buster for this, his 16th contribution to our newsletter. The Editor

TO MAKE A DOUBLE (OR REVERSE) TWIST, SET THE JAWS TO FIT THE SIZE OF THE STOCK TO BE USED, AND ADJUST TO THE DESIRED LENGTH BY SLIDING THE TUBING DOWN THE SQUARE STOCK AND LOCK IT INTO PLACE WITH THE SET SCREW.

HEAT STOCK TO BE TWISTED AND PLACE INTO THE WRENCHES. WITH A THIRD WRENCH PLACED ON THE STOCK AT THE CENTER POINT BETWEEN THE WRENCHES ON THE JIG, ROTATE THE STOCK IN ONE DIRECTION THE DESIRED NUMBER OF TURNS.

by Jack Andrews

I was asked to be an observer at the IBAM conference in Potosi, MO., from the 4th to 7th of May. It was a great opportunity to return to Missouri and see the many friends I had made during the ABANA conference in St. Louis. It was also a chance to see an area that I had not previously visited, the Ozarks.

It all started by being picked up at the airport by Todd Kinnikin and we immediately found many common interests. We drove to his home for a visit to his shop, a delicious steak, seeing his great Damascus knives and meeting his family. Later that evening we drove to the site in Potosi. It was hard to see how things were going to develop, other than rain. Inside the main building, at the Lions Club site, a 100# Little Giant power hammer was being set in place and wired up. Tom Clark, the conference chairman, was in charge and was in his usual form, running from one site to another and getting all aspects resolved in an efficient manner. You knew immediately that things were in control and going to be fine — they were.

The rain held off and in the morning light, at the site, it was easy to see the overall layout of the fair grounds. There were three locations for the Thursday and Friday classes. One area was devoted to the use of the power hammer which was lead by Clayton Ralph. Another area was devoted to forge welding with a number of work stations which was taught by Bob Patrick. The third area was a workshop equipped with treadle hammers and orchestrated by Clay Spencer. It was a learning experience to watch each of these men at the forge doing their work and expressing their control of iron through these various techniques.

They each excel at the processes they demonstrated, making each step look so simple and easy. It is great to have these human resources available to all blacksmiths to learn from and be inspired.

It is also interesting to note that BAM is a well equipped, tooled and organized association. The group has

Notes from Potosi

An outsider's look at the 1995 Ozark Conference

developed and fabricated the BAM forge, collected anvils and stands and many related tools. The group of people they have to work on the conferences are knowledgeable, friendly and dedicated.

The Saturday and Sunday demonstrations were done by the same three instructors for the classes. Bleachers were set up in the large building enabling over one hundred spectators to view the sessions (there were 140 who attended the conference). Each of the demonstrators elaborated on the work that they had done for the classes. These demonstrations were followed by individuals making a three-link-chain.

On Saturday evening with the shooting of the anvil, the bonfire was lighted and dinner was announced. This was a large a bonfire, which was sculpted by Tom Clark and his crew. It was about 25 feet tall and was lighted by Brad Gunter from the top. It was a grand fire — one that lasted through the night and finally burnt out the next morning.

After dinner the evening was hosted by Pat McCarty, president of BAM. There were awards, the auction and my slide lecture on the Las Anonas Forge project. The awards were meaningful in more ways than one. Robb Gunter made hammers for all of the people involved in the St.

Louis Conference. Tom Clark received the Bob Patrick Award and I received the Alex Bealer Award — I am not certain who was more surprised. The auction was led by Tim Ryan and John Stovesand who raised over \$6000, not bad for an evening.

After the side show on the Las Anonas Forge Project I was greeted with offers of all kinds of help and questions about the project. One example was that several members from the Upper Midwest Blacksmith's Association asked what kind of equipment did they need. My reply was that we needed a large foot powered grinding stone. Mike Duss said he had several in his barn in Iowa. How do we get them to Potosi and then back to the East Coast? My reply was I'll get Bill Gitchner to take it back for me, who was actively trading in the tailgate-sale. Unable to get back to Iowa in time they went to one of the tailgate trucks and bought one.

It was immediately loaded in Bill's van. Later, a suggestion was made to get someone from Las Anonas to come up to the states for a workshop. Robb Gunter, who happened to be listening, offered the space in a beginning class, and suggested that Luis Ramos to act as the translator. This helping atmosphere and generosity was the type of gestures that were begin done at the conference.

