

RAM

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NEWSLETTER of the BLACKSMITHS ASSOCIATION OF MISSOURI

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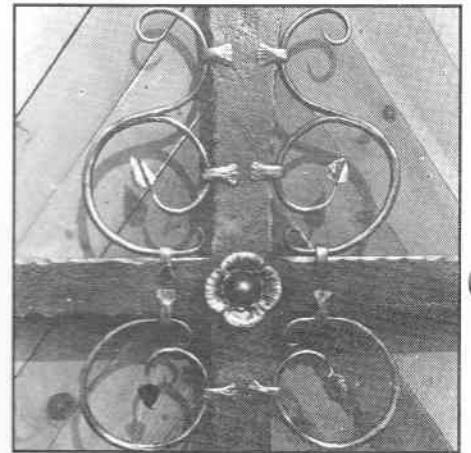
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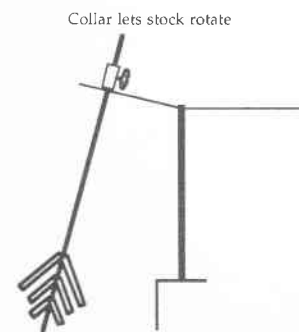


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Jig for welding pine cones



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**Newsletter of the
Blacksmiths
Association
of Missouri**

September — October 1996

Volume 13 No. 5

Our cover: John Murray likes to get things hot and hit them hard. Real hard, in fact, on his Nazel or Chambersburg hammers.

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Pat McCarty

Doug Merkel

Jerry Hoffmann

Mailing Labels

Maurice Ellis

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 \$20/year; a portion of this amount is for a subscription to this newsletter for one year. Editorial inquiries should be addressed to: Jim McCarty, 5821 Helias Dr., Jefferson City, MO 65101; (573) 395-3304. BAM membership inquiries should be addressed to: Maurice Ellis, Rt.1 Box 1442, Belgrade, MO 63622, (573) 766-5346. 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.

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New Member Renewal

How did you learn about BAM? _____

Do you need any tools? _____

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.

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How did you learn about ABANA? _____

- Regular Member\$35 yr.
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- Contributory\$100 yr.
- Public library.....\$25 yr.

See reverse

BAM

Send this form in an envelope with your payment to:

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c/o Maurice Ellis
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Belgrade, MO 63622

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2nd Vice President
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John Murray

Treasurer
Maurice Ellis

The Blacksmiths' Association of Missouri is a chapter 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.

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

MasterCard VISA Check/Money Order

Card Number

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Checks must be in U.S. currency

SEND RENEWAL TO:

ABANA

P.O. BOX 206, Washington, MO 63090 (314) 390-2133

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Editor's anvil

Fall is here and the fires are glowing hot in a lot of places. I have the Pumpkin Festival coming up again in Hartsburg, Pat is cranking stuff out for Luxenhaus and I bet Lee Marek is doing the Rendezvous circuit. When the weather gets crisp a good forge fire at your back is a welcome comfort, much better than when it is 100 degrees in the shade and so humid you can air harden coil spring.

I checked my schedule in early September and it occurred to me that there was something blacksmithing related every weekend for the next two months. A lot of the activities will be centered around Lou Mueller's shop. Lou has been most generous in offering his facilities for BAM functions. The least we can do is turn out in force to keep them coming.

John Murray's meeting Sept. 21 was a fun time for all. We had a lot of fun watching him hammer under his two big hammers. Glad the die on the Chambersburg missed Tom Clark's foot when it fell out or we would be giving a new award at next year's Ozark Conference.

We had an incredible turnout for the trade item and iron in the hat. Hope we can keep it up in November. A lot of folks have been wondering how the physics experiment we conducted there turned out. You know, the one where we wanted to determine the temperature at which a large chunk of wrought iron, something like an anvil for example, would melt.

We were able to get the large chunk of wrought iron to melt, and can show anyone how to do it. And that's all I'm going to say about that.

By the way, the folks on the ABANA Internet Mail List have found a new use for smart aleck Alabama Forge Council Editors who keep asking embarrassing questions about what went on at certain chapter meetings. They say you should pack Clay in your forge to keep it from burning up.

Seems like a good idea. . .

I just returned from the SOFA Quad States Round-up in Troy, Ohio. These guys really know how to put on a conference. They had four demon-

strators going over two days and as usual the largest assortment of tailgators in the free world.

It rained cats and dogs till about 11 a.m. but even before the rain stopped I was selling tools. Met Dick Postman, the anvil man, here and he helped identify the big anvil I brought to peddle as a 400-pound Hay-Budden. Dick says his long-awaited anvil book is being edited now and won't be long coming. Can't wait! He really knows his stuff and is fascinating to talk to.

There was some neat stuff for sale here, like double headed railroad spikes (explain that one) and some real cheap stuff at the auction. Bob Alexander went to sell stuff but by the way his springs were dragging he took home more than he sold. I know he got some parts for his treadle hammer to be and a new fire pot.

Maurice Ellis was there and as usual he had his psychology experiment going — the one where he sets a can out with a sign on it that reads "Put money in can." Think he got the idea from Joe Harris who is offering "Put money in can" franchises. I made sure I put some money in each can, didn't want to hurt anyone's feelings, and Joe looked like he needed the money.

Tom Clark was there hawking handles and Bob Patrick was one of the demonstrators. It's pretty bad when we've got to drive all the way to Ohio to see Bob — gotta drag him out of the woods.

Almost forgot to tell you guys my big news — no, not Emily, I mentioned that in the last issue (and you don't know how close we came to having a pink cover!)

Andy Quittner called me Oct. 2 to make it official — I am the new editor of the *Anvil's Ring*. I will take over from Robert Owings with the Spring 1997 issue. While I don't think it will be possible to improve on Robert's perfection, I hope I can hold my efforts up to the lofty standards he has created.

Will be asking you guys for some help — don't think I can get away with large photos of my kids in this one. I won't be giving up the BAM Newsletter either, just shifting a lot

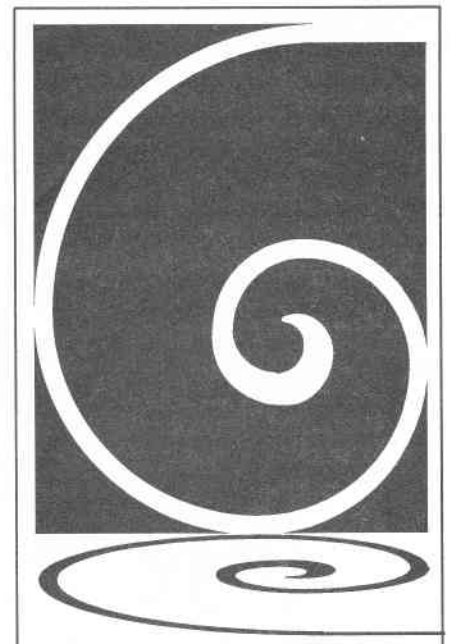
of the work to my wife Janice. She will be staffing the *Ring* office, keeping the BAM Newsletter from getting off course and generally keeping me in line.

It should be a good deal for all. Thanks to the publications committee and the rest of the ABANA Board for your confidence in me.

Hope you can all make it to Joe Wilkinson's in November. Joe has been working like a madman adding on to his shop so we can see the demos better. Word is his shop will double in size. Don't think that's going to be big enough for the junk I am going to load you down with Joe but it's a start!

Take care and have a safe fall.

—Jim McCarty
jimmac@socketis.net



Dear BAM,

BAM,
A great big thank you for the lifetime membership presented at the Ozark Conference in May. Total surprise.

As mentioned, when the presentation was made, for the work and revival of Little Giant. Most recognition or awards are made for sacrifice. I do not consider what I am doing a sacrifice, it has been fun and exciting. Being associated with several groups, I feel you have one of the most active, cohesive and enjoyable.

Again, thanks and keep up the good work.

— H. "Sid" Suedemeier,
Little Giant
Nebraska City, Neb.

Editor's Note: Sid sent this letter just after the Ozark Conference and it took me this long to discover where I put it. My apologies to Sid.

G'day Jim,
Sounds like I missed a Hell of a gathering :-)

My wife, Anne, told me to send her compliments for the BAM newsletter — she always reads it (after it's removed from my clutches) and enjoys it greatly.

I figure it must be time for me to send in a cheque for membership too. I figure that in about seven years or so we'll have to visit the relatives in KC and I think that if I can't organize myself enough to ensure that it happens right around a BAM meeting there is something wrong. I guess giving myself almost a decade to work the bugs out is about right.

I liked the birth notice, hope your little girl gets a hammer for her first birthday! Our "littlest" looks like he'll make a fine striker — the size of the hands and feet are daunting. Wonder where you can get welding gloves in 000 ...

I'll catch up with you later,

— Randall Gray
Tasmania

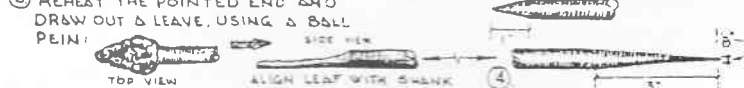
A SCROLLED WALL HOOK

by JOE FARINA

PERCE RIVER FORGE
ARCADIA, FL 4/88

THIS PIECE IS MADE BY FOLDING THE STOCK BACK ON ITSELF AND WELDING IT. IT'S A GOOD EXERCISE FOR THE NOVICE SMITH.

- CUT A 24" LENGTH OF 3/8" ROUND
- DRAW ONE END TO A STUBBY POINT:



- REHEAT THE POINTED END AND DRAW OUT A LEAVE, USING A BALL PEIN:
- FORM A TIGHT SCROLL AT THE TAPERED END USING THE FIRST INCH THEN TO A MORE OPEN SPIRAL USING THE NEXT 7" OR SO. TAKE SPECIAL NOTE AS TO THE DIRECTION OF THE SCROLL RELATIVE TO THE FLAT OF THE LEAF & SHANK.



- DRAW THE FOLDED END TO A STUBBY POINT AND PEEN OUT ANOTHER LEAF AS IN STEPS 2 & 3
- FOLD AS SHOWN



- DRILL HOLES INTO UPPER & LOWER LEAVES. MOUNT AS DESIRED AFTER SUITABLY FINISHED I USED FLAT BLACK SPRAY PAINT



- DRILL 7/16" HOLES



- DRILL



(From the newsletter of the Florida Artist-Blacksmith Ass'n)

The Anvil

by Gilbert McMillian

This is not a story about a man named Gad
it's about an anvil I said
You can beat on it, you can put your feet on it.
You can set it in the shade and let it rust
an it'll never bust
When I look at the anvil I look into the past
I don't see how they ever last
and the smoke from the coke makes me choke
It makes me sit on hammer, and makes the neighbors
ask whats a matter.
I just can't walk by without givn it a ping
to make it ring, boy it sure does sing.
That's rite pop, the star of the shop
the anvil

Pat's Place

Not much to comment about this month — I've been too busy doing shows and making stuff to not sell there to think about anything else.

We sure had an interesting meeting at John Murray's. Got to try out his big hammers and lived to tell about it. Thanks John and Lisa for a great time.

If you weren't there you missed seeing Tom Clark and Gay Wilkinson shoot it out with flying anvils. Gay hit his mark dead center but then I know his secret. Don't worry Gay, it's safe with me (for a price.)

We got one of Tom Clark's anvils so hot that it appeared to have melted. Some chapter newsletter editor has been spreading vicious rumors about our expertise concerning that day in September but no one who was there knows what he is talking about.

If anyone has an anvil they would like to have fixed up just give BAM's team of experts a call and we'll work it over for you.

BAM has some great activities coming up. Most of them center around Lou Mueller's shop in Valley Park. Lou has an open house coming up that will be over by the time you read this. Then on Nov. 9 there's a demo by Doug Merkel from North Carolina at Lou's.

Doug makes a neat letter opener with a marble on one end. I gave that a try, it's a nice touch.

We've also got the treadle hammer workshop coming up at the end of February. Sorry for all the confusion on the details. Look for something in the mail soon with better info.

Thanks to everyone who pitched in stuff for the Iron in the Hat at the last meeting. We keep doing better at each meeting. Let's keep it up — the money helps to build funds for scholarships and other activities.

Thought I would leave you with this item from our friend Page Thomas in Texas about how they came up with the standard gauge for railroad track. Hope you enjoy it as much as I did.

—Pat McCarty

How some specs live forever.

The US Standard railroad gauge (distance between the rails) is 4 feet, 8.5 inches. That's an exceedingly odd number. Why was that gauge used? Because that's the way they built them in England, and the US railroads were built by English expatriates.

Why did the English people build them like that? Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used.

Why did "they" use that gauge then? Because the people who built the tramways used the same jigs and tools that they used for building wagons, which used that wheel spacing.

OK! Why did the wagons use that odd wheel spacing? Well, if they tried to use any other spacing the wagons would break on some of the old, long distance roads, because that's the spacing of the old wheel ruts.

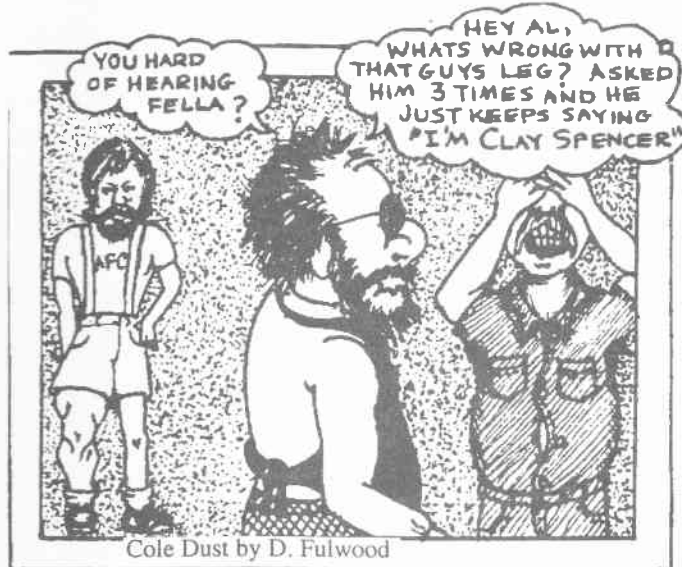
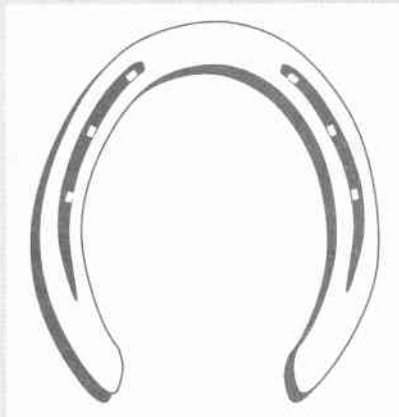
So who built these old rutted roads? The first

long distance roads in Europe were built by Imperial Rome for the benefit of their legions. The roads have been used ever since. And the ruts? The initial ruts, which everyone else had to match for fear of destroying their wagons, were first made by Roman war chariots. Since the chariots were made for or by Imperial Rome they were all alike in the matter of wheel spacing.

Thus, we have the answer to the original questions. The United State standard railroad gauge of 4 feet, 8.5 inches derives from the original specification (Military Spec) for an Imperial Roman army war chariot. MilSpecs and Bureaucracies live forever.

So, the next time you are handed a specification and wonder what

horse's ass came up with it, you may be exactly right. Because the Imperial Roman chariots were made to be just wide enough to accommodate the back-ends of two war horses.



BAM

SEPT.

MEETING

by Jim McCarty

Thank goodness John Murray has all those big hammers to work with. The way that guy likes to hit things, there would be lots of trouble if he didn't get the release that comes with thumping away on something that says Nazel or Chambersburg on the side.

John was the host of the September BAM meeting, an event that will go down in history as one of BAM's more unique happenings.

As usual folks started showing up early with truckloads of rusty tools and horseshoes for the trade item. Some interesting variations on the theme occurred: Walt Hull brought a horseshoe tied in a knot and a Celtic horseshoe, Bill Miller had a dehydrated draft horse shoe, brother Pat turned in a no-horseshoe sign and there was a great collection of knives, hooks and more created from shoes.

John Murray showed us how he sharpens jackhammer bits, something he does to make those big hammers earn their keep. He starts by cutting off the old point, which he considers ruined from use. He gets it hot then and slowly starts the point on a taper tool that sits in a saddle wrapped around the bottom die on his Nazel.

He hits slowly so that the hammer doesn't force the bit out. Once he gets it started he can hit harder and the point forms quickly. He says not to get to carried away with symmetry — "They're going to beat the daylight

out of them."

When it's right he snaps off the little bur that forms on the tip and heat treats. He heats until it's non-magnetic, then quenches in oil. Now John says it's harder than the hinge pins in hell, which John forged at last year's meeting. He polishes on a belt sander and then heats until the shiny spot turns a nice violet color. He likes to err on the soft side because, as he puts it, "No one ever got hurt by a tool that wore out. You get hurt by tools that are too hard and break."

John knocks these out 150 at a time, keeping 5 or 6 hot at a time in the gas forge. He gets \$4 each for his work.

After the first demo John started a one piece spoon under the power hammer. He got it roughed out about the time lunch arrived. We had our business meeting, which was unusually short, and then watched Gay Wilkinson and Tom Clark launch their anvils in a duel between master (Gay) and up and coming student (Tom). Gay taught us why he smokes cigars as his anvil was nearly off the launch pad before Tom could get a match to light.

Before the shoot Gay and Tom both spotted a stump as a target. Gay nailed his perfectly while Tom's was close enough to take first place had the event been held in Tennessee.

Sometime before lunch John Murray put something that resembled a very large pot roast in his gas forge. He let it slow cook all day and then later we built a coal fire outside using a piece of pipe connected to a blower as a tuyere.