Sunday noon, I returned to the airport in St. Louis with John Stovesand and we discussed everything from the fine points auctioning iron work to casting metals. We stopped by his home and saw the casting facility that he is developing and will be hosting a work-demonstration session in September. What a wonderful way to close out of the conference.

My two visits to Missouri have been both enlightening and inspiring (along with being one-hell-of-a-lot-of-fun). During each visit I gathered vital information and made wonderful friends. These few observations are just a short commentary on the many wonderful happenings. I believe the best thing is to plan to go and see for yourself at their next conference. Visit Missouri — check with BAM for details.



Left: For nearly 5 minutes Tom Clark was held speechless as he struggled for words upon being presented the Bob Patrick Founder's Award by last year's co-winner Lou Mueller. Above: Jack Andrews test drives a pedal powered grinder that was donated to his Los Ananos project by UMBA. Mike Dominas, right, was one of the UMBA members who chipped in.

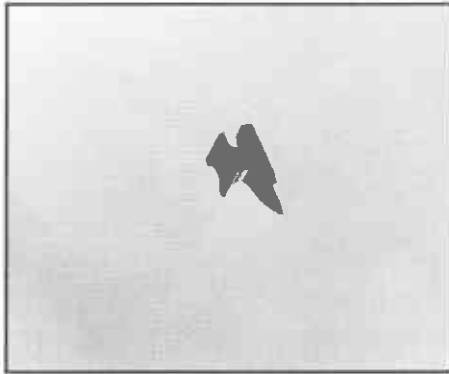


Above, left and right: Tim Ryan sees his victim, Bill Miller, weakening during the auction. In the photo at right he gives up, paying his part towards the \$6,000 Tim and John Stovesand helped raise for BAM.



Left: Tim Underwood bought one of the nicest items offered at the auction, a basket of "Wilt-less flowers" forged by Joe Wilkinson.

1995 Ozark Conference



Above: Tim Ryan's anvil hurls skyward but returned intact. Above, right: Clay Spencer wowed us with his huge collection of treadle hammer tooling. Clay also taught a workshop before the conference.



Above: Clifton Ralph put Tom Clark's 100-pound Little Giant to the task, forging a variety of items. Above, right: ABANA President Joe Harris checks out Rainbo's tool supply along with Floyd Daniels, who doesn't need any more tools! Right: Tom Clark swung the big hammer for Jerry Hoffmann, who ended the conference on a high note with his demonstration from the pages of the Blacksmiths Journal.



Talk about yer fixer-upper...

Gena and Bill Briggs passed these photos on to me at the Ozark Conference. They were taken at an old blacksmith and carriage shop located near their home in northeast Missouri — the exact location is being withheld to keep the editor from foaming at the mouth.

Anyway, as you can tell the old place needs a lot of work but is equipped with all the tools from the day the old boys closed the door and walked away for the last time.

There are piles of tongs, several forges, wagon tools, saws, huge grinding wheels, blowers, vises, even the ancient engine that turned the line shaft. The building burned once and its roof leaks, so everything is covered with mud and rust.

Still, I can't imagine a place with as much potential as this one for a living history museum. Gena says the folks in the town where it is located would like to see it back in business.

With that in mind, she asks anyone who is interested in restoring the shop and possibly doing demos to drop her a line.

Write to: Bill and Gena Briggs, 815 N. Centennial, Kirksville, MO 63501; or call (816) 665-2158.

You can count the editor in, Gena.



W. Randall Minton is selling forms for making frying pans. Not sure about the price or the size but you can contact him at Rt.4, Box 281-A, Oxford, Miss. 38655 or call (601) 234-3539.

New BAM member Paul Anderson left most of his tools behind in California and needs to restock at his new home near Branson (Galena). Paul needs the following items, reasonable please:

Tire roller
Treadle Hammer
50 pound hammer, any make
Sledge Block
Wire welder
Plasma Cutter
Coal forge and blower

Paul also seeks other blacksmiths in the Branson area to hammer with. Call or write to RR2, Box 524, Galeana, MO 65656, (417) 538-4603.

Jim Waller has big round saw blades for sale, good steel for knives, tools or whatever. Jim's also looking for a portable coal forge for his son. He's at 5651 Heads Creek Rd., House Springs, MO 63051 or call (314) 942-2529.

A good source for tools, especially rebuilt anvils and hammers, is Bob Alexander. Bob always has a van load of stuff at BAM meetings. Bob is at 14009 Hardin Rd., De Soto, MO 63020.