Into this pile of superheated coal went the thing shaped like a very large pot roast. Meanwhile a team of blacksmiths armed with sledge hammers practiced some strange ritual known only to them in which they beat rhythmically on a metal object while chanting one, two, three, four.

Eventually we pulled the object that looked like a very large pot roast out of the fire and it did indeed resemble even more a very large pot roast.

One of these days we should forge weld a plate on an anvil just to see if it can be done.

John had just barely test-driven his restored Chambersburg air hammer

before the meeting so we gave it a real work-out. None of this would have been possible without Phil Cox in the background keeping the air compressor going. That hammer sucks a lot of air.

We tried out Pat's birthday present, a 2-inch ball swage, but even John's stock of oversized steel wasn't quite big enough for this project. Still, we managed a pretty fair ball with one flat side in about two licks, with Tom Clark running the hammer and Pat holding the die. That hammer really thumps!

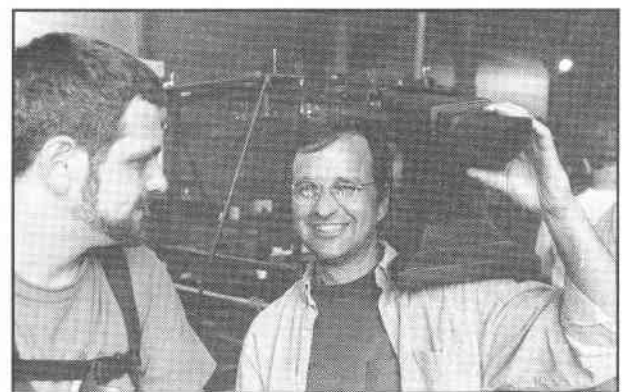
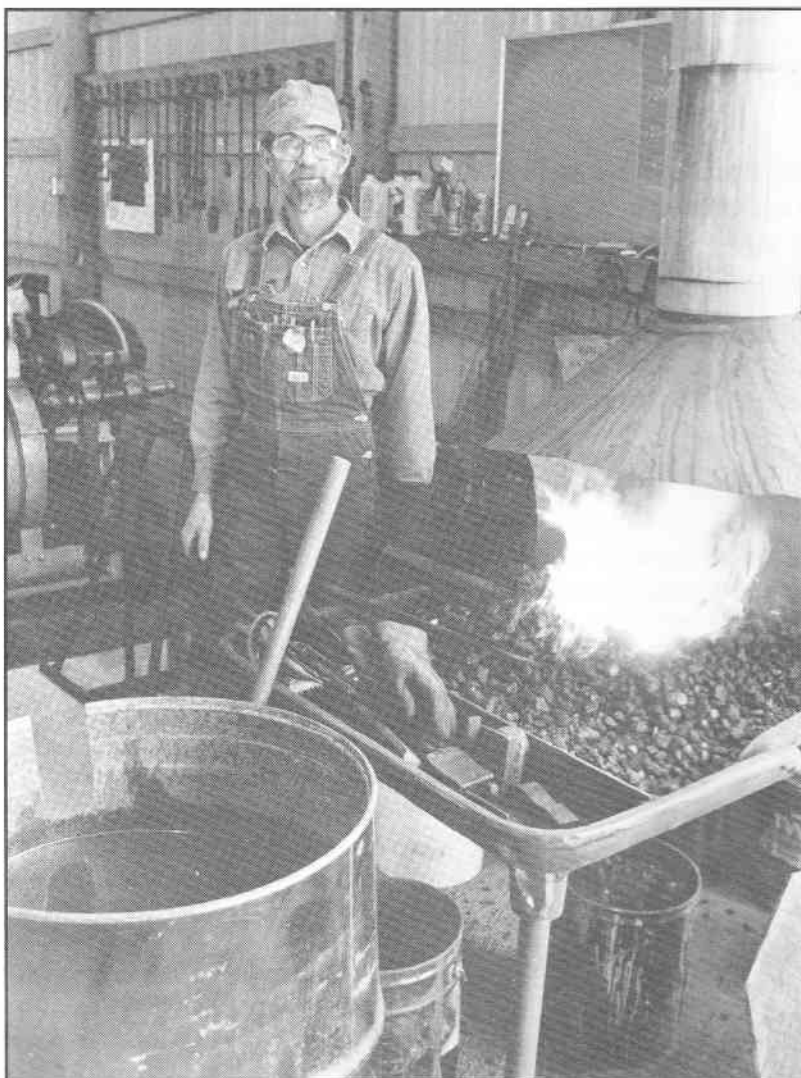
Pat was using the Nazel to make a pair of cut-off hardies when I left. No doubt the fun continued until the "pot roast" cooled off. Funny how much that thing looked like an anvil.

Minutes

- We honored our "Honored Guest," Tom Clark, who should have been honored at the ABANA Conference this summer. Pat presented Tom with his plaque.
- Andy MacDonald invited us to Mt. Vernon, Ill. for a Bob Patrick demo.
- Treasurer's report: Maurice said we took in \$497 this month and spent \$4,295 — most of this was for coal. We still have \$6,059 in treasury.
- Maurice brought up the Doug Merkel demo at Lou's and mentioned Lou's open house on Oct. 19 — postcard in the mail. Please let Lou know if you are coming to either event.
- Maurice also reminded us of the Tom Clark Fellowship Fund for travel to blacksmith events.
- Treadle hammer workshop confusion cleared up by Tom Clark. The date published in the last newsletter has been changed because Clay is teaching at the Folk School then. New date is Feb. 28-March 2.
- John Medwedeff announced Repair Days at the Metals Museum, Tom Joyce on hand. Also he asked for help at the Gen. Logan Museum blacksmith shop he is working to create in Murphysboro, Ill. He says they need donations of line shaft equipment, etc. Call John for more info, (618) 687-4304.
- Motion to adjourn



Left: BAM President Pat McCarty presents Tom Clark with a certificate declaring him BAM's "Honored Guest" for the 1996 ABANA Conference. Due to a comedy of errors Tom wasn't recognized during the conference held this summer in Alfred, N.Y.



Left: Walt Hull didn't need much prodding to get into the fire at John Murray's well-equipped shop. John has everything you need provided it involves making BIG things. Above: John Medwedeff admires Stan Winkler's ability to loft this mighty anvil hand forged by Gay Wilkinson and added to the iron in the hat pile. Big guy Stan was hoisting that anvil like it was made of styrofoam or something.



ABANA President's Message

As I am writing this, the deadline for returning your completed ballot for the 1996 election of ABANA directors is drawing near and by the time you read this, the ballots will have most likely been counted. I hope you voted. Five seats were open for election and only four incumbents were on the ballot so we will have at least one new director. Results of the election will be included in my November message.

All fifteen directors will meet at the Studebaker homestead in Tipp City, Ohio on November 14, 15, 16 and 17 to hammer out the 1997 ABANA budget. Finance Committee chairman Hans Peot has been tracking ABANA income and expense all year long to be sure we don't stray too far from our budget. Information compiled from this tracking process makes it a lot easier to structure next year's budget.

An important part of the budget process is the funding requests submitted by the various ABANA committees. A great deal of give and take occurs each year in order for us to complete a balanced budget. As I have assured you several time in the past, ABANA is financially sound but there are always some worthy causes that we are unable to fund. I believe that continued growth will be helpful in allowing us to fund even more benefits for our members than is now possible.

One of the early orders of business will be the election of ABANA officers to serve for the ensuing year or in the case of the office of President for the ensuing two years. There are five elected ABANA officers. They are as follows: President, First Vice President, Second Vice President, Secretary and Treasurer. One of the topics that will appear on this year's agenda will be "Long Range Planning". Given the rapid growth that ABANA has enjoyed, we are visibly lacking in long range planning. The more people we have join us in this effort, the more likely we will achieve a long range plan that will provide a clear cut future direction for ABANA. Any input that you may have should be directed to our central office or to any of the directors.

For a long time now we have used the last paragraph of these messages to convey a message related to safety. It become more and more difficult to come up with an appropriate message each month. The good news is that the lack of topics is due in part to the fact that I have not heard of any recent incidents that resulted from a let down of safety practices. Thanks to the Newsletter editors for the help they give in promoting safety and thanks to everyone for practicing safety. Keep it up.

Joe Harris

ABANA President

BIG Hammer for sale: Tom Clark has a 100-pound Little Giant for sale. This is the old style hammer, perfect condition, ready to run. Your choice of dies. He will take the best offer over \$4,000. For more info call him at (573) 438-4725. Also, Tom has expanded his line of hammer handles. He has the slim line plus all other types of handles.

Bob Alexander is selling his 50-pound Little Giant. It is up and running so you can try before you buy. He needs \$1,500 for it. If you need an anvil Bob usually has a few of these around with rebuilt faces, like new condition. For more info call him at (314)586-6938.

Farrier's equipment: Michael O'Dalaigh has a couple of Spanish Lake gas farrier's forges for sale. One is big enough to get big stock in. Price is \$200. He also has an NC Tool Big Face anvil with home made stand. Weighs 70 pounds. He wants \$175 for it (these are about \$400 new.) He lives north of Kansas City. For more info call (816) 628-2243.

For sale: 50-pound Little Giant, old style with wrap-around ram guides, no removeable sow block. Working condition, comes with a slow rpm (1160 rpm) 1 hp motor. \$1,500. No.1 Hossfeld bender, \$300. Numerous long tongs and very large power hammer tools, one spring tool that draws tapers, rest are top tools and flatters. I have one Buffalo Climax blower, great shape, \$80 and one Champion gas forge blower, needs motor. For more info call Jim McCarty at (573) 659-3421 (days) or (573) 395-3304 (nights or weekends).

Don Asbee has a Bantam Ironworker with lots of dies for sale at \$1,000. He also has a treadle hammer kit, will take \$350 for it. Don is in his new shop, just across Highway 63 from the old one. The number there is (573) 635-8363.

Heavy duty frying pan blanks, steel, approx. 9 inches diameter with 2 inch sides — 12 gauge (.095) thickness. Has two 3/16 inch holes for your dec-

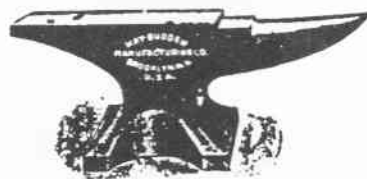
orative handle, \$7.75 each, \$7 for 5-9, \$6 for 10 or more pans. Shipping \$2.50 plus 50 cents for each pan. Bob Tuftee, 3855 Aspen Hills Dr., Bettendorf, IA 52722.

For sale: 70 pound ram air hammer. Total weight 1,000 pounds, 180 blows per minute. Requires 5 hp 2 stage air compressor. \$2,500. Also 25 pound ram air hammer. Total weight 400 pounds, 180+ blows per minute. Can be operated with small air compressor (3 hp, 20 gallon tank). \$2,000. Contact Maurice Ellis, (573) 766-5346.

David Oliver always has swage blocks — custom cut to your design or his — for sale. He usually has a power hammer or two and all sorts of other stuff for sale. David Oliver, PO Box 3452, Bristol, TN 37625, or phone (615) 878-5712.

For power hammer parts machined to your specs give Russell Cashion a call at (615) 731-3215. He also has a 1,000-pound and a 700-pound anvil for sale.

Back in production, the Wally Yater swage blocks, cones and fire pots. Wally's swage blocks are the best one's around but were unavailable for a while. Now Ted Mays is casting them again using Wally's patterns. His cone is 48 inches tall, has a 14 inch base and weighs 202 pounds. Price is \$750. There are two swage block patterns. They are 12x12x4 inches, one weighs 146 pounds and the other is 138 pounds. Both have round swages for sinking ladels. Price on these is \$250. There are two fire-pots, one is 15x14 inches and the other is 15x12 inches (Champion replacements.) Price is \$200. For more info contact Ted Mays, 5804 Emerald Woods Dr., Indian Trail, NC 28079.

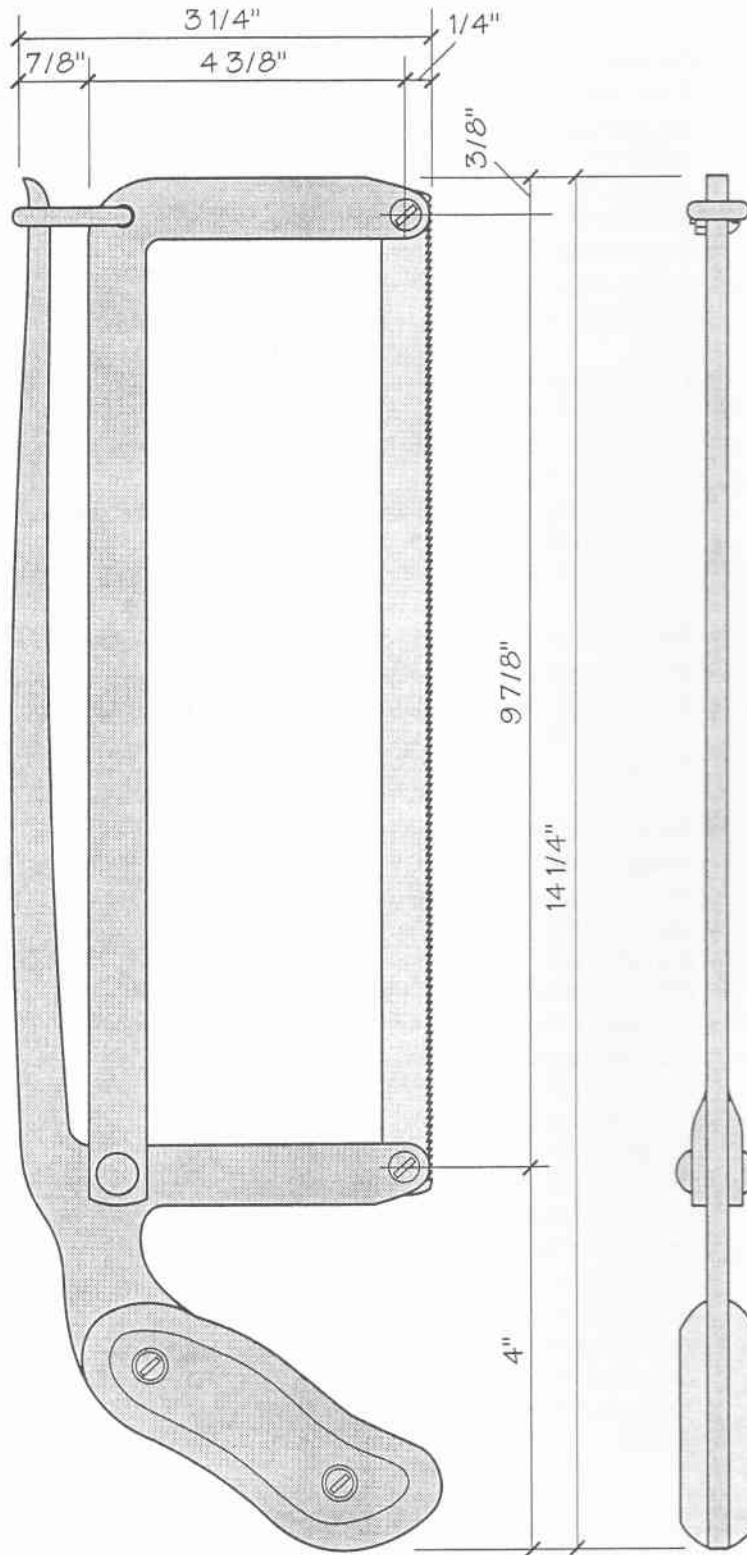


BAM

Bulletin Board

Bring your rusty iron for sale to the November BAM meeting at Joe Wilkinson's. Put those old tools back to work!

HACK SAW



1/2 SCALE

Most commercially available hack saws feature sloppy screw type blade tighteners and lack sturdy construction. This saw will keep the blade tight and rigid for accurate cutting.

PLUG WELD

1/2" Ø
SLOT PUNCHED
AND DRIFT
FOR 5/16" Ø
PIN

HEAT ENDS OF
HINGE PIN AND
UPSET - USE
TORCH

STARTED
AS 1/2"

IRON STRIPP
HOLE IN
STONE

STONE

STONE DOOR KNOCKER

IRON DISK - STRIKER PLATE

Welded joint

1/4 x 3/4 Punched, drawn out and welded into ring.

Punched Hole and Tennon.

Colonial Fireplace Trammel

Copy of original used in fireplace with a wooden beam as its support

1/4 x 3/4 Tennon on top, 1/4 hole punched near other end for rivet.

1/4 x 1 1/4 with one end drawn out and hooked. Other end off set, bent and punched to receive the 1/4 x 3/4 bar. Teeth cut with saw or hot cut.

1/2 square with ends drawn out, pierced with slot 1/4 x 3. 1/4 hole drilled for rivet.

DOUG AND SUZY MERKEL

BEAR MOUNTAIN FORGE

3096 BETHEL ROAD
SUGAR GROVE, NC 28679-9723
(704) 297-3191

© 1996





by Jim McCarty

For the past three years my brother, Pat, brought in the new year with a “hangover” hammer-in at his forge in Washington, Mo. In the past when I topped the rise that led to his shop dense smoke belched from the chimney from a coal fire tindered by Pat’s friend J.K. Reynolds.

J.K. usually was the first to arrive, and he couldn’t wait to get in the fire.

This year was different. No fire blazed in Pat’s brick forge, and the 10 members of the Blacksmiths Association of Missouri who showed up this year had some unfinished business.

J.K. built his last fire in October, 1995, you see. A long-time member of BAM, J.K. was one of our most respected members.

He rarely missed a meeting, traveling to each location in a converted “cookie” truck he and his wife, Joyce, used to keep their antique shop full. We anxiously awaited their return when they headed off on these ventures to places like Maine, Georgia and the upper Midwest. Once J.K. brought back most of the inventory from a closed hammer factory. He always had a rack full of tongs for sale, and more than one beginner bought his first hammer and tongs from the back of J.K.’s truck.