Wanted: Your stuff for the BAM Bulletin Board. Ads are free for BAM members and anyone who has something to buy or sell to a BAM member. Send it to: Jim McCarty, editor, Rt.1 Box 20, Loose Creek, MO 65054.

Business opportunity: I have been the owner/operator of a blacksmith shop called "The Celtic Knot Forge" for the last six years. The center of my summer season is "The Bristol Renaissance Faire" in Kenosha, WI. This show runs from the last weekend in June though the third weekend in August. This is a BIG show, with thousands of patrons coming through the gates each weekend. The site is

midway between Chicago and Milwaukee, just off I-94. To the point, I am in desperate need of a sabbatical. I am looking for an interested smith to sub-let the shop from me for the 1996 season. I will be taking my much-needed break next year regardless who rents the shop but I would prefer another smith to move in. This is a very good venture with over 15 years of history behind it. Interested individuals who desire more info may contact me at my address below.

Thank You.
Franklyn D. Garland
Proprietor
4223 Rose Ave., Lyons, IL 60534,
(708) 447-5154
CelticKnot@aol.com

The editor will pay the original price (\$3.75) for any and all leg vises brought to my front door working or not. Will also pay the outrageous sum of \$5 for forges and a whopping 11 cents per pound for anvils (less if they are in good shape). Will sell them back to you after wearing them out for double my money. Hurry, offer expires soon.

For Sale: No. 2 English Flypress. Good working condition. Includes top fuller, hot cut, chisel and instructions. You supply stand. \$1200. I'll pack it, you pay shipping. This press has a lot of mechanical advantage; about 40:1. I have done the following demos with it:
Accurate flattening of 6 inches length of 5/8" round to 3/8" flat in ONE heat
Grooving two sides of square bar 6" long with ONE person in ONE heat (preparatory to making a decorative twist)
Hot cutting 1/2" round with a SINGLE stroke
And it does all this almost dead quiet. The flypress is an ideal tool if your neighbors complain of power hammer noise. The press is "C" shaped, and has "T" slots in the table for tooling attachment. If you are nearby and would like to try it out, please give me a call.
Steve Smith
6333 East Hwy 402

BAM

Bulletin Board

Loveland, CO 80537
(970)663-1513 (home)
(970)225-7576 (work weekdays)
steve@cc.com

From new member Drew Johnson comes this word of tools for sale: Was down at Lake of the Ozarks this weekend in Sunrise Beach. There is a Lancaster blower with a 2-3" blower port, a lever arm forge, complete, a "tongue vise", and a foot driven grinding wheel. The blower is on a steel pedestal about 4 ft. tall. Everything is in working order, though the forge needs a belt. This is all at a place called "Josh's Antiques", which is 1/2 mile north of Hurricane Deck bridge on Hwy 5. Prices are \$50 for the vise, and \$125 for everything else. Phone # for Josh's is 314-374-4751. He also had a couple of tongs. My phone is 314-474-1780, if anyone would like to talk to me for more details (what few I can give).

The editor has for sale one 100-amp meter base and disconnect, ready to go with wire and everything. Make me an offer on this fine piece of electrical engineering and get your shop wired in a hurry. Would just as well trade something for it. Jim McCarty, (314) 897-4111.

BAM

Shop Notes

Got a tip to share? Jot it down and send it to the editor, Jim McCarty, Rt. 1 Box 20, Loose Creek, Mo. 65054

Center finder

From Jim Batson via Clay Spencer at the Ozark Conference comes this one: to find the center of a bar of steel hold your arms outstretched with your thumbs pointing down. Place the bar on the tops of your hands and slide your hands together slowly. As you move your hands the friction will be greatest on the heavy side causing it to stick to one hand. This give and take will go on until your hands come together dead center on the stock. Try it, it will work. But don't do this with a hot piece of steel please!

Clay also recommends a stainless steel wire brush (Weller 13158, 302 stainless) because it cleans better, lasts longer and is more aggressive.

Understanding tool steel

The letter designation on tool steels signifies alloys of iron and other metals and carbon to achieve a steel with specific characteristics for a given use.

W series: Water quench. W1 tempered to straw is best for general purpose hammers. W2 is also a good hammer steel.

S series: Good shock resistance and moderate heat resistance.

A series: Air hardening steel. Too hard to forge.