He loved ironwork, and he watched carefully the demonstrations we had at our meetings. When he found an open spot at the forge he jumped in and tried the new technique before

A Cross for JK.

When you lay your hammer down at the end of the day you can’t say for sure whether you’ll ever pick it up again.

the fire in his mind grew cold.

His greatest love came from a book he picked up called Iron Skeletons. After seeing the iron crosses in this book, J.K. and Joyce traveled to North Dakota to see them in person.

He always planned to forge his own cross to place his mark on the Earth, but like the best laid plans of mice and men, he never got it done. So BAM decided to do it for him.

Pat drew up the plans for the cross, borrowing from J.K.’s book. It would stand 5 feet tall with a wing span of 3 feet.

Tom Clark showed up with several pieces of wrought iron from a bridge salvaged by another BAM member, Phil Cox. Very fitting, for J.K. loved wrought iron.

Tom also brought a load of firewood for Joyce, conveniently covering the iron and ensuring he had help to get it unloaded. While three smiths took care of that project, Bernie Tappel and I started forging the four scrolls for the cross. These would frame the T made by the crossing arms, starting as 3/4 inch round with one end hammered square and split for 8 inches. One split end was hammered into a leaf while the other was split again and scrolled.

This stock was salvaged from an old log cabin, where it was used to keep the logs from spreading. Meanwhile, Pat, Colin Campbell, Maurice Ellis and Roy Warden started forging rosettes from copper scrounged out of the dumpster where J.K. and Pat worked.

When the crew of firewood unloaders returned they cut a piece of the 1/2 inch by 3 inch wrought iron to use to test the lap joint where the two

pieces of the cross would meet. Tom had some rusty butchers and set hammers, which looked like they had never been used. No one in attendance had ever forged a lap joint this large, but we were pretty sure which tool did the job.

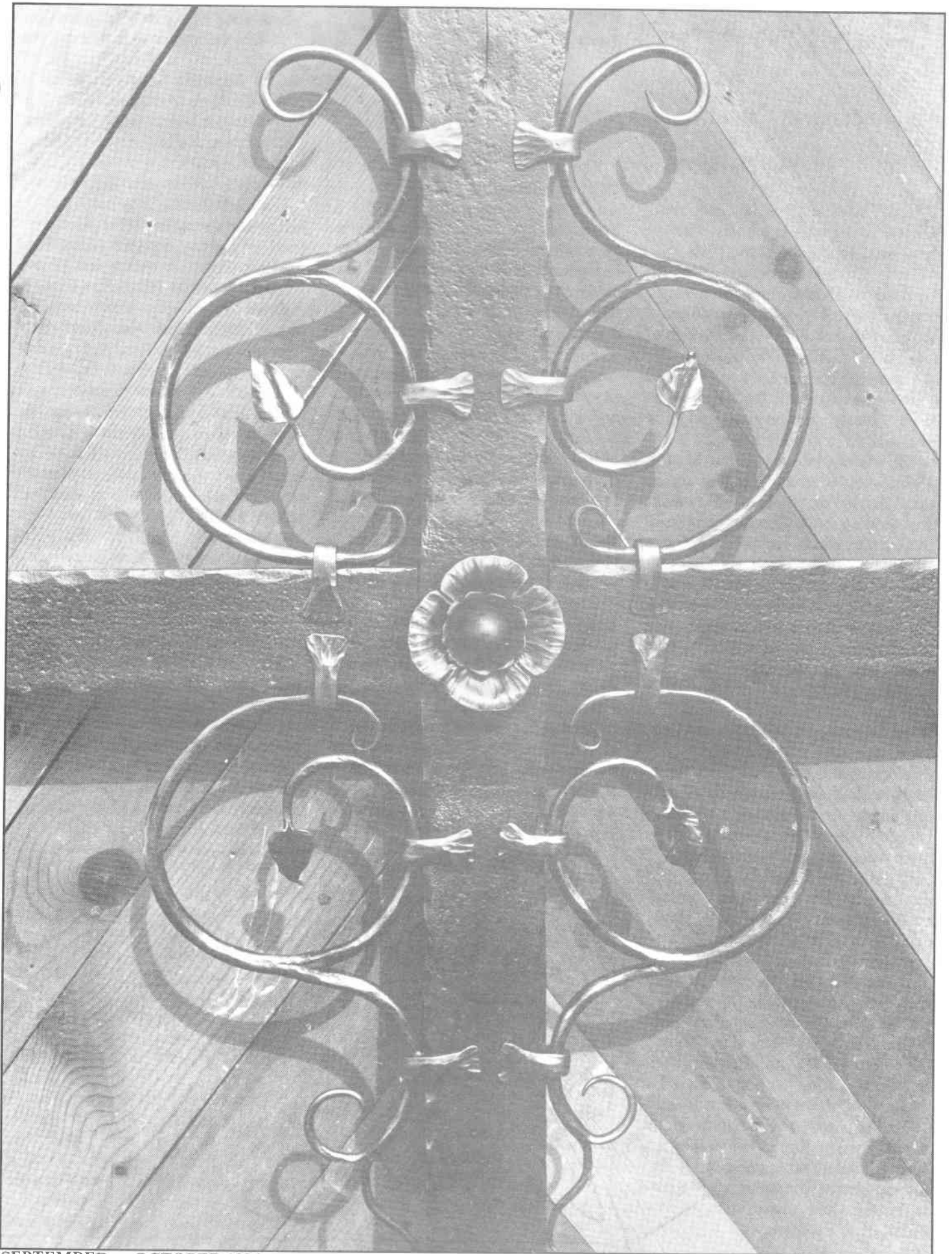
Joe Wilkinson tended the fire, John Murray held the long end while Bob Alexander held the butcher and Tom Clark struck with his trusty sledge.

The test piece proved the correct size for the joint and the four moved to the real thing, heating the top third of the 5 feet of stock in Pat’s open ended gas forge.

With the scrolls turned over to Pat for the leaves, Bernie, Maurice and myself got started on the last piece, a bracket that would be riveted to the bottom foot of the cross to serve as a brace. For this stock we searched Pat’s scrap pile until we located a 4-foot length of wagon axle bent from use as a pry bar. We straightened it out and punched a 5/8 inch hole for the rivet, then formed a compound bend that would end up set a foot deep in concrete.

With severe weather threatening and the cross nearly completed, we parted ways leaving Pat to put it together. We’ll wait for warmer weather and deliver it to Joyce.

With its many pieces of ancient recycled iron and the marks of many friends as its patina, I am sure it’s just what J.K. had in mind. I know at least one smith who plans to get started on his own cross real soon, because when you lay your hammer down at the end of the day you can’t say for sure whether you’ll ever pick it up again.



Natural Forgings

Nature inspires Steve Joslyn's pine cones, cattails and acorns

by Jim McCarty

Steve Joslyn can best be described as a young man in a hurry. The demonstration he did at the 1996 ABANA Conference centered around his need to produce large numbers of organic forms — leaves, pine cones, acorns, pine needles — fast enough to make some money in the process.

Along the way he has come up with a number of shortcuts that allow him to meet his production goals and still be creative.

For starters, he says the gas forge is the only way to go for production work. Otherwise you spend too much time tending fires, clearing clinkers and burning stock. He also likes the look the scale from the gas forge leaves on his work.

Steve likes using leaves in his work. But the time it took him to make them forced him to make a decision — find a better way or quit making leaves. Most blacksmiths are familiar with making leaves by pointing round stock, fullering on two sides and flattening the stock into a flat leaf.

Working this way took Steve three heats per leaf. He saved some labor by learning to use the side of his hammer instead of the flat face — why move more stock than you have to?

“I got to the point where I couldn't design using leaves because I couldn't make any money,” Steve said. “How could I get there closer without starting with round stock?”

By studying real leaves he decided that forging round stock flat was a wasted step. He began experimenting with flat stock. He started by forging the end to a point and fullering. Then he started cutting the points. Then he found a way that cut the steps in half.

He cut one side of the point on the hardy. Then he forged to a point and spring fullered, all in one heat. With a second heat he spread the leaf, peined in the veins and it was finished — two heats.

The amazing thing was when he cut the stem off, leaving just 1/4 inch to draw out. Most blacksmiths make leaves that have fat stems. Real leaves have extremely thin stems. Somehow he drew a 1-inch long stem out of the tiny stub he had to work with. He challenged us to see how thin we could draw the stems.

For most of us a two heat leaf would be fast enough. Not Steve. Once again he started studying nature and decided his leaves were too fat. Now he uses 18 gauge sheet metal (he uses the lids cut from 55 gallon drums) and cuts them with a tin snips that have a handle welded to them and are held in the vise, a crude Beverly sheer. For serrated edges he uses a Zip Cut 1/16 inch grinding wheel mounted in a table saw.

Lately he's been stacking them up 3 or 4 deep and cutting them out with a plasma cutter. He has a paper pattern which he lays on the metal and spray paints over it to mark the shape.

He folds the cut leaf down the middle and again peins it for the veins. One tip here — real leaves don't have veining going all the way to the tip. Stop 3/4 of the way to the end.

Steve had a copy of the Audubon

Book of Native American Trees for reference on leaves and seed pods.

Before he finished his first demo he moved on to acorns. Before he made his first acorn he headed to the woods and

studied the real thing. An acorn has two parts — the top and the body.

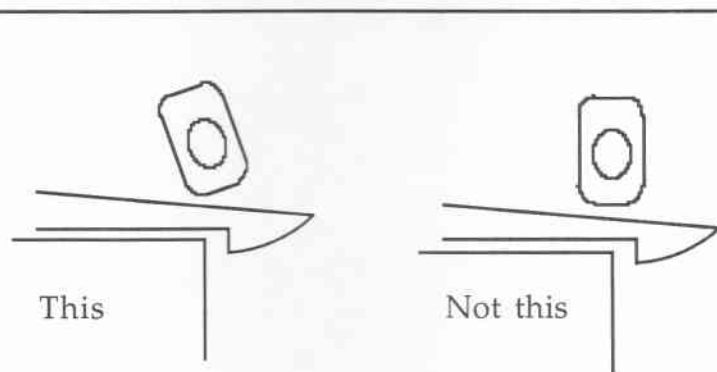
For the body the little point that hangs down was the real challenge. He tried 3/4 inch round stock but decided he was trying to move too much material. He settled on 1/2 inch and 3/8 inch schedule 40 pipe which he fullers in a guillotine all the way down at intervals that let him make two at a time.

These are chop sawed apart.

The next challenge was the cap. This proved to be easier than it looked. He just cut a piece of light gauge metal and drove it into a swage and had a cap. The problem was it had no texture and didn't look real.

To solve this problem he drilled a 1/2 inch hole and made a matching punch. Into the punch he cut a checkerboard pattern with the Zip Cut. He drove the stock into the hole and had his pattern — but it was on the inside instead of the outside where it belonged.

Next he made a flat punch with the texture on it and drove it hard into a piece of white hot stock. This left it textured and marked and ready to be cut out. Then he drove it into the hole and he had his cap.



Use inside corner of the hammer instead of the hammer's flat face to move less material.

The cap is mig welded to the body and a piece of wire is gas welded to the top for the stem.

Cattails are made similar to the body of the acorns except a 3/16 inch round piece of cold rolled is inserted into it for the stem. He gas welds the body onto the stem.

Most of us came back the next day to see Steve forge his trademark pine cone. Before he got started he apologized for how easy it was.

Like everything he makes, the pine cones required a lot of nature study and a lot of trial and error. He said his first effort looked more like an avocado.

The first step is to take a piece of 3/16 inch round and flatten the end, fold it to a concave shape in the step of the anvil, then offset a smidge over the edge of the anvil. This becomes the center stem.

For the next 15 minutes we watched him repeat the process about 35 times, only now he cut each piece off on the hardy eyeballing the length. He made them from four sizes of round stock — 3/8, 5/16, 1/4 and 3/16 inch. Cut them where the transition from flat to round begins.

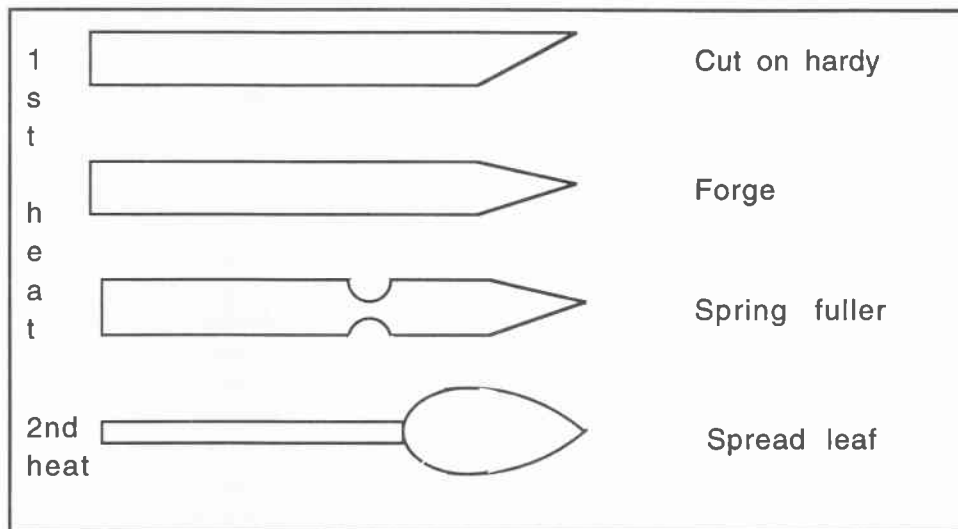
As he cut them he just let them lay until there were more than enough pieces. Then he gathered them in and separated them into piles. In the shop he would make these by the hundreds.

To hold the piece he created a jig that fits in his vise that lets the stock be rotated and flipped upside down. A collar with thumb screw keeps the stock from falling out.

He fired up the gas torch and started welding the chips onto the stem, starting with the smallest chips and placing them in two rows of four chips. Offset each row to avoid a spiral.

The remaining rows use five chips. There are two rows of 3/16 chips, two rows of 1/4 inch, four rows of 5/16 inch and two more rows of 3/8 inch chips.

Steve held the chips to the stem with a needle nose and hit it with the torch until it fused with the stem. Then he used a coat hanger as a welding rod for filler. Each time he would rotate the stem. You determine the length of the chip by where you place



it on the stem.

When all the chips are welded on flip the piece over and heat each chip with the torch until it starts to melt and the ends roll over.

You could see a lot of faces saying, “Why didn’t I think of that?” But there was more to come.

His final demo was pine needles. If Steve was embarrassed by how simple the pine cone is, he really apologized for the pine needles.

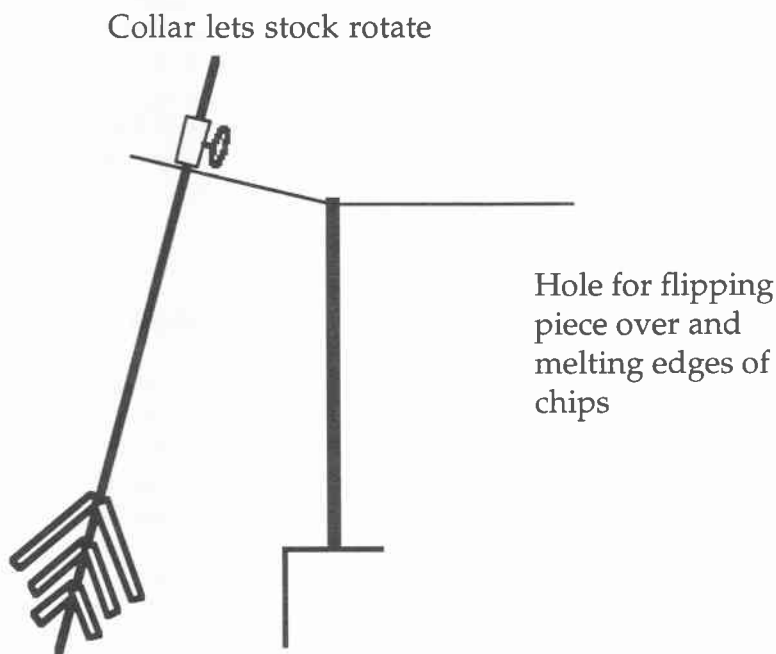
He takes tie wire and bundles it into a 1-inch roll tied with tie wraps. Then

he chop saws to length and places them in groups of three into a sand box.

He hits the ends with a torch and fuses them together, then bends them apart while still hot. He welds these in clusters to a branch. See the real thing for spacing. That’s it!

Add in a few pine cones (but not acorns as someone suggested) and you have a very simple but elegant design for a lighting fixture, door wreath or table centerpiece.

Jig for welding pine cones



BAM

Shop Notes

Got a tip to share? Jot it down and send it to the editor, Jim McCarty, 5821 Helias Dr., Jefferson City, MO 65101

Welding heat

A good way to tell if you are at the right heat is to use a heavy iron wire or small rod. As the heat rises on the piece you want to weld, push the wire or small rod against it (the wire or rod must also be heated). When the wire feels "sticky" you are at or near welding heat.

— Raymond Coon

From here to there

I've found something out recently about shipping. My previous experience was a 200 pound tool from Colorado to California. It cost \$200 via Yellow Freight. Here's what I just found on shipping 1,850 pounds from California to Colorado:

Yellow Freight \$750, \$30 add'l to home

Northwest \$850, \$30 add'l to home

Broker #1 \$450 to Denver, \$50 add'l to home

Broker #2 \$500 door to door

Pretty big variance! The problem is that most of the stuff the freight companies ship is under contract (read DISCOUNT). You call up and they don't give you a discount. Not quite

true — Yellow Freight will give you a discount if you ask for it — you write "Yes Discount" on your bill of lading, and they will give it to you. I've heard it described as 12 percent, 15 percent and also as 25 percent and I don't know which is right.