H series: Heat resistant steel. Good for hot work. Air cool, but can water quench if necessary.

Carbon steels

10 series: Iron with various amounts of carbon (steel). No other metals present. The second number (10/XX) is the amount of carbon in 100ths of a percent. Thus 10/20 is 0.2 percent carbon steel, which is the correct term for mild steel. Common carbon steels available run up to 10/95. The higher the number (carbon content) the easier it is to burn the carbon from the steel.

—from Bill Fiorini demo, *River Bluff Forge Council newsletter*

Dorothy's welding tips

Use deep hot fire. Heat to orange, brush off scale and flux with Borax. If Borax bubbles and falls off, work was not hot enough.

Keep work horizontal in the fire, for uniform heating, and maintain a layer of hot coke over the work to exclude oxygen.

Weld at lemon yellow (Coors Beer can yellow) heat.

If flux is moving, it will weld.

Shake flux off on the way to the anvil by swinging work toward floor.

If weld doesn't take immediately, stop hammering, clean and reflux.

One way to remove scale without damaging surface is an oxygen-free propane flame.

—from Dorothy Stiegler demo, *Blacksmiths Guild of the Potomac newsletter*

Coal test

If you are considering a new source of coal be sure to ask how well it cokes. One member of the California Blacksmith Association didn't and found out his coal also didn't! Bags and bags of worthless junk. George Stanya of Maryland (301) 387-0327 sells a "high-quality meteorological coal." His analysis shows the coal has a "Free Swelling Index ASTM of #8. So? The American Standard for Testing and Materials (ASTM) standard D720-91 gives an indication of the coking characteristics of coal when

burned as a fuel. So how is George's coal? His #8 is right up there.

—*The California Blacksmith*



Adjustable bending fork

Weld two pieces of rod or pipe to two pieces of angle iron as shown in the drawing above. Slide the pieces of angle iron in the vise jaws until the upright rods are the desired distance apart and clamp tight in the vise.

—Gale Mitchell, via the *Hot Iron News*

Proper anvil height

Anvil height is proper when your hammer handle is parallel to the face of the anvil at the end of your hammer stroke. Too low, it causes a tendency to make forward hammer marks. Too high, it causes back-type hammer strokes. Leaning against the anvil will cut the ring and will also help you relax when forging. It is also a good way to find out if an anvil is the right height for you when you first start using a strange anvil. This is because your anvil will hit you in a certain place against your leg and when you walk up to a different anvil it will hit you in a different place on your leg.

—George Dixon, from the *California Blacksmith*

Magnetic tape

I have discovered magnetic tape. It is available at craft stores and other sources. It comes in 1/2, 3/4, and 1 inch widths. The 1/2 inch size sells for 15 to 20 cents per foot. I used it on several auxiliary vise jaws — wood, aluminum, brass, etc. — and spacers that I use to prevent springing my post vise too much. It will stick to almost anything. It is also good for holding drawings to a metal table, just

lay it down in strips. You don't even have to remove the tape. It seems to take the pressure off the vise without any harm. Try it, you'll like it.

— *Thurmon Chaffin, Florida Clinker Breaker*

Quenching safety

Many of us have used oil quench tanks of one design or another. We have observed the nearby oil flash into flame as we add that hot part. It is entirely possible that with a small tank and a large piece the entire tank may flash and burn too. Are you really prepared for a major fire of this kind in your shop? Does your tank have a cover to snuff out the flame? If not, it should be very high on your priority list. It appears that the best tank cover system will not fan the flame as it closes — especially not towards you or a combustible wall.

Try to develop a guillotine cover which slides across the top of the tank without fanning the flames. It can be quick, neat and out. You might go one step further and have it spring loaded so that you must step on a treadle to open it. In this way when you turn away, the tank is sealed. In any event, it is always a good idea to have a suitable fire extinguisher handy in any shop.

Long twists

The following tips came in response to a query I made on the Internet. I was looking for advice on putting an even

twist on a 4-foot piece of 1/2 inch square. I got about two dozen responses to my plea for help.

I have a leg vise that I lug out and stand in a hole in my swageblock right near the anvil. It has an ugly, cockeyed piece of 1 1/4 inch square bolted to the mounting plate and twisted around so that it just drops into my hardy hole. Then it's only one extra step to the vice to do twists. This rig isn't stable enough for all-purpose work but is real handy for twisting and holding jigs or weird stakes for those jobs where I need something near the anvil. Only takes two or three grunts to move out of the way.

— *Roger W. Schmitt*

On your question about even-ness in long twists: it is usually helpful to have the rod under tension while you twist it. I've done some large-ish twists of multiple wire in a lathe. I used the tailstock to hold it under tension while I rotated the headstock by hand. (This was cold, BTW) Albert Paley is rumoured to have some sort of contraption rigged up out of the winch motor for an old elevator to do those super-tight twists he likes. I guess I would rig some sort of frame so that you could grab one end of the rod in a vise, and then pull it straight and tight while you twist the other end. You'll need to be careful of your heating though. It'll twist most wherever it's hottest. Good Luck.

— *Brian Meek*

Mark Williams recommends doing long twists in a metal lathe that has an opening in the tail stock. He says you will have to fabricate a holder. One word of caution -- don't turn it on! Use your hands to turn the drive end while the other end is held in place.

Hardening mild steel

Editor's note: This came in response to a question on Artmetal from someone who needed advice on hardening low carbon steel.

I have had very good results hardening mild steel (1018) using "Royal Hardening Powder," which I believe can be obtained from Centaur Forge. It is applied to the piece hot, and you let the piece soak for a while in the forge with the powder on it, then quench as you would a piece of steel. I find it very effective for hardening the edge of paper knives and it probably would work fairly well on chasing tools, etc. I think it provides a convenient way to get an effective, hard (but probably shallow) case on mild steel. The finish of a quenched piece, if wire brushed while wet, will come out quite bright and free of scale. If you have trouble with (or are concerned about) bits of a hard edge breaking off, you will have to temper your tool.

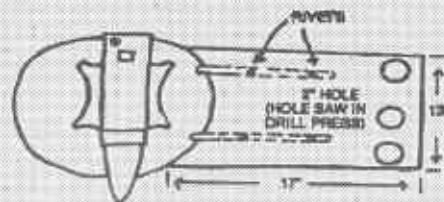
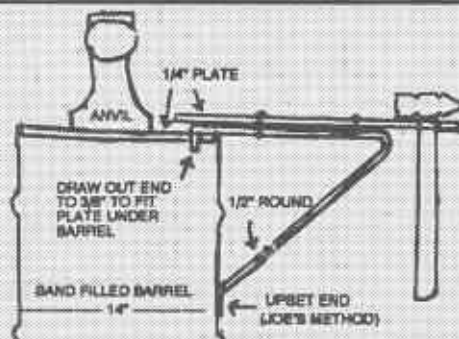
— *Sam Allen*

Glen Jones' Anvil table

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

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

— *Glen Jones, the Forge, Vancouver Island Blacksmith Association.*



BAM NEWS

ABANA/BAM for beginners

Lou Mueller reports that BAM is working with ABANA on creating a new beginner's workshop to be held sometime this fall. The event will be an ABANA project and will likely travel the country in some form or another.

The first one will be hosted by BAM and BAM will provide the instructors. It will have three stations. One will be a hands-on workshop for beginners similar to the First Fires workshop we had last fall.

The other two will be a little more advanced (but still basic) instruction on Damascus and beginning furniture. These won't be hands-on but will offer 12 hours of good instruction that you can take home and apply.

Lou is working out the details and will have more to share in a future newsletter.

Francis Whitaker Bio

The Francis Whitaker Blacksmiths Educational Foundation is pleased to announce the publication of Francis's biography. The book has 125 pages with many photos.

It is available from Centaur Forge, the John C. Campbell Folk School or Norm Larson Books. Autographed copies may be obtained from: Francis Whitaker, 1493 County Road 106, Carbondale, CO 81623. (Please note Francis will be abroad until the end of June.) Cost is \$45 postpaid.

A limited number of Library Edition, leather bound, gold embossed autographed and numbered books are available for \$100 postpaid.

There is also a video of his work plus outstanding work from many countries for \$25, or you can get a black and white action photo of him at work, size 16 by 20 and autographed for \$40.

All profits from these sales go to support the work of the foundation.

International events

From the last issue of HEPHAISTOS I am taking the following dates for blacksmith's conventions this summer in Europe - in case you are still thinking about your traveling plans:

June 2, 3, 4 in Ulm, Germany. Exhibition, lectures and demonstrations in the center of the old town

July 8 and 9 in Esztergom, Hungary. Meeting of the Hungarian metal workers

August 26 and 27 in Helfstyn, Czech Republic, big international meeting

August 31 to September 3 in Stia, Italy (a beautiful little town in Tuscany).