The key is to NOT call a freight company. Call a freight broker. Look under Trucking-Motor Freight in the Yellow pages of some nearby big city. There will be ads for freight companies, also some that say "Bonded ICC Broker" or some such. These are the folks to deal with, as THEY get a good discount. The cost is based on poundage, and the more pounds you ship, the lower the per pound rate. You should be able to beat UPS pretty easy, though. Here's one that serves all 50 states:

AAA Transport
Denver, CO
(970)693-4110
(800)548-9984

Another thing I've been told is to pre-pay the freight. They usually accept whatever weight you tell them (within reason!) and don't re-weigh.

— Steven O. Smith

Weld it square

I have "welding squares" that I made up out of 2x2 tubing made with a rafter's square for trueness and I clamp anything with a right angle to one of them, then weld. LET THE PIECE COOL WHILE STILL CLAMPED or it will go out of square. I have built fences, gates, sign brackets and holders, tables, machinery, etc. and it's all square this way.

— Bill Wyant

Claying a forge

Claying a forge entails packing a layer of mud into it. You can get fancy and buy high-temperature fire-clay, go basic and dig a wad of mud out of your backyard, or anywhere in between. To prevent cracking mix LOTS of sand with it. The mix should be anywhere from 50 percent to 75 percent sand. Use the mud to hold it together, and that's about it. Fire it

while the sand/mud is still damp. It should hold together just fine for mobile use. If it cracks, just mush some more sand/mud mix into the cracks and fire it up as if nothing had happened. You can chip it with a hammer, chisel, or chunk of steel if you want to change the shape after it's fired.

— Morgan Hall

Wire brush holder

Dan Tull says to take an old wire brush and nail or screw it to the side of your stump that holds your anvil. If you push another wire brush into it, wires to wires, the two will stick together. This way, the wire brush can be stored so that it is always handy, and it is not necessary to carefully hang it on a nail after it has been used.

— Tullie Smith House Blacksmith Guild Newsletter

Forging miniature swords

Get a good supply of double-headed 16 penny nails. Most hardware stores stock these — they are used on scaffolding and concrete form work where you need to remove the nail later. Heat the nail and flatten the heads to form an instant hand-guard and hilt. Then hammer the nail to flatten and at the same time cause it to bend. The process will make a very nice scimitar blade. That's all there is to it. It is quick, easy, inexpensive and kids will line up to receive one.

— As demonstrated by Ed Halligan, master bladesmith, at a meeting of the Tullie Smith House Blacksmith Guild

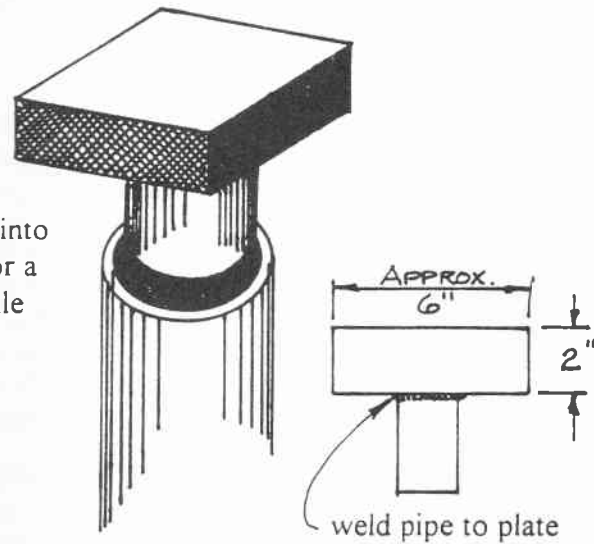
Stop the noise

If you own a Hay-Budden or Trenton anvil you probably have the need to quiet that noisy thing down. A bolt in the pritchel hole works, as does a speaker magnet attached under the heel or a length of heavy chain wrapped around the waist.

Tip from Benny Crevitt's shop:

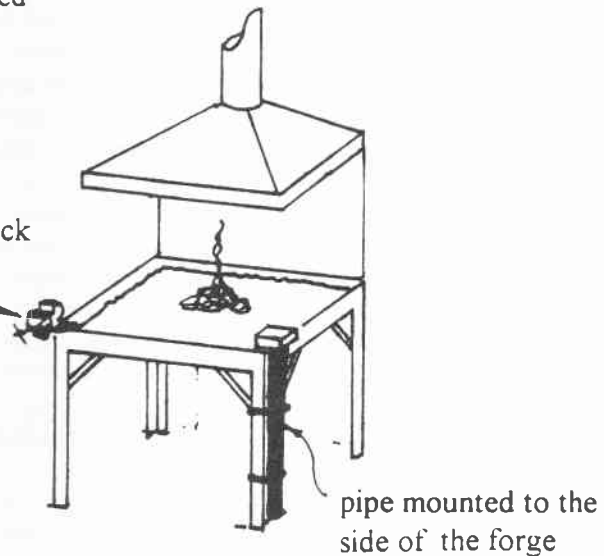
When working with small pieces, the closer you can stay to the fire the more iron you can move and the fewer steps you have to take.

The 2" thick plate metal is heated in the fire and dropped into pipe mounted to the side of the forge. Use the 2" plate for a "preheated anvil" to keep thin pieces from losing heat while forge welding.



Benny says, "You can stand in one place and not have to move back and forth. When you're making a hundred repetitive items (i.e. scrolls, twists, etc.) every step saved adds up."

A small vise is mounted on the side of the forge for quick twist of small pieces.



Note: The method of mounting may not be exactly the same as in Benny's shop, due to memory lapse of the editor.

Drawn by: Dean Foster

BAM NEWS

ABANA Mini Conference

About the time winter kicks into high gear in Missouri ABANA has an event scheduled that will warm you up in more ways than one. The first ever winter mini-conference sponsored by the Arizona Artist Blacksmith Association will be held Jan. 8-12 at Bill Callaway's Phoenix Forge in Phoenix Arizona. Demonstrators are Jerry Hoffmann, Dorothy Stiegler, Dmitri Gerakaris, Lou Mueller and Corky Storer. Only pre-registration will be accepted due to a limit of 125 people. You must be an ABANA member to attend. Cost is \$150 plus \$191.50 per person for lodging at the Ramada Inn. To register or for more information contact Bob Rummage at the Phoenix Forge, (602) 253-3116 or Mike Cooper at (602) 938-1495.

Old tool club

If you are into old tools you might be interested in joining an organization dedicated to collecting them. The Midwest Tool Collectors is a group that gathers to swap old tools and learn about their manufacture and use. They publish a nice newsletter and hold tool sales that are open to members only. While the majority of the stuff at these sales is for woodworking, you can find some great deals on the less collected blacksmith items.

To join contact William Rigler, Treasurer, Rt. 2, Box 152, Wartrace, TN 37183. I understand our old friend and former BAM member Jim Price is the group's president. Jim is

from Naylor, in southeast Missouri. Got to lure him back into BAM.

Women of Iron

Ladies, this one's for you. "WOMEN OF IRON" May 1997, a national juried show of work by women blacksmiths will be held at the Contemporary Artifacts Gallery, 202-B North Broadway, Berea, KY 40403; 606-986-1096. Contact Gwen Heffner, owner, at the above address or phone number for a prospectus. Send 5 slides, resume, \$15 jury fee, SASE by January 15 to be considered.

Teach Blacksmithing

Southern Illinois University at Carbondale is looking for a someone to replace Brent Kington, who is retiring after an exceptional 35 year career teaching at the school. Clearly Brent can not be replaced, but they are looking for a blacksmith who can carry on the unique program he founded.

SIU-C is committed to blacksmithing. Currently two classes work in this media. The well-equipped facility has three power hammers and five forging stations. Last year \$80,000 was spent improving the ventilation system. A successful candidate must maintain this facility including two "classic" power hammers that need loving care on a regular basis.

The job description points out that the applicant must have a Master of Fine Arts Degree or equivalent. It would be hard to make a case for someone without a college degree. However a committed blacksmith without this master's degree but with a noteworthy professional record should still consider applying.

The title of the position is assistant professor in Blacksmithing/Metal-smithing/Foundations, School of Art and Design. Deadline for application is Nov. 4 or whenever position is filled.

For more information contact Richard Mawdsley, Search Committee Chair, Southern Illinois University at Carbondale, Mailcode 4301,

Carbondale, IL 62901-4301; or call (618) 453-4315.

Treadle Hammer Update

Some of the information in the Treadle hammer workshop notice in the last newsletter was incorrect or has changed. First of all, the date for the workshop is Feb. 28 to March 2, still at Lou Mueller's in Valley Park. We plan to build 30 hammers, with the cost divided by those taking part.

Clay Spencer will be conducting the workshop. We will probably have a pre-workshop workshop to get some of the parts created. More on that later.

If your name is on the list (sorry, the class is full but we are taking names in case someone drops out) you will get a letter from Tom Clark with the details. He needs a deposit of \$50 from each participant to start buying the materials.