Biannual meeting with demonstrations and international Exhibition-September 16 and 17 in Nottingham, Great Britain. BABA Conference

Additional information concerning sign up is available by fax from HEPHAISTOS in Germany: 011 49 8171 80646.

Hammerfest 1995

The annual North Texas Blacksmiths Association fall workshop will be held Sept. 8-10 at the Sid Richardson Scout Camp near Bridgeport, Texas.

Guest demonstrators will be Hershel and Frank House of Woodbury, Ky. These are two of the finest and most highly regarded blacksmith gunsmiths in America. Hershel is also known for his Basic Blacksmithing video.

There will be an auction Saturday night and donations are appreciated. Fees are \$85 for members or \$100 for non-members, which includes membership. Lodging is available. For details contact Verl Underwood, 613 N. Bailey Ave., Fort Worth, Texas 78107-1005 or call (817) 626-5909.

UMBACON '95

UMBA, The Upper Midwest Blacksmith Association, welcomes Jay Burnham-Kidwell as our demonstrator for the 1995 UMBACON in Baraboo, WI. Jay is from Kingman, AZ and is currently serving on the ABANA board. He will use hand forging techniques and plans to demonstrate furniture design and construction.

The fee is \$20 for Saturday and \$10 for Sunday. Camping is \$8, or \$5 for tents. Showers on site. Informal open forge on Friday night. Demonstrations Saturday from 9 am to noon and Sunday from 9 am to noon. Auction is late Saturday afternoon.

For more info send business sized envelope, SASE, to: UMBACON, c/o Frank Garland, 4223 Rose Ave., Lyons, IL 60534.

State Fair sign-up

If you would like to take part in BAM's presence at the Missouri State Fair in August, please drop the editor a note to that effect.

I'm not sure of the exact dates yet but we are trying to improve on last year's start.

I would also appreciate anyone's comments on how to do it this time around. I think we all agreed last year that it was a worthwhile project though we were a little disappointed with the location and the turnout that day.

My address is Rt. 1 Box 20, Loose Creek, MO 65054 or phone (314) 897-4111.

The Forge

According to David Hufford who sent an e-mail message to the artmetalboard, the Spring 1995 (February) issue of Parabola magazine (volume 20, number 1) has an article titled, "The Forge", by Will R. Cummings, which is worth reading.

The theme for this issue of Parabola is Earth, Air, Fire, Water, and contains some other interesting articles.

Next Meeting June 17, Doug Hendrickson's

Dr. Iron is hosting the next BAM meeting at his shop in Lesterville. Our summer meetings are always family oriented and alternate between Vernon and Eunice Fisher at Lake of the Ozarks or at Doug and Bonnie's on Black River. The river offers a nice place for kids to cool and spouses to frolic while the blacksmiths work.

Doug will have the route well marked (won't you Doug?). Hopefully the newsletter with a genuine map will arrive before June 17. If you get lost call (314) 637-2576.

The Saturday meeting will be a hands on workshop for beginners. We will have 5 forging stations set up each manned by one of BAM's more experienced smiths. Each of these teachers has developed a project that beginners can deal with under his expert tutelage. Everyone who becomes involved can expect to walk away with several finished pieces. The teachers and their projects are as follows:

Pat McCarty — creature heads
Maurice Ellis — shovel blades
Stan Winkler — handle for shovel or poker

Walt Hull — BBQ fork

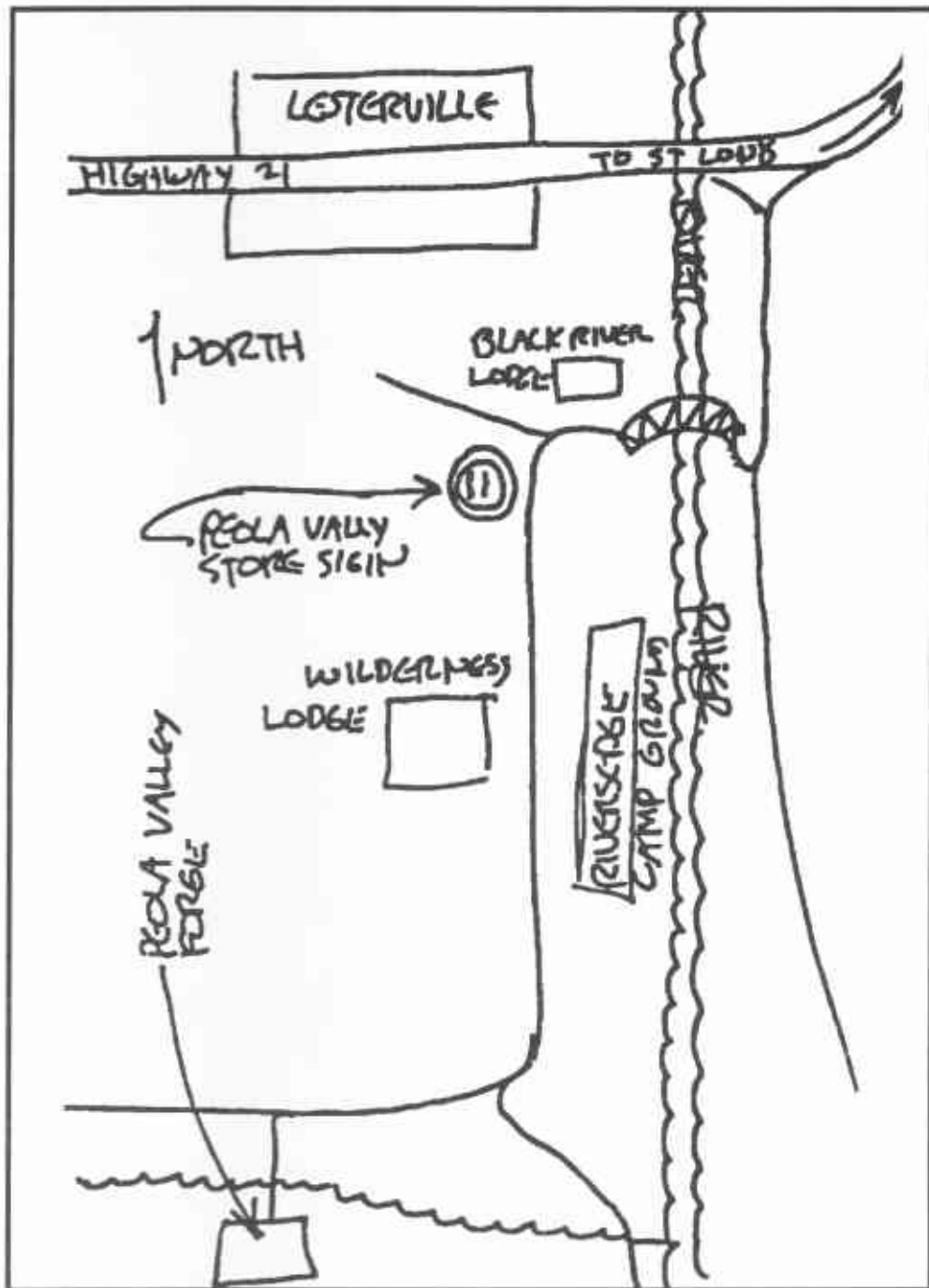
Tom Clark — Tongs

The teachers will have the stock cut, marked and ready to go so that all you have to do is step up to the anvil and do it.

On Sunday we will have the annual float trip down Black(smith) River. The trip will start at 11 or noon and last several hours. Cost is \$20 per canoe. There is a very nice campground, right on the river just 1/2 mile from the Hendrickson's and a motel in Lesterville just 5 miles away. Call for reservations.

Black River Family Restaurant and Motel, (314) 637-2600. Rate is \$45 for a room with 2 double beds, will sleep up to 4 good friends. Riversedge Camp Ground (314) 637-2422.

Trade item is a leaf.



1995 Schedule

July 1995

Meeting

Doug Hendrickson,
Lesterville, Mo.,

June 17

September 1995

Meeting

John Stovesand,
Cedar Hill, Mo.,

September 23

November 1995

Meeting

Joe Wilkinson, Hope,
Mo., date to be

announced



Bet you've never seen a Damascus railroad spike laying along the tracks. This one was forged by V.J. McCrackin and then worked into a knife as an anniversary present for his wife. Congratulations V.J. — this is No. 35 and counting!

BAM
Rt. 1 Box 20
Loose Creek, MO 65054

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Address Correction

Please send changes to Matthew Ellis, Rt. 1, Box 1442, Belgrade, MO 63622