Should be a great opportunity. If there's enough interest maybe we can do this again.

Scholarship payback time

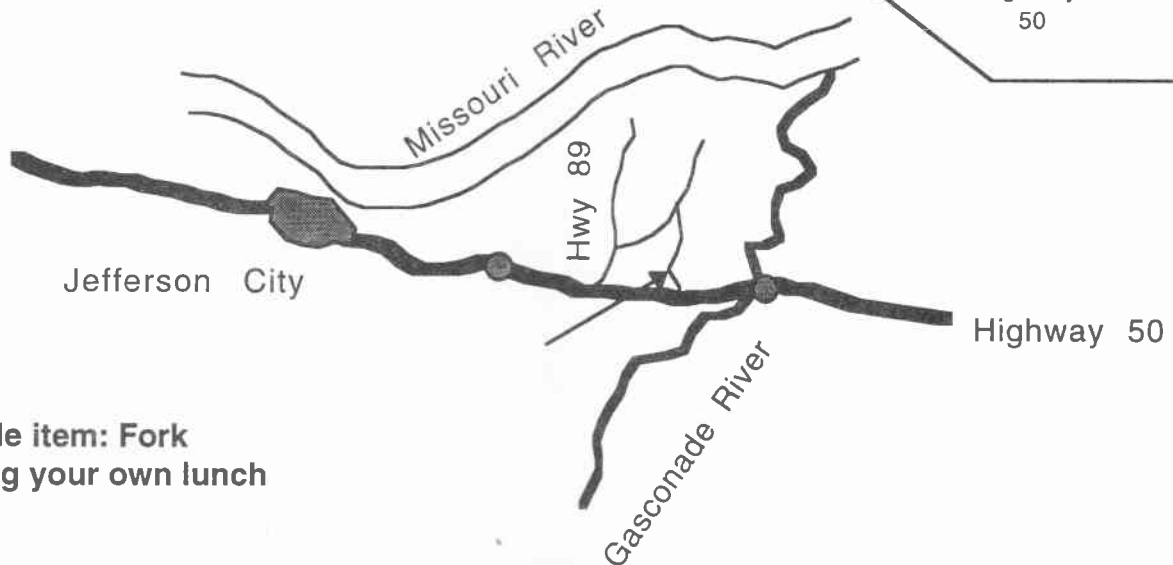
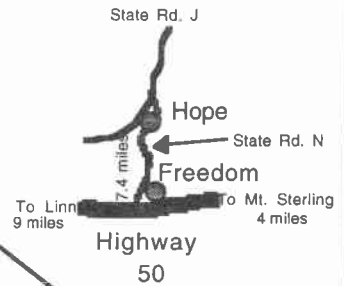
If you were one of the lucky people to win a BAM Scholarship at the Ozark Conference last spring, you owe us! Receiving a scholarship requires you to write an article for the newsletter and demonstrate at a BAM Meeting.

Thanks to those of you who have already fulfilled your obligation. For the rest of you, the editor can help get your article in shape. We are most interested in what you learned, not how you got there and what you saw along the way.

Please contact the person hosting the next meeting or our President Pat McCarty to arrange your demo. A few scholarships have not been used yet. Talk to Treasurer Maurice Ellis for details on getting your money. I can get you the schedules for the various blacksmithing schools and what they have to offer. This is one excellent way to learn and we all benefit if the paybacks occur.

If you are interested in applying for a scholarship next year watch the newsletter for an application.

Joe Wilkinson, Hope, Mo.
 (314) 943-6779



Trade item: Fork
 Bring your own lunch

Next meeting November 2 at Joe Wilkinson's

Joe Wilkinson is the host for the JBAM November meeting to be held Nov. 2 at Joe's Hope Forge in central Missouri. Hope's not on the highway map but we'll put it there with another turnout like last year's. Joe has been adding to his shop, nearly doubling the size since the last time we saw it so there should be a lot more room around the forge this time.

We are trying something new to make it easier on the host. Lunch will be bring your own, or you could venture into Linn where there is a Hardware and other restaurants.

Joe is strongly encouraging tailgate sales so haul your rusty iron with you. He hopes to have some tools for sale from other Osage County folks who aren't into blacksmithing. Trade item

is a fork. As usual, bring something for the iron in the hat, anything blacksmithing related will do.

We have had a great turnout in the past so let's keep it going. Don't forget your wallets as well.

Hope to see everyone at Joe's on Nov. 2 — we'll get you home in time for deer season. Remember to bring your lunch.

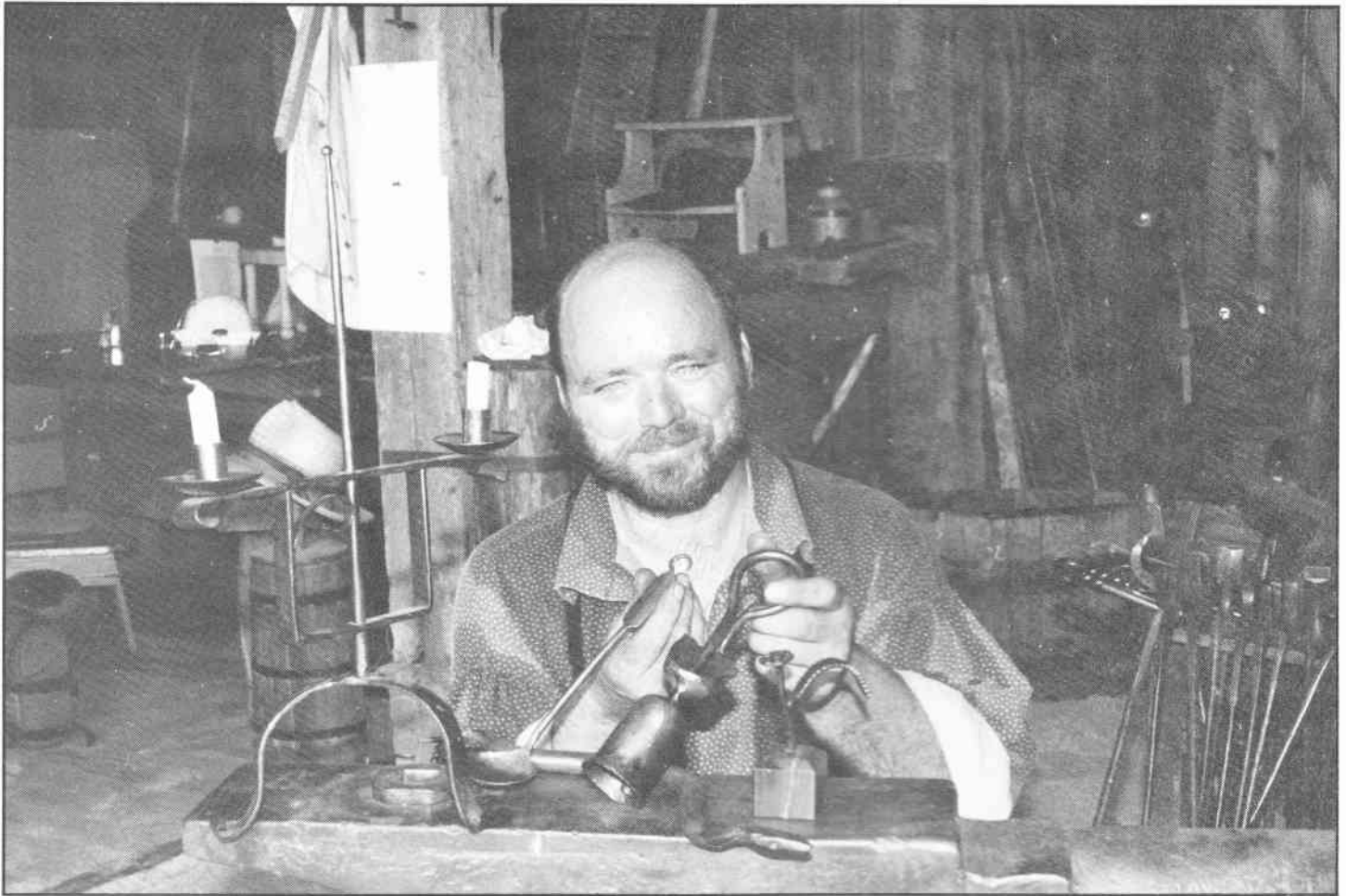
BAM 1996 Schedule

November Meeting
 Joe Wilkinson
 Hope, Mo.
 November 2, 1996

Doug Merkel Work-
 shop, Lou Mueller,
 Valley Park, Mo.
 Nov. 9, 1996

January 1997 Meeting
 A&K Cooperage,
 Higbee, Mo.
 Date to be announced

March 1997 Meeting
 Maurice Ellis
 Belgrade, Mo.
 Date to be announced



Bob Alexander looks the part at the historic blacksmith shop he's been working out of on weekends at St. Louis' Faust Park. Some of the iron shown here with Bob was made in the class he took with Jerry Darnell at the John C. Campbell Folk School.

BAM
5821 Helias Dr.
Jefferson City, MO 65101

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